



WAQF FOREST AS A STRATEGY FOR REFORESTATION: A QUALITATIVE STUDY OF ECOLOGICAL SUSTAINABILITY IN ACEH

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Abstract

Aceh has one of the largest forest areas in Sumatra. However, Aceh has lost approximately 117,000 hectares in the last 7 years. Although the Aceh government has addressed forest destruction through programs run by the environment and forestry agencies and regulatory support from Indonesian laws and Qanun, these measures have not been effective. In addressing this issue, Islam has a solution-

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oriented and relevant approach to tackling forest destruction through the concept of Waqf Forest. This study examined the implementation, positive impacts, and challenges, and will produce recommendations for the development of waqf forests in Aceh province. This study used a qualitative approach with a case study method to explore in depth the waqf forest model as a forest reforestation strategy in Aceh. Overall, this study highlights that the waqf forest model represents a promising strategy for addressing deforestation and supporting reforestation efforts in Aceh Province, while also identifying key challenges that hinder its optimal development. Contributing empirical insights into waqf forest implementation in Aceh, an area largely underexplored in prior literature. This research demonstrates that waqf forests hold significant potential as an Islamic philanthropic mechanism for advancing ecological sustainability and long-term forest conservation in the region.

Keywords: Waqf; Forest; Waqf Forest; Deforestation; Reforestation.

Abstrak

Aceh memiliki salah satu kawasan hutan terluas di Sumatera. Namun, Aceh telah kehilangan sekitar 117.000 hektar hutan dalam 7 tahun terakhir. Meskipun pemerintah Aceh telah menangani kerusakan hutan melalui program-program yang dijalankan oleh dinas lingkungan hidup dan kehutanan serta dukungan regulasi dari undang-undang Indonesia dan Qanun, langkah-langkah tersebut belum efektif. Dalam mengatasi permasalahan ini, Islam memiliki pendekatan yang berorientasi pada solusi dan relevan dalam menanggulangi kerusakan hutan melalui konsep Hutan Wakaf. Penelitian ini mengkaji implementasi, dampak positif, dan tantangan, serta akan menghasilkan rekomendasi bagi pengembangan hutan wakaf di Provinsi Aceh. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus untuk mengeksplorasi secara mendalam model hutan wakaf sebagai strategi reforestasi hutan di Aceh. Secara keseluruhan, penelitian ini menyoroti bahwa model hutan wakaf merupakan strategi yang menjanjikan dalam mengatasi deforestasi dan mendukung upaya reforestasi di Provinsi Aceh, sekaligus mengidentifikasi berbagai tantangan utama yang menghambat pengembangan optimalnya. Dengan memberikan wawasan empiris mengenai implementasi hutan wakaf di Aceh, sebuah area yang sebagian besar belum banyak dieksplorasi dalam literatur sebelumnya. Penelitian ini menunjukkan bahwa hutan wakaf memiliki potensi signifikan sebagai mekanisme filantropi Islam dalam mendorong keberlanjutan ekologis dan konservasi hutan jangka panjang di kawasan ini.

Kata Kunci: Wakaf; Hutan; Hutan Wakaf; Reforestasi; Deforestasi.

INTRODUCTION

Forests are important ecosystems that play a strategic role in maintaining environmental balance. Based on Law of the Republic of Indonesia No. 41 of 1999, forests are defined as ecosystems consisting of expanses of land containing natural biological resources, dominated by trees in their natural environment, and inseparable from one another. In this case, forests contribute in various ways to the country's foreign exchange and serve as initial capital for the development of sectors such as job creation through planting, protection, maintenance, forest product industries, and forest harvesting.¹ The economic value of Indonesia's forest lies in the raw materials it produces, especially timber. Non-timber forest products such as spices, rubber, coffee, and cloves also have economic potential. In addition to its economic values, forests also provide significant environmental contributions, including protecting water sources, supporting life systems, preserving the ozone layer, maintaining air quality, and absorbing pollution.²

However, forests in Indonesia, particularly in Aceh Province, face serious threats, including deforestation, illegal logging, and extractive economic practices. Data shows that Aceh has one the largest forest areas in Sumatra. According to the Indonesian Ministry of Environment and Forestry, the forest area of Aceh Province reaches 3,551,329 hectares. Based on data from Forest Watch Indonesia (FWI) satellite monitoring, the province of Aceh has lost approximately 117,000 hectares in the last 7 years. Deforestation, defined as the reduction of forest area due to land conversion for infrastructure, agriculture, plantations, settlements, and mining, poses a serious threat to ecological sustainability, impacting not only human life but also the survival of wildlife habitats.³ Preserving the integrity of forests not only supports human life and the habitats within them, but also serves as a natural fortress in protecting against natural disasters that can threaten human life.

This has been proven by the natural disasters in the form of flash floods and landslides that struck the Sumatra region, including Aceh, North Sumatra, and West Sumatra, at the end of November 2025, which resulted in thousands of people losing their lives, losing their homes, and destroying public and private facilities. Data from the Indonesian National Disaster Management Agency (BNPB) shows that the death toll in Aceh reached 414 people, and around 144,865 houses suffered damage ranging from minor to severe.⁴

Forest exploitation practices can be firmly addressed and declared through Indonesian Law and regional regulations through the Qanun Aceh. However, these regulations have not been strictly enforced. Indonesian law regulates forest logging through Law of the Republic of Indonesia No. 18 of 2013 on the Prevention and Eradication of Forest Destruction (P3H) and Law No. 41 of 1999 on Forestry, which has been amended through the Job Creation Law. This regulation prohibits all forms of illegal logging and

¹Mayasari, Fadhilah, Reflis, Utama, dan Ramdon, 'Valuasi Ekonomi Nilai Jasa Hutan: Sebuah Literature Review', *INSOLOGI Jurnal Sains dan Teknologi*, 3.1 (2024).

²Arba, Sudiarto, dan R. Yuniansar, 'Perlindungan Hutan dan Fungsinya bagi Kehidupan Manusia dan Lingkungan Alam', *Jurnal Kompilasi Hukum*, 8.2 (2023).

³Wahyuni, Herpinta, dan Suranto, 'Dampak Deforestasi Hutan Skala Besar terhadap Pemanasan Global di Indonesia', *JIP: Jurnal Ilmiah Ilmu Pemerintahan*, 6.1 (2021).

⁴Polri.go.id, 'BNPB Records 1,006 Fatalities as Number of Flood Evacuees in Aceh Declines', (2025) <https://inp.polri.go.id/artikel/bnpb-records-1006-fatalities-as-number-of-flood-evacuees-in-aceh-declines> (8 February 2025).

requires an official permit (business license) for timber harvesting, with criminal sanctions and heavy fines for violators. In addition, Aceh Province has strict regulations on forest exploitation, as stipulated in Aceh Qanun No. 7 of 2016, which requires the governor's permission and aims to benefit local communities in forest areas, especially those with low economic status. However, these regulations are not in line with the reality on the field. Based on the initial observations of researchers in Lamteba Village, Aceh Besar Regency, Aceh Province, logging is carried out almost every day with large timber trucks operating from early morning until evening. In addition, logging carried out by unknown individuals is very detrimental to the local community and has no economic impact whatsoever. This indicates that the applicable regulations are still not being complied with and enforced strictly.

Another strategy adopted by the Aceh government is reforestation and replanting of degraded forests, particularly in critical areas such as the Leuser Ecosystem (KEL) and the Krueng Aceh Watershed (DAS).⁵ However, limited funding from the Aceh Revenue and Expenditure Budget (APBA) remains a major obstacle. In 2022, the total budget allocated for the forestry sector in Aceh Province was only around Rp 48.3 billion, or 0.4% of the total provincial budget. In 2023, the Aceh Environment and Forestry Agency (DLHK) only allocated around Rp 50 million for all forest management activities.⁶

In addressing this issue, Islam has a solution-oriented and relevant approach to tackling forest destruction through the concept of Waqf Forest. Waqf forests are a contemporary form of waqf that focuses on forest conservation and protection.⁷ According to Caliph Muhammad Ali, waqf instruments can be used to support forest sustainability and are suitable for sustainable forest management, thereby ensuring forest conservation. This is also supported by the characteristics of waqf, which cannot be converted, sold, or donated, thereby ensuring its continuity for the benefit of the people.⁸ The practice of waqf is sunnah, which is similar to the practice of shadaqah, but the difference is that waqf cannot be spent in its entirety, so that if an area is designated as a waqf forest area, it cannot be converted into another area.

Waqf instruments must be managed based on the principle of sustainability so that the value of these objects is maintained and protected from degradation or deterioration. The urgency of waqf-based forests is a consideration given the increasing rate of environmental damage, particularly the impact of increasingly uncontrolled deforestation. In Indonesia, waqf forests were first initiated in Banda Aceh in 2012 out of concern for the condition of forests that were continuously being exploited in the Aceh region. Until now, waqf forests continue to expand to other areas such as Bogor and West Sumatra. The Aceh Waqf Forest covers a total area of 6 hectares and has empowered local forest communities through organic farming and conservation programs.

Waqf forest promotes the protection of forest environments as a form of worship. This can strengthen community motivation to sustainably protect forests, not only because

⁵Interview with Beni (Dinas Lingkungan Hidup Aceh), Geucu, Banda Aceh, October 24, 2025.

⁶Sari, 'Anggaran Penanganan Hutan dari DLHK Aceh hanya Rp 50 Juta, WALHI: Miris!', RMOL Aceh, (2023) <https://www.rmolaceh.id/anggaran-penanganan-hutan-dari-dlhc-aceh-hanya-rp-50-juta-walhi-miris> (8 February 2025).

⁷Sup, David Frastiawan Amir, 'Relevansi Konsep Hutan Wakaf dengan Konsep Wakaf di dalam Islam', *Journal of Islamic Economics*, 7.1 (2021).

⁸Nur, Rahma Aini, dan Muhammad Iqbal Irfany, 'Strategi Pengembangan Hutan Wakaf Bogor Menggunakan Pendekatan ISM', *Al-Muzara'ah*, 12.1 (2024).

of regulations but also due to moral and spiritual beliefs.⁹ Waqf assets are permanent in nature (they cannot be sold or transferred), so waqf forests have the potential to become a stable long-term conservation model compared to project-based programs or short-term policies that have proven unable to keep pace with the rate of deforestation.

Waqf forests have a very strong relevance to the culture of Acehese society as they are rooted in values that have long been lived and practiced in daily life. Aceh, as a region closely identified with Islamic teachings, makes the concept of waqf not something unfamiliar, but rather part of a deeply rooted socio-religious tradition. Until now, waqf has been more commonly known in the form of land for mosques, cemeteries, or educational institutions. However, with the development of the times, the idea of waqf forests has emerged as an expansion of the meaning of waqf into the context of environmental conservation, without abandoning the essence of worship and long-term benefit.

On the other hand, the Acehese community also possesses local wisdom in managing natural resources collectively. Traditional local wisdom such as the *Panglima Uteun* demonstrate that the management of territories, including forests, is not purely individual in nature, but rather community-based with the aim of maintaining a balance between human needs and the preservation of nature.¹⁰ In this context, waqf forests become highly relevant as they carry the principle of collective ownership that cannot be bought or sold, and are managed for the benefit of both present and future generations.

Aceh's historical experience, particularly the 2025 flood event, has further strengthened the collective awareness of the community regarding the importance of protecting the environment. The disaster provided a lesson that environmental damage can magnify the risks and impacts of disasters, while well-preserved ecosystems, such as forests and mangroves, are capable of serving as natural protectors. Within this framework, waqf forests can be understood as a form of humanity's moral and spiritual responsibility to protect nature as a trust from God.

Thus, waqf forests are not merely a new concept introduced from the outside, but rather an innovation that grows from the intersection of religious teachings, customary traditions, and the historical experiences of the Acehese community. Waqf forests represent the continuity of long-held values in a form that is more contextually responsive to present-day environmental challenges, while simultaneously serving as a pathway to achieving ecological sustainability and social welfare at the same time.

There has not been much research on waqf forests. However, researchers have found that previous studies indicate that waqf forests can be an alternative solution in reforestation programs. But there is still a gap between the results and the literature. Rohmaningtyas (2022) in "*Waqf Forests as a Solution to Deforestation in Indonesia*" and Syawal and Handayani (2020) in "*Prevention of Forest Destruction Through Waqf Forest Activities and the Role of Notaries in the Preparation of Waqf Deeds*" both rely exclusively on secondary data through normative legal and literature-based approaches, limiting their ability to reflect real world conditions and implementation challenges. Building on empirical ground, Suhendar et al. (2024) in "*Analysis of the Utilization of Waqf Forests in the Empowerment of the Community of Cibunian Village, Pamijahan District, Bogor Regency*" employed primary data to examine

⁹Nurholis, Muhammad, 'Islamic Law and Environmental Sustainability: Maqasid al-Sharia's Perspective', *Jurnal Mediasas: Media Ilmu Syari'ah dan Ahwal Al-Syakhsyiyah*, 8.3 (2025).

¹⁰Mahmuddin, Januar, Eka, dan Mansari, 'Revitalisasi Panglima Uteun dalam Pengelolaan Hutan di Kabupaten Aceh Besar', *Jurnal Sosiologi USK: Media Pemikiran dan Aplikasi*, 18.2 (2024).

managerial challenges in waqf forest governance. However, the study stops short of offering actionable recommendations or a framework for further development.

Collectively, these studies reveal a critical gap, which is the absence of field-based research that not only identifies challenges but also proposes concrete strategies for advancing waqf forest management in Indonesia. Currently, researchers have not found any studies specifically related to waqf forests in Aceh. The majority of research in Aceh province is still related to land waqf. This study will examine the implementation, positive impacts, and challenges, and will produce recommendations for the development of waqf forests in Aceh province.

LITERATURE REVIEW

A. Waqf

The word waqf comes from the Arabic word *Waqafa*. The meaning of the word *Waqafa* is to hold, stop, and stay in place. Across classical Islamic jurisprudence, scholars have defined waqf with varying emphases: the Hanafi school frames it as the detention of property from the ownership of the waqif for charitable purposes, while the Shafi'i school, as articulated in *Tahrir al-Alfaz at-Tanbih*, stresses the preservation of the asset itself, free from interference, with its proceeds directed toward drawing oneself closer to Allah SWT. Despite these differences in framing, both traditions converge on a shared principle. Waqf is a deliberate act of perpetual dedication, where an individual relinquishes personal ownership in favor of sustained public or religious benefit.¹¹

What is more significant, however, is how the concept of waqf has evolved beyond its classical consumptive form into a productive instrument capable of financing large-scale social and environmental initiatives.¹² Productive waqf encompassing fixed assets such as land, water sources, and other yield-generating properties has demonstrated potential as a sustainable financing mechanism, particularly for environmental projects such as the acquisition and rehabilitation of critical land for reforestation.¹³ This shift is critical, rather than being confined to mosque endowments or charitable distributions, waqf can be strategically mobilized as an institutional response to pressing ecological challenges, including deforestation, a dimension that remains underexplored in contemporary waqf discourse.

B. Waqf Forest

Islamic economics is based on sharia principles that aim to achieve social justice, equitable distribution of wealth, and community welfare.¹⁴ Within the framework of maqashid al-shariah, the preservation of life (*hifz al-nafs*), the protection of property (*hifz al-mal*), and the preservation of the environment are fundamental objectives that guide

¹¹Latifah, Nur A., dan Mulyono Jamal, 'Analisis Pelaksanaan Wakaf di Kuwait', *ZISWAF: Jurnal Zakat dan Wakaf*, 6.1 (2019).

¹²Mardani, Dede A., 'Wakaf dan Ekonomi Hijau: Upaya Mengurangi Perubahan Iklim dan Emisi Gas Karbon', *La Zhulma: Jurnal Ekonomi Syariah*, 2.1 (2023), 23-34.

¹³Zainal, Veithzal R., 'Pengelolaan dan Pengembangan Wakaf Produktif', *Al-Awqaf: Jurnal Wakaf dan Ekonomi Islam*, 9.1 (2016), 1-16.

¹⁴Maharati, Cindy, 'Prinsip-Prinsip Ekonomi Syariah dan Tujuan Utamanya', *FADZAT: Jurnal Ekonomi Syariah*, 5.2 (2025).

economic activities.¹⁵ The values of *mizan* (balance) and the prohibition of *israf* (excessive exploitation) provide an ethical foundation for sustainable and intergenerational equitable management of natural resources. Thus, the forest waqf-based model gains normative and religious legitimacy as an instrument of sustainability. Waqf forests have a long history dating back to the Ottoman Empire in Turkey. There were four types of forest ownership at that time, such as state-owned forests covering an area of up to 10 million hectares, waqf forests covering an area of up to 100,000 hectares, municipal forests covering an area of 146,000 hectares, and privately-owned forests covering an area of 539,000 hectares.¹⁶ Beyond its historical roots, the concept of waqf forest integrates spiritual and socio-ecological dimensions, positioning it as a long-term instrument for both environmental conservation and local community empowerment

Waqf forests fall into the category of productive waqf. It is within this normative foundation that the waqf forest model derives both its religious legitimacy and its practical relevance. Waqf forests, defined as natural or replanted forests established on land legally designated as waqf under sharia, represent a category of productive waqf in which the asset is managed for public benefit, with proceeds directed toward charitable and communal purposes under the stewardship of a nazir.¹⁷

The concept of waqf forests is highly relevant to the principles of waqf in Islam, which provide benefits for the Muslim community. Beyond that, the concept of waqf forests also represents an innovative solution for preserving the natural environment. Although the concept of waqf forests is not entirely new within the Islamic intellectual tradition, waqf as an instrument of Islamic philanthropy has been widely proven to deliver positive impacts on sustainable economic development for the Muslim community.¹⁸

C. Cash Waqf and Sustainable Environmental Financing

In recent years, the concept of cash waqf has gained increasing attention as an innovative mechanism to enhance the sustainability and flexibility of waqf management. Unlike traditional waqf assets that are limited to immovable properties such as land and buildings, cash waqf enables the mobilization of financial resources that can be invested in productive sectors, generating continuous returns for social and environmental purposes. According to Cizakca (2011), cash waqf played a significant historical role in supporting public welfare projects during the Ottoman era, demonstrating its potential as a sustainable financial instrument.¹⁹

In the contemporary context, cash waqf is considered highly relevant for financing long-term development programs, including ecological conservation and climate-related initiatives. Mohsin (2013) argues that integrating cash waqf into modern Islamic finance systems can strengthen community resilience and provide alternative funding sources for

¹⁵Dusuki, Ayraf W., dan Said Bouheraoua, 'The Framework of Maqasid al-Shari'ah and Its Implication for Islamic Finance', *ICR Journal*, 2.2 (2011).

¹⁶Sup, David Frastiawan Amir, 'Relevansi Konsep Hutan Wakaf dengan Konsep Wakaf di dalam Islam', *Journal of Islamic Economics*, 7.1 (2021).

¹⁷Nur, Rahma Aini, dan Muhammad Iqbal Irfany, 'Strategi Pengembangan Hutan Wakaf Bogor Menggunakan Pendekatan ISM', *Al-Muzara'ah*, 12.1 (2024).

¹⁸Hidayat, Nurul Dede, 'Konsep Hutan Wakaf Dalam Perspektif Ekonomi Islam', Gunung Djati Conference Series, (2025).

¹⁹Cizakca, Murat, 'Finance and Economic Development in Islam, Historical Perspective', MPRA Paper 42046, *University Library of Munich Germany*, (2012).

sustainable development goals.²⁰ Therefore, the development of waqf forests could benefit significantly from cash waqf schemes, such as waqf-linked deposits or green waqf investments, to ensure stable funding for reforestation and conservation programs.

D. Community-Based Forest Management and Islamic Environmental Ethics

Another important dimension in understanding the waqf forest model is its alignment with the concept of community-based natural resource management. Forest sustainability is not solely dependent on legal frameworks, but also on local participation and collective stewardship. Ostrom (1990) emphasizes that community-managed common resources can be sustainably maintained when local actors are empowered with governance roles, shared responsibilities, and long-term incentives. This perspective supports the waqf forest initiative, which is largely driven by grassroots environmental activists and community engagement.²¹

Moreover, Islamic environmental ethics provide a strong moral foundation for forest conservation. Islam views humans as khalifah (stewards) on earth, responsible for protecting natural resources and preventing destruction (fasad). Foltz (2003) highlights that Islamic teachings emphasize harmony with nature, moderation, and accountability before God in utilizing environmental resources.²² Thus, waqf forests not only function as ecological instruments but also embody religious values that encourage collective responsibility and sustainable environmental behavior.

METHOD

This study used a qualitative approach with a case study method to explore in depth the waqf forest model as a forest reforestation strategy in Aceh. This approach was chosen because the focus of the study is to understand the phenomena, strategies, and obstacles encountered in the implementation of waqf forests as an instrument of forest ecological sustainability.²³ The research was conducted in the Jantho and Selimum waqf forests in Aceh Besar Regency, and some participants were interviewed in the city of Banda Aceh. This was conducted from November 15, 2025, and ended on January 30, 2026. The research data consists of primary and secondary data.

Primary data was obtained from in-depth interviews with participants, observations, and documentation. Secondary data was obtained from previous literature reviews, government data, and reliable opinions. Purposive sampling is used to find samples or research participants that match the specified criteria and topics. The total number of participants was 8 people, with the following breakdown: 2 members of the the Aceh Waqf Forest Initiative team, 2 officials from the Aceh Provincial Environmental Agency, 2 professors of Islamic economics, and 2 representatives of non-governmental organizations (NGOs) from WALHI Aceh (Indonesian Forum for the Environment) and HaKA (Aceh Natural Forest and Environment).

²⁰Mohsin, Ismail Abdel, 'Financing through Cash-Waqf: A Revitalization to Finance Different Needs', *International Journal of Islamic and Middle Eastern Finance and Management*, 6.4.

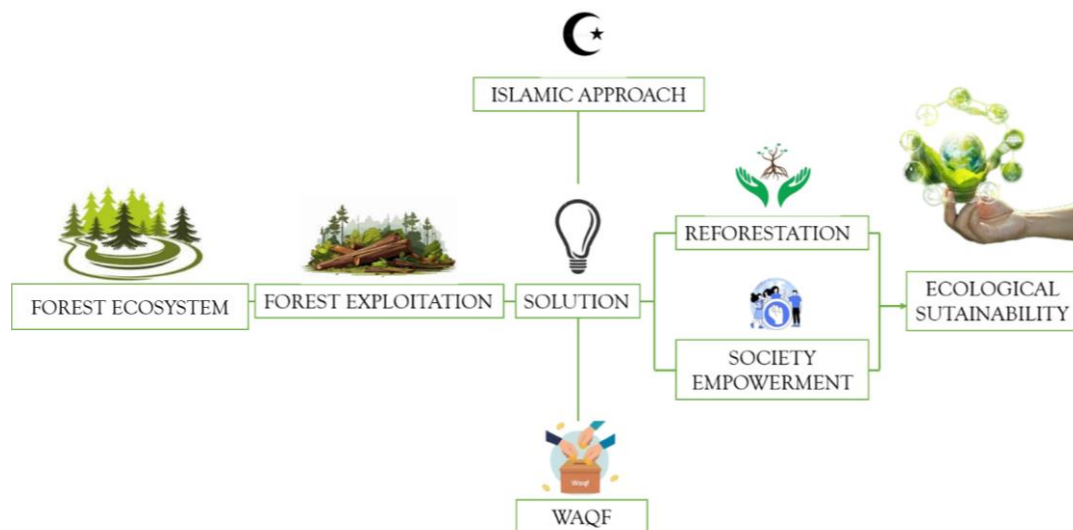
²¹Ostrom, Elinor, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge, *Cambridge University Press*, (1990).

²²Foltz, Richard C., 'Does Nature Have Historical Agency? World History, Environmental History, and How Historians Can Help Save the Planet', *History Teacher*, 37 (2003), 9-28.

²³Creswell, John W., dan Cheryl N. Poth, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, (2016).

This study employs three data collection techniques designed to provide a comprehensive understanding of the waqf forest model. First, semi-structured interviews to obtain information related to implementation strategies, challenges, and opportunities of waqf forest model. Second, field observations at reforestation sites to observe the physical conditions and maintenance processes of waqf forests. Third, documentation studies of relevant laws and regulations, annual reports, and publications.

Data analysis used thematic analysis methods with four sequential stages.²⁴ The process began with the transcription of interview and observation data. Building on this, the second stage involved describing the data to identify main themes such as management models, funding, collaboration, and ecological impact. After that, the next stage was grouping themes to find patterns of relationship between waqf forests and reforestation efforts. Lastly was interpreting the results by comparing field findings and theory (triangulation of sources).



Picture 1. Waqf Forest Theoretical Framework.

To ensure the trustworthiness and rigor of the findings, this study employs three complementary validation strategies, which include triangulation of sources and methods (comparing the results of interviews, observations, and documents), member checking with informants to validate the researcher's interpretation, and peer debriefing through discussions with experts in Islamic economics and environmental practitioners. Researchers requested consent from respondents prior to interviews, guaranteed confidentiality of identity, and used data solely for academic purposes in accordance with ethical research guidelines.

FINDINGS AND DISCUSSION

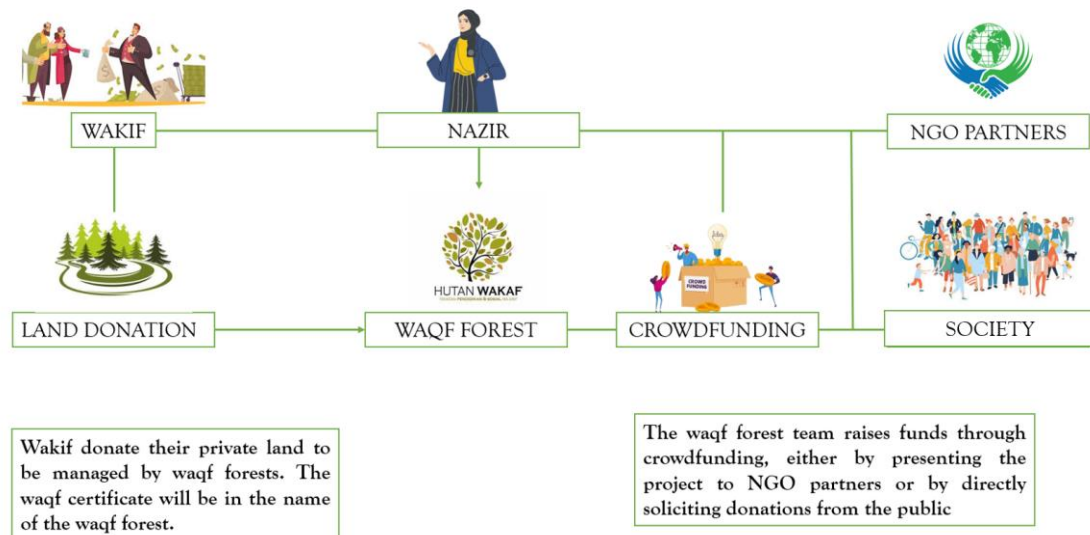
Findings

A. Waqf Forest Model as a Strategy for Forest Reforestation

In Indonesia, the first province to implement waqf forests was Aceh. The establishment of Aceh Waqf Forest was motivated by the alarming condition of the forest,

²⁴Braun, Virginia, dan Victoria Clarke, 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology*, 3.2 (2006), 77-101.

which was constantly experiencing degradation, leading to natural disasters and increasingly hot weather due to climate change. The Aceh Waqf Forest was established in 2012, initiated by young environmentalists, most of whom are graduates of the Chik Pante Kulu College of Forestry (STIK).²⁵ Wakaf Forest is the only community or initiative that owns and manages forest land assets compared to NGOs and environmental communities in Aceh such as HaKA, WALHI, and FKL.



Picture 2. Land Acquisition Scheme.

Currently, the Aceh Waqf Forest has freed up 6 hectares of critical land and other APL areas through two methods, namely:²⁶

1. The waqf forest team raises funds through crowdfunding, either by presenting the project to NGO partners or by directly soliciting donations from generous members of the public. Crowdfunding is a form of funding that is accessible to all people and certain groups in providing small or large funds.²⁷ In terms of nominal amount, the largest amount of money can be obtained from presentations with NGO partners compared to fundraising from the community, but this method is very competitive, because waqf forests must compete with other NGOs or environmental movements to obtain such funding. The funds raised will be used to purchase land, trees, or community empowerment programs in local forests. The land and trees purchased will be converted into waqf assets.
2. Generous individuals donate their private land to be managed by waqf forests. The waqf certificate will be in the name of the waqf forest.

The assets donated can be in the form of land or trees that will be planted later. After acquiring forest land, the waqf forest manages the administration and legality of waqf land through the Aceh Baitul Mal institution and the Religious Affairs Office, which has

²⁵Interview with Quddus (Hutan Wakaf), Janthoe, Aceh Besar, November 21, 2025.

²⁶Interview with Akmal Senja (Hutan Wakaf), Lamteba, Aceh Besar, November 23, 2025.

²⁷Sitanggang, March H. A., 'Memahami Mekanisme Crowdfunding dan Motivasi Berpartisipasi dalam Platform Kitabisa.com', *Journal Undip*, 6.3 (2018).

authority over waqf assets in Aceh.²⁸ The main strength of waqf lies in its role in preserving assets. This means that once the waqf has been declared, the decision cannot be revoked. In this context, waqf assets are permanent and may not be sold, inherited, gifted, or transferred except in very specific circumstances and based on strict legal rules.²⁹

In the context of forest land, forest areas that have been declared as waqf cannot be exploited, logged, or used by certain individuals. Interviews with Islamic economic experts indicate that waqf forests are the last resort to save forests from rampant exploitation practices.³⁰ In this case, if there is an individual who exploits or damages the waqf forest, he or she is responsible for his or her actions before God. In this context, the waqf endowment provides a stronger legal and institutional framework than a land certificate in preserving the integrity and permanence of the asset. This is also emphasized in national regulations and Aceh regional regulations.

The Law of Republic of Indonesia No. 41 of 2004 on Wakaf is the primary legal basis for waqf in Indonesia, which regulates the separation of part of the property owned by the waqif to be utilized forever or for a specified period for the purpose of worship or public welfare. The management of waqf in Aceh is primarily regulated through the Aceh Qanun No. 10 of 2018 on Baitul Mal (as amended by Qanun No. 3 of 2021). This qanun grants authority to Baitul Mal to conduct the protection, management, and development of waqf property, religious property, and guardianship in a professional manner. Moreover, the Muslim population in Aceh province is more dominant than followers of other religions.

In managing waqf assets, waqf forests carry out various activities and programs related to conservation, community empowerment, reforestation, and education. The program implementation model consists of 3E (Ecology, Economy, Education).

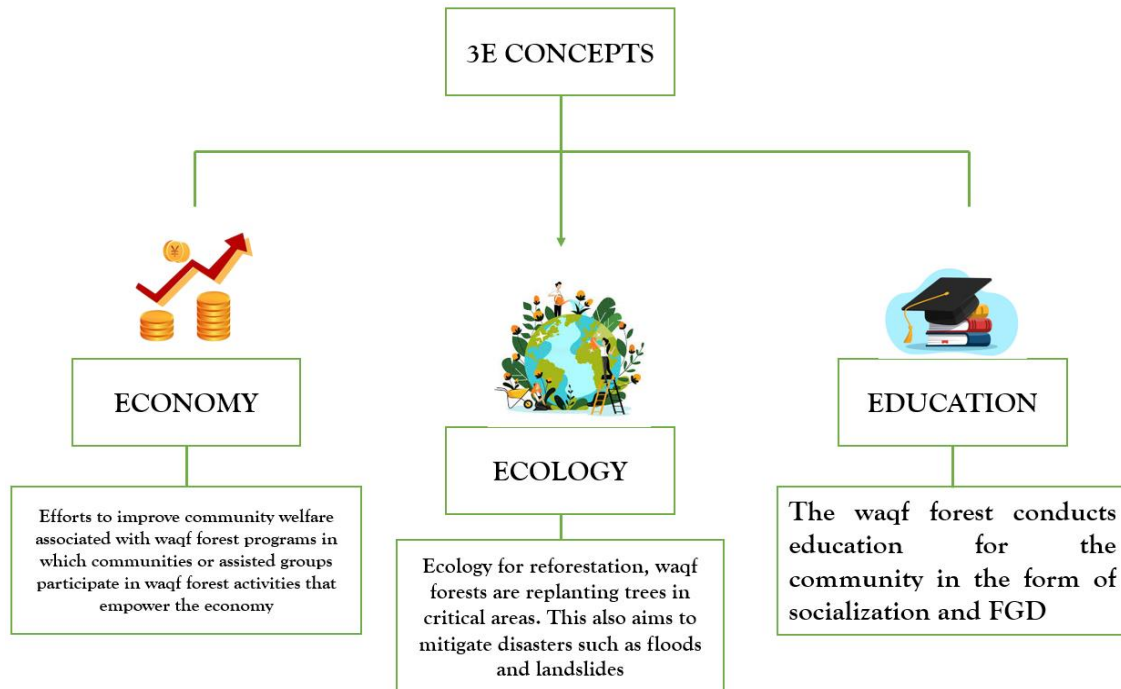
1. Ecology for reforestation, waqf forests are replanting trees in critical areas. This also aims to mitigate disasters such as floods and landslides because both waqf forest locations are close to local populations or residents. The selected tree is a fast-growing pioneer species with strong taproots, drought tolerance, and the ability to improve soil quality.
2. Economy. Concepts or efforts to improve community welfare associated with waqf forest programs in which communities or assisted groups participate in waqf forest activities that empower the economy. The trees selected are not only those with strong roots and trunks, but also those with economic value. The waqf forest has planted avocado and cacao trees in several waqf forest areas in Selimum and Janthoe. In addition, the waqf forest also develops forest bee honey cultivation, which will later be sold. In the future, waqf forests will implement horticulture or intercropping to increase income and profits from waqf forest agriculture.
3. Education. The waqf forest conducts education for the community in the form of socialization. The socialization provided includes material related to community agriculture, conservation, and the importance of protecting the environment. On the other hand, the waqf forest also involves university students (Syiah Kuala University,

²⁸Hidayatina MA, dan Ali Muhayatsyah, 'Overlapping Fungsi Baitul Mal dan Kantor Urusan Agama sebagai Lembaga Pengelola Wakaf (Kritik terhadap Peran Baitul Mal sebagai Lembaga Pengelola Wakaf di Aceh)', *Inferensi Jurnal Sosial Keagamaan*, 13.2 (2019).

²⁹Kurniati, Herlina, dan Muslim, 'Reconstruction of the Management, Utilization, and Sale of Waqf Property in Indonesia from the Perspective of Maqāṣid Ash-Shari'ah', *EJournal Raden Intan*, 16.1 (2024).

³⁰Interview with Prof. Dr. Hafas Furqani, M.Ec., Darussalam, Banda Aceh, November 14, 2025.

Ar-Raniry State Islamic University (UIN), STIK Pante Kulu) in each of its programs. Then, the waqf forest conducted a focus group discussion involving environmental experts and practitioners, advocates, NGOs, and the government to discuss environmental policies and policy briefs.³¹



Picture 3. 3E Concepts Program.

So far, the waqf forest has also had a good relationship with environmental NGOs, and the Aceh environmental and forestry agency considers this a good thing because they share the same focus. To this day, the waqf forest continues to strive to free up critical land and implement community empowerment programs so that it not only saves the waqf-based forest but also contributes to the welfare of the local community.

B. Challenges and Obstacles

Although the Aceh waqf forest model has great potential, there are still several obstacles in its management and operation. These challenges include:

1. Financial Challenges
 - a. Waqf forests do not have regular funding from national or international institutions, compared to environmental NGOs in Aceh, so the scope of their programs is limited and they cannot pay their active members. The majority of active members in this initiative participate in waqf forest activities and programs on a voluntary basis.³²
 - b. Baitul Mal Aceh does not manage cash waqf, only waqf in the form of assets or physical property. This precludes any possibility of funding collaboration between waqf forests from Baitul Mal Aceh.³³

³¹Interview with Akmal Senja (Hutan Wakaf), Lamteba, Aceh Besar, November 23, 2025.

³²Interview with Quddus (Hutan Wakaf), Janthoe, Aceh Besar, November 21, 2025.

³³Interview with Saed Husein (Baitul Mal Aceh), Lingke, Banda Aceh, November 15, 2025.

2. Institutional Challenges

The waqf forest does not yet have a single member certified as a waqf administrator by the National Waqf Board (BWI). This indirectly undermines the public and funding partners' trust in the waqf forest as a community managing waqf assets. One example is when the waqf forest wanted to publish a press release about its activities in a national media outlet, but the outlet flatly refused to publish it because it did not have a waqf administrator certificate.³⁴

3. Technical Challenges

- a. Lack of promotion and campaigns on social media. This can be seen from the lack of followers and uninteresting social media posts, especially for the younger generation, who are the most dominant consumers of social media.
- b. The management of waqf land is still not very productive and does not generate large profits. This is due to a lack of funds, resulting in a lot of land remaining vacant and not being planted with trees or used for community agriculture.³⁵

Discussion

The results of the interviews, which have been analyzed in depth, have produced several recommendations that can be implemented in real-world situations. Some recommendations from the research results are presented in Table 1.

Table 1. Change Plan.

Real Situations	Recommendations
Lack of funding	<ol style="list-style-type: none"> 1. Transformation into a non-governmental organization (NGO) to obtain regular funding and increase donor trust. 2. Implementation of a Cash Waqf-Linked Deposit (CWLD) scheme to achieve fund independence.
Lack of a certified waqf administrator	<ol style="list-style-type: none"> 1. Collaborate and involve members of the Baitul Mal to increase public trust. 2. Involving alumni of Sharia and Islamic Economics and recommending them to obtain nazir wakaf certification from the Indonesian Waqf Board.
Lack of promotion and campaigns on social media	<ol style="list-style-type: none"> 1. Recruit members who are more knowledgeable about social media and give them responsibility for managing social media. 2. Involve informal leaders and public figures to campaign for waqf forests.
Unproductive waqf land	Allocation of some land for producing leading commodities and a rapid cash flow.

³⁴Interview with Akmal Senja (Hutan Wakaf), Lamteba, Aceh Besar, November 23, 2025.

³⁵Interview with Quddus (Hutan Wakaf), Janthoe, Aceh Besar, November 21, 2025.

The discussion in this study combines empirical findings with the broader environmental and social context in Aceh. The study affirms that Islamic philanthropy holds great potential in supporting forest ecosystem conservation through the empowerment of waqf, by presenting the waqf forest model as a mechanism for sustainable forest management. This model is positioned as an alternative approach to addressing deforestation problems that have not been fully resolved by government policies. In the context of Aceh, where pressure on forest areas remains high due to economic activities and limited oversight, a community-based approach integrated with religious values becomes socially and culturally relevant. The following are several factors as to why waqf forests have great potential to be developed in Aceh:

1. The majority of Acehnese people are adherents of Islam.
2. Acehnese society is deeply rooted in Islamic religious values in their daily lives.
3. There are similar forms of local wisdom such as *peulara uteun* and *panglima uteun*, which function as customary institutions for forest protection, although these customary values are now rarely practiced. In this regard, the Acehnese Customary Council (MAA) has a role to play in preserving and reviving these traditions.³⁶
4. Supported by 4 regulations, namely Indonesian Laws regarding sanctions on forest exploitation and Waqf, as well as Aceh Qanun (Regional Regulations) regarding forest exploitation and waqf.

In terms of novelty and contribution, this study can make a significant contribution to the growing discourse on Islamic social finance and environmental sustainability. The proposed waqf forest model not only functions as a reforestation strategy but also represents an integration of Islamic philanthropy and ecological conservation. This aligns with findings in Islamic Social Finance that increasingly emphasize the role of instruments such as zakat and waqf in sustainable development. A study by Ahmed et al. (2015) demonstrates that waqf can serve as an effective instrument in financing the public and social sectors.³⁷ These findings are in line with the Islamic Social Finance framework, which emphasizes that Islamic philanthropic instruments, such as waqf, not only function as redistribution mechanisms but also as tools for sustainable economic development. From a theoretical perspective, this can be linked to the concept of sustainable development, which integrates economic, social, and environmental aspects.³⁸

Furthermore, a study by Hasan et al (2019) found that the integration of waqf with productive sectors can enhance economic impact while maintaining the sustainability of an asset.³⁹ In an environmental context, a study by Mursyid and Sulaiman (2022) indicates that land-based waqf holds significant potential in supporting forest conservation when

³⁶Mahmuddin, Januar, Eka, dan Mansari, 'Revitalisasi Panglima Uteun dalam Pengelolaan Hutan di Kabupaten Aceh Besar', *Jurnal Sosiologi USK: Media Pemikiran dan Aplikasi*, 18.2 (2024).

³⁷Ahmed, Habib, *Waqf-Based Microfinance: Realizing the Social Role of Islamic Finance*, Jeddah: Islamic Research and Training Institute (IRTI), (2015).

³⁸Kassim, Kassim, Salina, 'Islamic Social Finance and the Role of Waqf in Achieving Sustainable Development Goals', *International Journal of Islamic and Middle Eastern Finance and Management*, 13.3 (2020).

³⁹Hasan, Zulkifli, Muhammad Ahmad, dan Siti A. Siraj, 'Waqf and Sustainable Economic Development: A Conceptual Framework', *International Journal of Islamic Economics and Finance Studies*, 5.2 (2019).

managed professionally and on a community-based basis.⁴⁰ Thus, the waqf forest model proposed in this study can be regarded as an interdisciplinary approach that bridges the spiritual, economic, and ecological dimensions.

The empirical study conducted by Suhdar et al. (2024) related to waqf forests in Bogor.⁴¹ The findings indicate that waqf forests demonstrate good potential in efforts to prevent soil erosion, as well as generating income for the managers of the waqf forest. In addition, waqf forests have been proven to improve the welfare of surrounding communities and contribute significantly to poverty alleviation, particularly in the Bogor Regency area. However, in the management of the waqf forest, there are still certain shortcomings and weaknesses, namely an excessive focus on development and the large expenditure of funds throughout its operational activities, resulting in profits that can be managed and utilized remaining relatively unstable. Another relevant empirical study was conducted by Mardani (2023) regarding green waqf.⁴² The findings of that study indicate that green waqf plays a very important role in protecting ecological maintenance and has a significant role in preserving the environment, particularly in the face of changing climate conditions. Green waqf has also been proven to strengthen the acceleration of new economic development.

In addressing financial constraints, waqf forests initiatives need to transform into non-governmental organizations (NGOs) so they can access wider funding sources, so that they do not depend on community donations and social project funding. On the other hand, waqf forests must also be capable of generating funds independently to ensure long-term sustainability. Based on the empirical findings of this study, financial limitations remain one of the main challenges in the management of waqf forests, particularly in maintaining operational sustainability and expanding the impact of conservation.

To address these challenges, the author recommends that waqf asset management be integrated with the Cash Waqf Linked Deposit (CWLD) model. Cash Waqf Linked Deposit (CWLD) is a temporary cash waqf product designed in an effort to combine the social function with the commercial function of Islamic banks. The procedures and mechanisms used in the product are the same as those in general deposit instruments.⁴³

These findings are in line with the need for innovative and sustainable financing mechanisms, where traditional donation-based models are often insufficient to support long-term environmental programs, given that traditional waqf is merely a voluntary contribution of funds without expecting any return. The integration of CWLD allows public interest in contributing to waqf to increase, as the CWLD scheme is an investment scheme that not only provides benefits to waqf beneficiaries but also profit returns for the waqif (waqf donor).

⁴⁰Mursyid, dan Sulaiman, S., 'The Role of Waqf Land in Environmental Sustainability and Forest Conservation', *Journal of Islamic Environmental Studies*, 4.1 (2022).

⁴¹Suhendar, Cecep, R. C. Y. Pujiharto, dan Misno, 'Analisis Pemanfaatan Hutan Wakaf dalam Pemberdayaan Masyarakat Desa Cibunian Kecamatan Pamijahan Kabupaten Bogor', *Jurnal Penelitian Pascasarjana Program Studi Ekonomi Syariah Institut Agama Islam Sahid Bogor*, 5.2 (2024).

⁴²Mardani, Dede Aji, 'Wakaf dan Ekonomi Hijau: Upaya Mengurangi Perubahan Iklim dan Emisi Gas Karbon', *Jurnal Ekonomi Syariah*, 2.1 (2023).

⁴³Cahyono, Yoyok, Dwi Purwoko, Intan R. Koho, Asri Setiani, Suspenti, Paulus I. Setyoko, Mulia Sosiady, dan H. Wijoyo, 'The Role of Supply Chain Management Practices on Competitive Advantage and Performance of Halal Agroindustry SMEs', *Uncertain Supply Chain Management*, 11.1 (2023).

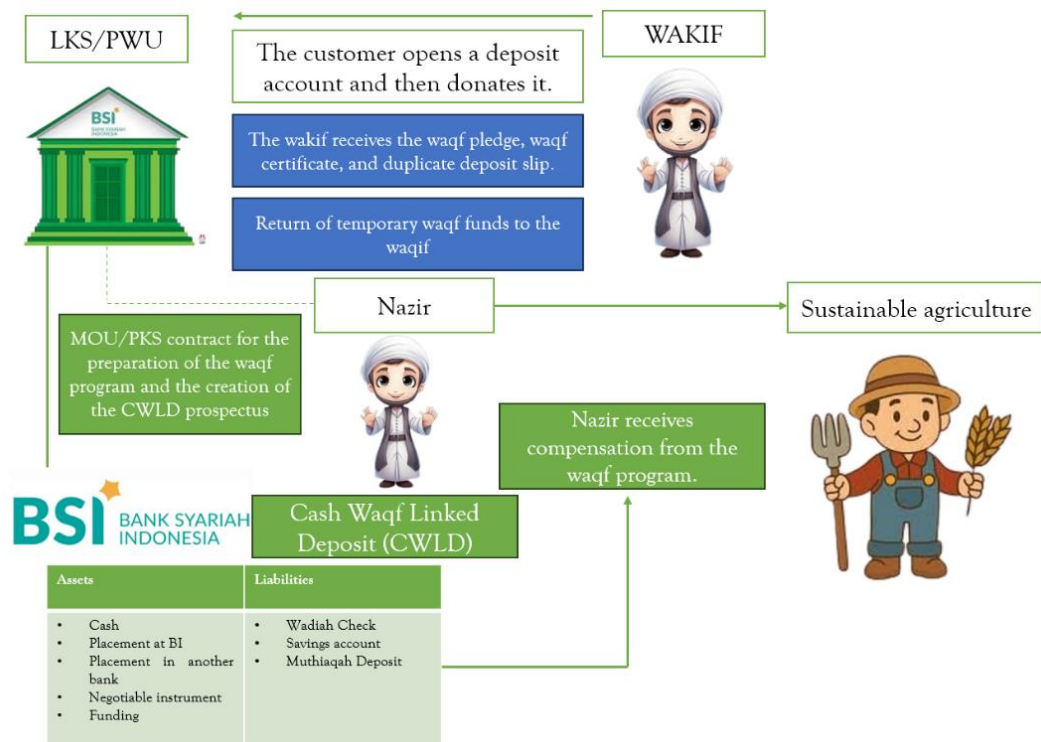
Nevertheless, this indicates that the current management of waqf forests has not yet fully optimized financial instruments within the Islamic social finance framework, as it remains dominated by conventional fundraising approaches. Therefore, the implementation of CWLD has the potential to enhance financial resilience while at the same time maintaining compliance with Islamic principles.

Cash Waqf Linked Deposit (CWLD) is a cash waqf investment product in deposits where the returns will be distributed by the waqf nazhir, who acts as the manager of waqf funds and activities in financing social programs and community economic empowerment. CWLD adheres to sharia principles, so it does not contain elements of transactions prohibited by Islam, such as *riba* (usury/interest), *maysir* (gambling), and *gharar* (uncertainty).⁴⁴ CWLD is a temporary waqf product designed to integrate the social and commercial functions of Islamic banks as financial institutions receiving cash waqf (LKS-PWU). The cash waqf mechanism is applied to deposit instruments for a certain period of time, whereby the profit sharing can be used for the beneficiaries (*mauquf alaih*) and when the period ends, the cash waqf in the form of deposits is returned to the waqif. The uniqueness of CWLD is that the deposit profit sharing is not given to the wakif but is distributed to the beneficiaries (*mauquf alaih*) through the nazhir who is a partner of the Islamic Bank LKS-PWU.

LKS-PWU Islamic Banks can provide financing facilities to Nazir to accelerate the procurement of waqf assets. Installment payments for sharia bank financing facilities use profit sharing received from waqf management funds through CWLD. The waqif will open a deposit account, then temporarily waqf the deposit to the nazhir through LKS PWU. Later, the wakif will receive an Endowment Deed (AIW), a Cash Endowment Certificate, and a duplicate deposit slip in the name of the wakif. Later, when the temporary endowment tenor has been completed, there will be a return of temporary endowment funds to the wakif. The benefit for customers is that they can make a temporary waqf donation in exchange for a return at the end of the waqf period, and waqf programs can be chosen based on the waqf donor's preferences and emotional attachment, as the realization of the program can be seen or known by the waqf donor directly. Research conducted by Faaza et al. (2025) confirms that CWLD transforms cash waqf from a passive philanthropic instrument into productive capital.⁴⁵ The proceeds from waqf fund management are used for economic empowerment programs, education funding, MSME support, and other social activities with a multiplier effect on the community.

⁴⁴Kurniawan, Erik, M. R. Maika, Fitri N. Latifah, dan R. Kristiyanto, 'Cash Waqf Linked Deposit; Sebuah Alternatif Pendanaan Pendidikan Tinggi', *WADIAH: Jurnal Perbankan Syariah*, 8.2 (2024).

⁴⁵Faaza, Haseena K., Muhammad Z. Hamzah, Haris Fahrurroji, dan Kuncoro Hadi, 'The Transformation of Islamic Philanthropy as an Economic Power: Multiplier Effect Cash Waqf Linked Deposit (CWLD) in Sharia Banking', *Enrichment: Journal of Multidisciplinary Research and Development*, 3.8 (2025).



Picture 4. Cash Waqf Linked Deposito (CWLD) Scheme.

To increase public trust, Waqf forests can involve or collaborate with Baitul Mal as an official institution in fundraising activities. This is because the public is more likely to entrust their funds to official institutions than private institutions. Moreover, the Baitul Mal plans to manage cash waqf in the future.⁴⁶ This will enable waqf forests to build collaborations. On the other hand, the waqf forest can recommend one of its members to obtain nazir waqf certification from the Indonesian Waqf Board (BWI). This step not only increases public trust but also gives international partners a sense of professionalism, encouraging them to entrust their funds to the waqf forest as a movement that manages waqf assets professionally and reliably. This is in line with research by Haidlir et al. (2023), which found that dimensions such as religiosity and public knowledge of institutions contribute to the formation of trust.⁴⁷

Waqf forests must also be more serious in managing social media content because in today's Society 5.0 era, campaigns through social media are more widely consumed by the public, especially the younger generation. Based on a report by the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia reached 229,428,417 by 2025, with the highest contribution to internet penetration coming from the younger generation (those born between 1997 and 2012).⁴⁸ This step can increase public interest in providing cash waqf to waqf forests. This is in line with research by Sutisna et al. (2024), which shows that social media content from waqf institutions has a

⁴⁶Interview with Saed Husein (Baitul Mal Aceh), Lingke, Banda Aceh, November 15, 2025.

⁴⁷Haidlir, Banu M., Wahyu Jatmiko, dan A. Azizon, 'Determinants and Impacts of Trust on Awqaf Institutions: Intergenerational Evidence from Indonesia', *Etikonomi*, 22.1 (2023).

⁴⁸Nisryna, Nadhira, Alya, 'Pengguna Internet di Indonesia Tembus 229 Juta, Paling Banyak dari Gen Z', <https://www.gadgetdiva.id/news/pengguna-internet-di-indonesia-tembus-229-juta-paling-banyak-dari-gen-z> (17 February 2026).

positive and significant influence on interest in waqf among Generation Z.⁴⁹ After that, informal leaders or community figures such as preachers, cultural figures, and religious teachers at religious study centers were involved in the waqf campaign. This is because the people of Aceh tend to trust informal leaders, especially those in villages and rural areas.⁵⁰

Finally, to generate profits and rapid cash flow, waqf forests can allocate part of their land for the production of leading commodities. This is because not all commodities are absorbed by the market. Research conducted by Ilham et al. (2025) shows that the primary commodities that play an important role in the local economy are red chili peppers, cayenne peppers, shallots, rice, and chicken eggs, which are part of the leading agriculture and livestock sub-sectors. This reflects that these commodities are the focus of marketing because of their high volume and absorption in the local market of the province.⁵¹ Other studies show that patchouli is also a leading commodity in Aceh, especially since PT Global Mandiri Universitas Syiah Kuala can purchase patchouli oil from Aceh farmers and export it internationally. On the other hand, patchouli can fertilize and improve soil quality because of its spreading roots, which increase aeration and help loosen the soil.⁵²

Overall, the selection of leading commodities can provide financial independence to waqf forests so that they are not overly dependent on fundraising and international donor partners.

CONCLUSION

This study highlights that the waqf forest model represents a promising and innovative strategy for addressing deforestation and supporting reforestation efforts in Aceh Province. It holds significant potential as an Islamic philanthropic mechanism for ecological sustainability and forest conservation in Aceh. This study also has important policy implications, namely the need for strengthened governance, innovative funding models, and community-based productivity so that the waqf forest movement can develop as a long term solution for sustainable reforestation and environmental resilience. Furthermore, this study suggests that local governments and waqf institutions consider the integration of waqf forests into formal conservation planning.

However, the limitation of this study is that it has not yet highlighted the local community perspective, as the researcher was unable to interview local forest communities due to time constraints and the disaster that struck Aceh in late November 2025. Therefore, future research can encompass local forest communities and explore how the empowerment of waqf forests can provide welfare benefits for them it can assess the socio-economic and environmental impacts of waqf forest initiatives.

⁴⁹Sutisna, Fajar A., Hilman M. Akbar, dan Nabiela R. Alifia, 'Does Social Media Content Affect Cash Waqf Literacy and Interest in Paying Cash Waqf Among Gen Z?', *Jurnal Ilmu Ekonomi dan Bisnis Islam*, 6.2 (2024).

⁵⁰Interview with Prof. Nazaruddin A. Wahid, M.A, Darussalam, Banda Aceh, October 17, 2024.

⁵¹Ilham, Rico N., Mohd Haekal, Muammar Khaddafi, dan Falehuddin Hasballah, 'Survey of Leading Commodities of Aceh Province as Academic Effort to Join and Build the Country', *IRPITAGE Journal*, 1.1.

⁵²Ichsan, Cut N., G. Erida, Erida Nurahmi, dan Muthiah Hasibuan, 'Sustainable Patchouli Cultivation Opportunities in Lhoong Sub-District, Aceh Besar to Increase Land Productivity [Peluang Budidaya Nilam Berkelanjutan di Kecamatan Lhoong Aceh Besar untuk Meningkatkan Produktivitas Lahan]', *Jurnal USK*, 4.4 (2024).

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