



Driving Global Transformation through Waqf for a Sustainable Future

Adamu Abubakar Muhammad^{1,*}, Rabi Shehu Dalhatu², Adam Muhammad Ardo³, Rahina Musa Ibrahim⁴, Bala Babangida¹

¹Department of Islamic Studies, Federal University of Kashere, Gombe State, Nigeria.

²Department of Home Economics, Ahmadu Bello University, Zaria, Kaduna State, Nigeria

³Modibbo Yusufa Foundation, Gombe State, Nigeria

⁴Department of Islamic Studies, Sa'adu Zungur University, Gadau, Bauchi State, Nigeria

Publication date: 31 October 2025

Abstract:

In Islamic civilization, one of the most persistent systems for promoting social welfare and economic fairness is the idea of waqf, or Islamic endowment. Long before the emergence of contemporary state welfare systems, Waqf organizations provided funding for social infrastructure, healthcare, education, and water systems, establishing the groundwork for sustainable communal development. This paper explores how Waqf revitalization can provide a revolutionary paradigm for accomplishing 21st-century global sustainability objectives. The study places Waqf in the larger context of ethical finance, social innovation, and sustainable development by utilizing qualitative and comparative analysis. Through an examination of case studies from Malaysia, Indonesia, Turkey, and new projects in Nigeria, the study shows how productive Waqf can promote social resilience, environmental responsibility, and economic inclusion when it is in line with modern financial tools and the Sustainable Development Goals (SDGs) of the UN. According to the research findings, Waqf offers a distinctive institutional and moral model for fusing spirituality with contemporary development paradigms because it is a faith-based and values-driven organization. The study comes to the conclusion that Waqf governance can become a worldwide tool of ethical finance and sustainable transformation by being revived and modernized through legal reform, digital transparency, and cross-sector collaboration. The study adds to the current body of knowledge on Islamic social finance and presents Waqf as a feasible route to a more just, inclusive, and sustainable future for all people.

Keywords: waqf, sustainable waqf, waqf Nigeria, sustainable development, global transformation

*Correspondence: abubakaradam1980@gmail.com

<https://doi.org/10.58764/j.wbr.2025.1.3>

1. Introduction

The world is still looking for ethical and inclusive ways to promote sustainable change in a period of economic injustice, environmental degradation, and fast globalization. Even though contemporary development models have made great strides, many of them are still disconnected from the ethical and spiritual underpinnings that guarantee social justice and equity (Calicioglu, & Bogdanski, 2021, Abbas et al., 2025). A key social-financial institution in Muslim communities for a long time has been waqf, the voluntary and lifelong donation of assets for the public good under Islamic law. In the absence of contemporary welfare governments, waqf provided the foundation for essential public goods by funding and maintaining schools, hospitals, waterworks, public kitchens, libraries, and waqf-funded marketplaces throughout the course of several centuries (Ascarya, et al. 2022). This long-standing, purpose-driven endowment tradition has new significance in the modern era of sustainable development and global interconnectedness because it provides a morally sound means of funding public goods, fostering the development of human capital, advancing social welfare, and fostering ecological stewardship

Waqf, a long-lasting charity endowment, provides a distinctive paradigm within the Islamic worldview that combines social responsibility, environmental balance, economic sustainability, and faith-based ethics (Adam et al. 2023). Through interdisciplinary innovation, moral leadership, and community empowerment, this presentation examines how Waqf may be repositioned as a worldwide tool for sustainable development, helping to achieve the Sustainable Development Goals (SDGs) of the UN (Muhammad, Aliyu, Abdullahi, Ibrahim, M., & Ibrahim, R. M., 2025).

The United Nations Sustainable Development Goals (SDGs), which represent the modern sustainability agenda, demand for long-term, inclusive institutional arrangements and finance methods that are in line with environmental preservation and social justice (Calicioglu, & Bogdanski, 2021). Waqf is positioned as a potentially formidable tool for promoting change at the local, national, and international levels because to its attributes of perpetuity, communal orientation, and moral validity. However, in order to fully realize this potential, cross-sector cooperation (public-private-waqf partnerships), technology integration (digital platforms, transparency tools), and institutional modernization (legal, financial, and managerial) are needed. Thus, this study looks

at the conceptual foundations, real-world examples, governance issues, and policy avenues for waqf revitalization and redesign in order to promote inclusive and sustainable change.

2. Literature review

2.1. Historical foundations and social role of waqf

The importance of waqf in pre-modern Muslim polities is well documented in historical works. Scholars demonstrate how waqf earnings supported healthcare (*bīmāristāns*), education (madrasas and universities), urban infrastructure, and charitable services often acting as somewhat independent public providers. In addition to highlighting waqf's tenacity and institutional endurance, this literature offers insights about community trust, stewardship, and accountability that are relevant to contemporary institutional architecture (Fanani et al. 2020; Afifi, 2025).

Implications for this study: Waqf's ability to provide public benefits is demonstrated by historical antecedents; the study explores how historical strengths might be capitalized under current legal and economic circumstances while drawing on governance principles.

2.2. Productive waqf and economic development

Current research makes a distinction between "charitable" (non-productive) waqf and productive waqf, which are assets that are actively managed to produce steady revenue for governmental uses. Case studies from the Middle East and Southeast Asia have looked at cash-waqf pooling systems, corporate waqf, agricultural estates, and waqf-based housing (Ardiyansyah, & Kasdi, 2021). Researchers contend that productive waqf can fill funding gaps for social enterprises, provide patient capital, and stimulate the growth of MSME

Implications for this study: The study assesses the economic viability and scalability of models of productive waqf as a financing tool for SDG-related projects (such as food security and education).

2.3. Waqf and ethical finance / SDGs alignment

Multidisciplinary literature connects waqf to more general ethical finance, Islamic social finance, and ESG (Environmental, Social, Governance) investing movements. Scholars argue that waqf can directly support SDG targets in health, education, poverty alleviation, and climate action, acting as a faith-based alternative to philanthropic endowments and impact investing (Lasmiatun, & Manteghi, 2025).

Implications for this study: The research outlines ways that waqf activities can be integrated with modern effect measuring techniques and purposefully connected with SDG indicators.

2.4. Green waqf and environmental sustainability

Green Waqf, or the use of waqf assets for climate-smart agriculture, water management, renewable energy, and biodiversity protection, is the subject of an emerging body of literature (Seadon, 2010; Wan Musyirah et al. 2025). This stream proposes waqf as a locally based finance tool for ecological resilience, bridging the gap between Islamic environmental principles (*khalifah*, *mīzān*) and practical resource stewardship.

Implications for this research: The study examines pilot green waqf programs and their potential for mitigating and adapting to climate change.

2.5. Empirical evidence and evaluations

Although there are several case studies, there aren't many thorough impact analyses evaluating waqf's quantifiable results (such as income generation, poverty reduction, and educational achievement). There are still few thorough quantitative evaluations, especially in African contexts, and most studies are descriptive.

Implication for this study: In order to close a significant research gap, this project intends to provide empirical evidence through a combination of methods on the impact of waqf in specific situations (such as cash waqf for MSMEs and agricultural waqf initiatives).

2.6. Global case studies and best practices

Waqf has been effectively revived as a dynamic tool for sustainable development in a number of Muslim and non-Muslim nations. These international experiences demonstrate how conventional religious endowments may be transformed into catalysts for social welfare, economic inclusion, and environmental resilience through institutional change, technological integration, and policy innovation.

a) Cash Waqf and Corporate Waqf in Malaysia SDG Framework Integration

With the establishment of the Cash Waqf and Corporate Waqf models, overseen by the State Islamic Religious Councils (SIRCs) and the Department of Waqf, Zakat, and Hajj

(JAWHAR), Malaysia is a leader in Waqf innovation (Ali Azizan et al. 2022). Individuals make modest financial contributions through Cash Waqf, which are then combined into investment funds that support healthcare, educational scholarships, and public housing. The Corporate Waqf model, which was developed by organizations like Johor Corporation (JCorp), directs business earnings towards social businesses, hospitals, and educational institutions (Mahmassani, 2021). Islamic social finance can support global sustainability goals by coordinating spiritual ideals with quantifiable development achievements, as demonstrated by Malaysia's incorporation of Waqf within its national SDG framework.

b) Indonesia: Productive Waqf for Agriculture, Education, and Housing

Indonesia has changed the idea of Waqf from static land endowments to productive assets that produce continuous revenue through the National Waqf Board, also known as the Badan Wakaf Indonesia (BWI). Nowadays, productive Waqf lands are utilized for housing projects aimed at low-income households, education, and agriculture, where the revenues fuel farmer cooperatives and rural development (Eliza, et al., 2024; Intan Zahira et al., 2024). Furthermore, Indonesia has been able to raise money for significant infrastructure and renewable energy projects because to the growth of Waqf-linked sukuk, or Islamic bonds (Fanani et al. 2020). These programs show how Waqf can promote inclusive growth and community empowerment by fusing contemporary financial instruments with traditional Islamic ideals.

2.6.1. Turkey: Vakif Katilim Bank and Financial Inclusion

The Vakif Katilim Bank, a participation bank founded in 2015 to oversee and grow endowment-based finance, is a living example of Turkey's centuries-old Vakif legacy. In order to ensure that the advantages of Islamic finance are seen at the local level, the bank reinvests Waqf-derived assets into social housing, microfinance, and small business support. Modern Turkish Waqf organizations continue the Ottoman history by combining innovation and tradition in healthcare, education, and cultural preservation (Ascarya et al. 2022). The experience of Turkey demonstrates how Waqf integration with the official banking and financial sector can improve

accountability, transparency, and long-term social benefit.

2.6.2. Nigeria: Emerging Interest in Waqf-Based Development

Through scholarly research, policy discussions, and trial initiatives run by governmental agencies, Islamic organizations, and universities, Waqf is making a comeback in Nigeria. Waqf is being investigated by academics and professionals as a tool for reducing poverty, empowering SMEs (Micro, Small, and Medium Enterprises), and promoting education (Muhammad, Ibrahim, Anas, Musa, & Asma'u, 2023). Initiatives are looking into how Cash Waqf may be used to finance community health initiatives, microcredit programs, and vocational training in states including Gombe, Kano, and Bauchi (Muhammad, Ikilima, & Aminu, 2023). Nigeria's rising involvement shows a growing understanding of Waqf's potential as a grassroots-driven social finance model that may support government and NGO-led initiatives to reduce poverty, even though it is still in its infancy (Muhammad, Ibrahim, Mohammed, & Yakub, 2025).

3. Research Gaps

- Limited longitudinal and impact-evaluation studies quantifying the direct contribution of waqf to SDG indicators represent the empirical measurement gap.
- Contextual application gap: Few studies examine the relevance of waqf in fragile or conflict-affected environments with limited institutional capability.
- Integration gap: There is a lack of research on operational methods that preserve religious legitimacy while integrating waqf with contemporary financial markets (such as sukuk and blended finance).
- Gap between technology and governance: A methodical examination of how digital tools and governance reforms might be applied in diverse legal and cultural contexts is required.

In order to fill these gaps, this research will (a) offer a workable, governance-conscious model for productive and environmentally friendly waqf; (b) carry out comparative case analysis with policy recommendations; and (c) suggest monitoring frameworks that connect waqf results to SDG metrics.

Therefore, this research supports waqf's historical effectiveness, contemporary developments, but it also draws attention to important issues with measurement, governance, and contextualization. In order to create workable frameworks that allow waqf to function as a legitimate, scalable force for sustainable change, this study places itself at the nexus of historical understanding, policy reform, technical innovation, and empirical evaluation.

4. Findings and discussion

The study's findings show that, when combined with contemporary governance, financial innovation, and regulatory frameworks, Waqf has a huge but underutilized potential to promote sustainable development and global transformation. Several important insights were obtained from the examination of historical precedents, current case studies, and stakeholder viewpoints. These are covered under thematic dimensions: Institutional governance, social welfare, education, economic empowerment, and environmental sustainability

4.1. Linking Waqf, Transformation, and Sustainability

This conceptual framework investigates the relationship among sustainability, social change, and Waqf (Islamic endowment). It emphasizes how Waqf, as a religious organization, may promote social welfare, economic expansion, and environmental harmony. According to Islamic philosophy, waqf is an ongoing investment in the advancement of society and individuals rather than only a charitable deed. Waqf offers an all-encompassing concept that encourages sustainable community empowerment, prudent resource management, and intergenerational justice by fusing the moral precepts of Islam with contemporary sustainability objectives. As a result, the framework presents Waqf as a practical and spiritual tool for accomplishing long-lasting change in the current global environment. Let's examine each one separately (Afifi, 2024).

4.2. Economic Empowerment and Inclusive Growth

The study demonstrates that productive Waqf can be a significant driver of inclusive growth and economic empowerment. Research from Malaysia, Indonesia, and Turkey demonstrates that corporate and cash waqf programs have successfully redirected idle charity funds onto profitable ventures.

The Corporate Waqf concept of the Johor Corporation in Malaysia reinvests corporate firm profits into microenterprises, hospitals, and institutions. The National Waqf Board (BWI) in Indonesia has converted conventional land-based waqf into housing and agricultural projects that generate income. Productive Waqf initiatives help small and medium-sized businesses (SMEs) with microfinance, generate jobs, and stabilize local economies, according to respondents and secondary data. Thus, in tandem to ethical impact investment in the traditional system, waqf functions as a sustainable Islamic social finance tool.

Findings also show that many Muslim-majority nations, especially those in Sub-Saharan Africa, lack the financial and legal frameworks necessary to duplicate these models. For example, Nigeria is still in the early stages of creating community endowment plans and Waqf-based MSME funds, but its institutional coordination is still lacking.

4.3. Social Welfare and Poverty Alleviation

Waqf was the foundation of public welfare in the past, and the study concludes that its resuscitation can significantly lessen reliance on government assistance. Respondents pointed out that, when properly regulated, Waqf-supported programs in community food, social housing, and healthcare remain successful in contemporary settings.

Waqf-based housing initiatives and hospitals in Malaysia and Turkey show that endowment revenue may stably fund vital social services, particularly in low-income or post-conflict areas. The results show that Waqf-based welfare is self-renewing; it continues to provide benefits without using up the initial endowment, in contrast to temporary humanitarian help.

However, the report notes that in many Middle Eastern and African countries, there are major barriers due to public mistrust and ignorance. Confidence has been damaged by poor community involvement and opaque management techniques, highlighting the necessity of strong accountability and digital transparency systems.

4.4. Education, Human Capital, and Knowledge Transformation

The study's findings unequivocally support Waqf's longstanding contribution to intellectual growth and education. Waqf earnings were used to support traditional models like the Ottoman madrasah system, Al-Azhar University in Egypt, and Al-Qarawiyīn in Morocco. Countries like

Malaysia and Indonesia have effectively established research centres, universities, and institutions that combine faith and scientific innovation in the modern era using Cash Waqf monies.

The respondents underlined that SDGs 4 (Quality Education) and 8 (Decent Work and Economic Growth) are directly aligned with this educational role. They emphasized, however, that contemporary financial management, institutional certification, and collaborations with national and international organizations are necessary for the educational Waqf to remain sustainable. Accordingly, the study concludes that Waqf can offer a religious framework for educational reform that combines moral principles with intellectual advancement, which is crucial for creating morally upright world citizens.

4.5. Environmental Sustainability and "Green Waqf" Initiatives

One of the study's major conclusions is the increasing applicability of the Green Waqf model, which allocates endowed resources to climate resilience, renewable energy, and environmental preservation. Waqf money have been utilized for solar energy development, water management, and reforestation, according to data from pilot projects in Malaysia, Indonesia, and the United Arab Emirates.

This illustrates how Waqf can be used to operationalize Islamic environmental ideals, which are embodied in the Qur'anic idea of *khalīfah fī al-ard* (stewardship on earth), in order to support sustainable ecosystems. According to the respondents, Green Waqf might act as a link between Islamic financing and the global climate finance goal by assisting with biodiversity preservation and renewable energy projects at the local level. However, the results show that there is still a lack of knowledge of Green Waqf, especially in the Middle East and Africa, which calls for cross-sector cooperation and scholarly advocacy.

4.6. Governance, Legal Framework, and Institutional Innovation

The biggest obstacle to Waqf's revival as well as its biggest opportunity was institutional governance. According to the survey, a large number of Waqf institutions function under antiquated or disjointed legislative frameworks. Recurring issues were identified through document analysis and interviews:

- Absence of cohesive national policy structures.

- Inadequate asset registration and documentation
- Low levels of financial literacy and professional management
- Overlaps in the bureaucracy of civil and religious authority.

On the other hand, nations with improved governance structures like Turkey's General Directorate of Foundations (Vakıflar Genel Müdürlüğü) and Malaysia's State Islamic Religious Councils (SIRCs) showcase more effectiveness, transparency, and social impact. The findings suggest that adopting digital waqf registries, blockchain-based auditing, and public-private-waqf partnerships (PPWPs) can significantly improve performance, attract investment, and restore public trust.

4.7. Cross-Regional Comparison and Emerging Trends

Although the principles of Waqf are universal, a comparative review of case studies showed that stakeholder alignment and context-specific regulatory frameworks are crucial for its implementation. Integrated approaches linking Waqf to national SDG initiatives are demonstrated in Southeast Asia (Malaysia, Indonesia). Through waqf participation banks, Turkey blends financial innovation with historical continuity. Nigeria and other African countries are still in their infancy, exhibiting increasing institutional and scholarly interest but in need of support for capacity-building and modernization of their laws. This variation demonstrates how Waqf may be adapted to other governance systems, indicating that it can be duplicated globally as a faith-based ethical finance mechanism with appropriate institutional design.

Together, these case studies demonstrate that Waqf can develop into a global model of moral and sustainable finance with the help of strategic policy backing, regulatory change, and institutional innovation. Countries like Malaysia, Indonesia, Turkey, and Nigeria are demonstrating that Waqf is not just religious charity but rather a transformative development mechanism that can address global issues like poverty, unemployment, and inequality by fusing faith-based motivations with contemporary economic management. Waqf has the potential to be a key component of a new, values-based economic system that integrates sustainability, social justice, and spirituality if it is successfully expanded and networked internationally.

4.8. Overall Implications for Global Transformation

The compilation of results confirms that Waqf is a dynamic tool for world change rather than a holdover from pre-modern Islamic civilization. It concurrently supports social cohesion, environmental sustainability, and economic development the three pillars of sustainable development when it is strategically modernized. The study revealed that by integrating social justice and moral responsibility into the very fabric of economic systems, Waqf's transition from a charity to a productive, technologically advanced, and policy-aligned organization has the potential to completely reshape paradigms for global development. Waqf is essentially a moral economy of sustainability, connecting compassion with innovation, ethics with enterprise, and faith with finance. Waqf may promote an inclusive and sustainable future in line with Islamic values and humankind's universal goals by means of international collaboration, knowledge sharing, and digital governance.

According to the study's findings, Waqf, the Islamic endowment system, is much more than just a legacy of charity; it is a vibrant, flexible organization that can promote long-lasting change in the modern world. Waqf has been a consistent cornerstone of social welfare, education, healthcare, and community development in Muslim communities, as confirmed by historical data and contemporary case studies. Waqf can effectively address today's issues, including poverty, inequality, unemployment, and environmental degradation, if it is revitalized with modern governance, financial innovation, and digital transparency.

The study shows that as productive Waqf embodies continuity, intergenerational fairness, and ethical resource management, it naturally fits with the concepts of sustainability. Its institutional framework permits flexibility in supporting the economic, educational, social, and ecological pillars of the United Nations Sustainable Development Goals (SDGs), while its moral base in *ṣadaqah jāriyah* (continuous generosity) guarantees perpetual benefit.

5. Recommendations

Based on the research findings, the following recommendations are proposed for practical implementation, policy development, and scholarly advancement:

- Legal harmonization and institutional reforms: Comprehensive waqf legislation that define property rights, registration, and management procedures should be passed by governments in mixed and Muslim-majority communities. To supervise the coordination, standardization, and incorporation of Waqf into national development programs, National Waqf Commissions or Development Boards ought to be set up.
- Combining the Sustainable Development Goals (SDGs) with Waqf: International organizations and policymakers should draw a clear connection between Waqf projects and SDG indicators, especially those pertaining to climate action (SDG 13), decent work (SDG 8), clean water (SDG 6), poverty eradication (SDG 1), and excellent education (SDG 4). This alignment will increase international recognition and encourage cooperation across borders.
- Embracing Innovation in Finance and Technology: To guarantee transparency, real-time monitoring, and heightened donor confidence, stakeholders should adopt fintech integration, blockchain-based tracking systems, and digital waqf platforms. Waqf-linked sukuk, or Islamic bonds, have the potential to further raise private funds for social welfare, renewable energy, and infrastructure initiatives.
- Encouragement of Green and Productive Waqf Models: Waqf assets ought to be created for beneficial applications in fields including microenterprise financing, housing, education, and agriculture. To combine ecological responsibility with religious ideals, governments and non-governmental organizations should fund Green Waqf initiatives that promote environmental sustainability, such as waste management, reforestation, and renewable energy.
- Building Capacity and Professional Management : Mutawallīs (waqf managers), attorneys, and academics should all participate in training programs to advance their knowledge of asset management, investment, and development planning.
- Community Involvement and Public Awareness: Media outlets, civil society groups, and religious leaders should raise awareness of Waqf as a way to practise sustainable social responsibility. Through inclusive governance practices that promote openness and shared ownership, community involvement should be improved.
- Global Cooperation and Networking for Research: International collaborations for cooperative Waqf projects, knowledge sharing, and research financing should be facilitated by global Islamic organizations like the Islamic Development Bank (IsDB), UNDP, and OIC. To produce empirical data on Waqf's influence in various socioeconomic contexts, comparative research ought to be promoted.

6. Conclusion

According to the study's findings, Waqf, the Islamic endowment system, is much more than just a legacy of charity; it is a vibrant, flexible organization that can promote long-lasting change in the modern world. Waqf has been a consistent cornerstone of social welfare, education, healthcare, and community development in Muslim communities, as confirmed by historical data and contemporary case studies. Waqf can effectively address today's issues, including poverty, inequality, unemployment, and environmental degradation, if it is revitalized with modern governance, financial innovation, and digital transparency.

The study shows that as productive Waqf embodies continuity, intergenerational fairness, and ethical resource management, it naturally fits with the concepts of sustainability. Its institutional framework permits flexibility in supporting the economic, educational, social, and ecological pillars of the United Nations Sustainable Development Goals (SDGs), while its moral base in *sadaqah jāriyah* (continuous generosity) guarantees perpetual benefit.

Comparative analysis of Malaysia, Indonesia, Turkey, and Nigeria reveals that the success of Waqf-based development depends on three key determinants: Ultimately, the study emphasizes that global transformation requires an ethical foundation an economy rooted in compassion, justice, and shared prosperity. Waqf offers precisely such a framework, and when properly harnessed, it can serve as a universal model of faith-driven ethical finance, connecting spirituality with global sustainability and making religion a force for inclusive, peaceful, and transformative development.

Waqf is a timeless system that has the capacity to unite ethics and economics, tradition and innovation, and faith and progress. By putting human dignity and moral purpose at the core of economic systems, its resurgence in the twenty-first

century has the potential to change the conversation around global development. Waqf has the potential to be a pillar of long-term, sustainable change if it is properly regulated, technologically sophisticated, and internationally connected.

References

Abbas, A. F., Afifi, A. A., Eliza, M., & Muhammad, A. A. (2025). The Political Dimension of Prophecy on Civilizing the Moral Ethics, Justice, and Class Reform. *Perwakilan: Journal of Good Governance, Diplomacy, Customary Institutionalization and Social Networks*, 3(1), 119-134.

Adam M.A, Muhammad, A.A., Bashir L.M & Mohammed B.I (2023). The Role of Waqf for Human Sustainable Development (HSD) in North-Eastern Nigeria. *IJZIP International Journal of Zakat and Islamic Philanthropy*, (MARCH 2023). eISSN: 2672-7471, ISSN: 2682-7530. Volume: 5, Issue: 1, pp. 198-208. <https://journal.zakatkedah.com.my>

Afifi, A. A. (2024). Waqf Business Model (WBM): Towards A Sustainable Social Business Model on The Mainstream Economics. *Journal of Regional Development and Technology Initiatives*, 2(2), 63–78. <https://doi.org/10.58764/j.jrdti.2024.2.75>

Afifi, A. A. (2025). The Legacy of Waqf: Foundation and Its Continuities. *WAQF Business Review*, 1(1), 1–13. <https://doi.org/10.58764/j.wbr.2025.1.1>

Ahmad, A. U. F., & Karim, M. F. (2019). Opportunities and challenges of Waqf in Bangladesh: The way forward for socioeconomic development. In *Revitalization of Waqf for SocioEconomic Development*, 1. https://doi.org/10.1007/9783030184452_10.

Ali Azizan, N., Muhamat, A. A., Syed Alwi, S. F., Ali, H., & Abdullah, A. Q. C. (2022). Revitalising Waqf (endowment) lands for agribusiness: potentials of the anchor company models. *Journal of Agribusiness in Developing and Emerging Economies*, 12(3), 345-370.

Agaileh, Z. M. (2024). Educational Waqf (Endowment) in artificial intelligence programs: Toward A new form of Waqf. *Journal of Governance and Regulation*. <https://doi.org/10.22495/jgrv13i1art21>

Ardiyansyah, R., & Kasdi, A. (2021). Strategies and Optimizing the Role of Productive Waqf in Economic Empowerment of the Ummah. *Ziswaf: Jurnal Zakat Dan Wakaf*, 8(1), 61. <https://doi.org/10.21043/ziswaf.v8i1.9871>

Ascarya, A., Hosen, M. N., & Rahmawati, S. (2022). Designing simple productive waqf models for Indonesia. *International Journal of Ethics and Systems*, 38(3), 380–401. <https://doi.org/10.1108/IJOES-07-2020-0101>

Calicioglu, Ö., & Bogdanski, A. (2021). Linking the bio-economy to the 2030 sustainable development agenda: Can SDG indicators be used to monitor progress towards a sustainable bio-economy? *New Biotechnology*, 61(November 2020), 40–49. <https://doi.org/10.1016/j.nbt.2020.10.010>

Eliza, M., Afifi, A. A., Arifin, N. A., & Azami, E. (2024). Digital Learning Co-Creation: A Conceptual Study between University and Learning Hub in Underdeveloped Urban Areas. *Journal of Regional Development and Technology Initiatives*, 2(2), 119-130.

Fanani, A., Muhammad, N., & Omar, S. (2020). The Strategy of Waqf Influencing through the International Center of Awqaf Studies Indonesia. *Mimbar*, 36(1), 21–45. <https://doi.org/10.29313/mimbar.v36i1>

Fatira, M., & Nasution, A. W. (2019). Boosting The Welfare of Business Community: Implementing The Model of Islamic Micro Bank of Waqf in Pesantren. *AL-FALAH : Journal of Islamic Economics*, 4(1), 21–34. <https://doi.org/10.29240/alfalah.v4i1.771>

Iman, N., Santoso, A., & Kurniawan, E. (2021). Wakif's Behavior in Money Waqf: an Approach to Theory of Planned Behavior. *Ekuilibrium : Jurnal Ilmiah Bidang Ilmu Ekonomi*, 16(1), 12. <https://doi.org/10.24269/ekuilibrium.v16i1.3184>

Intan Zahira, M. Zidny Nafi' Hasbi, S. F. (2024). Strengthening Economic and Development Relations Transformation Efforts Towards Golden Indonesia 2045. *Journal of Islamic Economics and Business Ethics*, 1(3), 125–135. <https://doi.org/10.24235/jiesbi.v1i2.133>

Lasmiyatun, K. M. T., & Manteghi, N. (2025). The Impact of Artificial Intelligence (AI) Implementation on Islamic Financial Literacy and Global Economic Changes in the Banking World. 2(1), 23–43.

<https://doi.org/10.24235/jiesbiv1i3>

Mahmassani, S. (2021). Waqf empowerment for the autonomy of Islamic boarding school(pesantren); study of modern Islamic boarding school (Pondok) Tazakka Batang. Journal of Islamic Economics, Management, and Business (JIEMB), 2(2), 1–22. <https://doi.org/10.21580/jiemb.2020.2.2.6845>

Muhammad, A.A., Ikilima A.S & Aminu, U (2023). The Impact of Islamic Models of Zakat and Waqf in Reducing Poverty among Vulnerable during the Pandemic Era in Bauchi State Nigeria. AZKA International Journal of Zakat and Social Finance, 4(1), 69-90. <https://doi.org/10.51377/azjaf.vol4n01.143>

Muhammad, A.A., Ibrahim D.I, Anas A.M, Musa I & Asma'u M.S (2023b). Strengthening Zakat and Waqf Institutions for the Development of Micro, Small and Medium Enterprises (MSMEs) in Nigeria. International Journal of Small and Medium Enterprises and Business Sustainability. ISSN 2242-9368 (Online), Vol. 8, No. 1, March 2023. Pp. 101-120.

Muhammad, A. A., Aliyu, S. A., Abdullahi, H., Ibrahim, M., & Ibrahim, R. M. (2025). The Role of Waqf in Agricultural Development and Modernization in North-Eastern Nigeria. *WAQF Business Review*, 1(1), 15–22. Retrieved from <https://awqaf.biz/journal/index.php/wbr/article/view/2>

Muhammad, A. A., Ibrahim, A., Mohammed, Y. Z., & Yakub, A. A. (2025). Waqf as a Tool for Climate Change Mitigation in Northern Nigeria. *AL-IMAM: Journal on Islamic Studies, Civilization and Learning Societies*, 6(1), 123–131. <https://doi.org/10.58764/j.im.2025.6.86>

Swadia Gandhi Mahardika, and Afifa Tanweer (2025). Environmentally Friendly Waqf Model: A Response to Sustainable Economic Development and the Presence of a Circular Economy, JIESBI: Journal of Islamic Economics and Business Ethic 2(1):68-93, DOI: [10.24235/jiesbi.v2i1.180](https://doi.org/10.24235/jiesbi.v2i1.180)

Seardon, J. K. (2010). Sustainable waste management systems. Journal of Cleaner Production, 18(16–17), 1639–1651. <https://doi.org/10.1016/j.jclepro.2010.07.009>

Wan Musyirah Wan Ismail, Nor Tasik Misba, , Nurul Amyra Mat Isa (2025). Reimagining Waqf in the Digital Age: A Framework for Smart Waqf Governance Through Emerging Technologies. International Journal of Research and Innovation in Social Science (IJRISS), 9(05), 4704-4714. <https://doi.org/https://dx.doi.org/10.47772/IJRISS.2025.905000361>