

A Collaborative Development Framework for Micro Waqf Banks: Strategic Prioritization Through the Analytic Network Process

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ABSTRACT

Micro Waqf Banks (MWBs) are innovative financial institutions in the Islamic finance ecosystem designed to empower micro-entrepreneurs and promote financial inclusion. However, despite their potential, MWBs face various challenges that hinder sustainable growth. This study aims to identify and map these key challenges and determine strategic responses using the Analytic Network Process (ANP) method. A qualitative approach was employed, gathering insights from experts and practitioners, and applying the ANP method to structure and prioritize complex decision-making. The consistency of expert judgment was measured using the Rater Agreement index. Five main challenges were identified: technical and operational issues (weight: 0.26), regulatory and policy constraints (0.23), partnership and collaboration barriers (0.20), human resource limitations (0.16), and community-related concerns (0.11), with a Rater Agreement of 0.67. Strategic responses were prioritized as follows: resolving technical issues (0.25), improving regulations (0.23), enhancing partnerships (0.22), strengthening human resources (0.17), and addressing community engagement (0.10), with improved agreement (0.73). Preferred strategies included regulatory reform and policy optimization (0.36), building networks with Islamic Financial Institutions and Zakat Agencies (0.19), leveraging technology-based collaboration (0.17), partnering with local governments (0.14), and establishing an apex institution (0.11), with a Rater Agreement of 0.60. The findings emphasize the importance of a comprehensive and collaborative approach to ensure MWBs' sustainable development, focusing on regulatory reform and multistakeholder cooperation for their institutional strengthening within the Islamic social finance framework.

Keywords: Micro Waqf Bank, Collaboration, Analytic Network Process.

INTRODUCTION

Indonesia, as one of the most populous Muslim-majority countries in the world, holds significant potential for leveraging Islamic Social Finance. When utilized appropriately, Islamic Social Finance can play a strategic role in the development of micro, small, and medium enterprises (MSMEs), particularly micro-enterprises in Indonesia. The productive use of Islamic social finance instruments such as zakat and waqf can contribute substantially to poverty alleviation and the economic empowerment of disadvantaged communities.

The potential of cash waqf in Indonesia is estimated to reach IDR 180 trillion annually, as reported by the Waqf Information System (SIWAK) of the Ministry of Religious Affairs. Financial challenges in Indonesia could be substantially mitigated if this potential were to be fully realized. According to Mustafa Edwin Nasution, if approximately 10 million members of Indonesia's middle-income population—earning between IDR 500,000 and IDR 10 million per month—participated annually, the accumulated value of cash waqf could reach IDR 3 trillion. This represents a vast financial reservoir that, if effectively mobilized, could be directed toward widespread social welfare enhancement. The process of collecting and mobilizing waqf funds is facilitated by the flexible nature of financial contributions, which can be adjusted based on the donor's capacity (Sofyan, 2013).

To bridge Islamic finance with community empowerment programs, specialized financial institutions known as Islamic Microfinance Institutions (IMFIs) have been established. These institutions manage savings and provide consulting services for enterprise development, without solely focusing on profit maximization. Often, pursuing social performance can hinder financial performance, leading to a trade-off between the two goals (Olivares, 2005). However, several empirical studies—including those by Erasmus Fabian and Kipesha Xianzhi (2013), Henry Francis Millson (2013), and Gakhar (2015)—have demonstrated that both social and financial objectives can be achieved simultaneously within Islamic microfinance models.

One such IMFI is the Micro Waqf Bank (Bank Wakaf Mikro/BWM), which offers several advantages over conventional microfinance institutions. The BWM operates based on Islamic principles and provides non-collateralized financing, offering funding amounts ranging from IDR 1 million to IDR 3 million per year with a profit-sharing rate of only 3% annually. The financing tenure is set for one year. BWM is formally authorized by the Ministry of Cooperatives and is uniquely established around Islamic boarding schools (pesantren), which reinforces its community-based character (Otoritas Jasa Keuangan, 2019). Another distinguishing feature of BWM is its non-commercial nature; it does not offer commercial financial products. As stated on the official website of LKMS BWM, the financing model used is based on the qardh contract (interest-free loans) and does not require collateral (Arinta et al., 2019).

Since its inception in 2018, the Micro Waqf Bank has provided financing to numerous micro-enterprises, as detailed in Table 1.

Table 1. Cumulative Financing and Customer Growth of Bank Wakaf Mikro (2018–2023)

Years	Cumulative Financing (Billion IDR)	Number of Beneficiaries (People)
2018	13.1	11,300
2019	37.7	28,200
2020	55.6	38,900
2021	82.0	52,700
2022	112.1	67,300
2023	112.7	67,300

The role of Micro Waqf Banks (Bank Wakaf Mikro, BWM) is notably significant in empowering and fostering the development of micro-enterprises within society. However, the limited number of established BWM institutions has constrained the wider dissemination of their benefits. Many members of the public remain unaware of the existence of these microfinance institutions.

Several studies have highlighted the important role of BWM in supporting the local economy, particularly within the vicinity of Islamic boarding schools (pesantren). For instance, Fauziah (2018) demonstrated that the institutional design of BWM has shown promising potential in strengthening the community-based economic system. This is corroborated by Disemadi (2019), who noted that the presence of BWM represents a comprehensive initiative to support local economic empowerment and micro, small, and medium enterprises (MSMEs), especially those excluded from formal financial institutions.

Syahril (2020) further emphasized that BWM plays a crucial role in enhancing financial inclusion, particularly for communities around pesantren, by easing access to capital for small and micro enterprises (SMEs). Wahyu (2020) also acknowledged BWM as a Sharia-compliant microfinance institution designed to assist SMEs that struggle to access conventional bank financing. BWM employs a qardh (benevolent loan) contract without collateral, thereby making financial services more accessible to the underserved. Its operations are regulated by fatwas issued by the National Sharia Council (DSN) of the Indonesian Ulema Council (MUI), ensuring legal and religious compliance.

Ramadhan and Sukmana (2019) found a significant difference in the income of BWM clients before and after receiving financing support. The mentoring provided by BWM has had a positive influence on the development of clients' businesses. BWM not only supplies capital but also offers continuous assistance and practical solutions for operational challenges faced by entrepreneurs. This aligns with findings from Harahap, Mailin, and Amini (2019), who observed that BWM contributes meaningfully to community empowerment by helping clients sustain and expand their businesses through access to capital and mentorship.

Thus, BWM is not merely a financial intermediary, but also serves as a strategic instrument in promoting Sharia-based economic growth and advancing social justice.

Beyond national research, international studies have also addressed innovations in Islamic finance, particularly those related to waqf-based funding mechanisms. Iman and Mohammad (2017) discussed how waqf funds can

foster entrepreneurial spirit within the Malaysian context. Meanwhile, Mohd Thas Thaker et al. (2020) proposed an integrated human resource development model combining cash waqf investments with micro-enterprises. Zauro et al. (2020) examined the potential of waqf integration to enhance financial inclusion and socio-economic justice in Nigeria.

Nonetheless, Sharia-based microfinance institutions (Lembaga Keuangan Mikro Syariah, LKMS) face numerous challenges. Rusidiana (2019), using the Analytic Network Process (ANP-BOCR) method, identified human resource limitations and public trust issues as the main constraints facing LKMS in Indonesia. Similarly, Darwanto found that human resource capacity, asset constraints, and weak infrastructure are persistent problems. Sucipto, using a maqashid shariah-based approach, emphasized the importance of aligning strategic initiatives with Islamic objectives to improve competitiveness among Islamic microfinance institutions.

In sum, while both BWM and LKMS have shown positive impacts in promoting micro-enterprise development and providing capital access, they still face considerable challenges, including limited human resources, infrastructure deficits, asset constraints, and public mistrust. Therefore, there is an urgent need for a comprehensive and shariah-oriented development model to enhance the competitiveness and sustainability of these institutions. These challenges reflect deeper concerns about professionalism and ukhuwah (social solidarity) within the institutions themselves.

Mahmudah highlighted that the challenges faced by Islamic microfinance institutions in Indonesia are both internal (such as human resource limitations) and external (including competition and regulatory constraints). This is further supported by Awaluddin (2021), who emphasized that institutional development must consider both dimensions.

Given the varying degrees of growth and development across Islamic microfinance institutions, it is critical to design tailored strategies and business models for institutional enhancement. BWM, in particular, demonstrates distinct advantages over other microfinance institutions due to its low financial risk and broader community outreach. Its unique model positions it as a key driver of community-based economic empowerment and a potential incubator for emerging micro-enterprises that can support the growth of the national halal industry.

METHODS

This study adopts a qualitative approach aimed at understanding the values and perspectives held by experts and Sharia practitioners regarding the development of Micro Waqf Banks (Bank Wakaf Mikro—BWM). The analytical method employed is the Analytic Network Process (ANP). The primary data were obtained through in-depth interviews with experts and practitioners possessing substantial knowledge of the relevant issues (Ascarya, 2005).

The selection of ANP as the research methodology is based on its capacity to capture strategic priorities by accommodating the interrelationships among criteria and alternatives, a feature not addressed by the Analytical Hierarchy Process (AHP) (Saaty, 1999). As an advancement of AHP, ANP offers a significant advantage by incorporating inner dependence (interrelations within a single set of elements) and outer dependence (interrelations across different element sets), thus providing a more dynamic and interactive assessment framework. While ANP is inherently more complex than AHP, its ability to reflect the interconnected dynamics among relevant variables makes it particularly suitable for research on Islamic microfinance institutions.

By utilizing ANP, this study aims to develop a more comprehensive model for the development of Micro Waqf Banks that aligns with the views of experts and practitioners in the field of Islamic finance.

Table 2. List of Research Respondents

No	Respondent Name	Field of Expertise	Current Position
1	Abdul Muin Akmal Padang	Regulator	Head of Banking Supervision Division, OJK Medan
2	M. Farid Hasan	Practitioner	Manager, LKMS-BWM Al-Falah, Jember
3	Marzuki	Practitioner	Manager, BSI Maslahat, Medan Regional Office

4	Dr. Sugianto, M.A.	Academic	Head, Master's Program in Islamic Banking, UIN North Sumatra
5	H. Hendri Tanjung, Ph.D	Academic	Deputy Director, Postgraduate School, Universitas Ibnu Khaldun (UIKA), Bogor

The respondent population in this study comprises five experts with specific knowledge related to BWM development and Islamic finance. These include one representative from a regulatory authority (the Financial Services Authority—OJK), two practitioners from Micro Waqf Banks, and two additional experts. Respondents were selected through purposive sampling, intentionally targeting individuals with recognized expertise and direct involvement with Micro Waqf Banks, including regulatory stakeholders (OJK), Sharia Supervisory Board (DPS), microfinance practitioners, and scholars specializing in Islamic microfinance institutions. This selection process adheres to the valid respondent requirements for ANP-based studies.

1. Model Construction

This phase marks the initial step in building an ANP model. The researcher conducts a comprehensive literature review, expert discussions, and focus group discussions (FGD). The model design is guided by expert inputs and FGD outcomes (Saaty, 2004). A well-established model at this stage ensures a strong foundation for subsequent steps.

2. Model Quantification

This step involves refining and finalizing the questionnaire used in the ANP analysis. It includes pilot testing the ANP questionnaire and engaging with respondents according to their respective areas of expertise.

3. Result Analysis

This is the concluding phase of the ANP process. Researchers analyze responses using the Super Decisions software, which facilitates **pairwise comparison** between elements within a cluster. This allows researchers to determine the relative influence of each element using a numerical scale (1 to 9) (Ascarya, 2011).

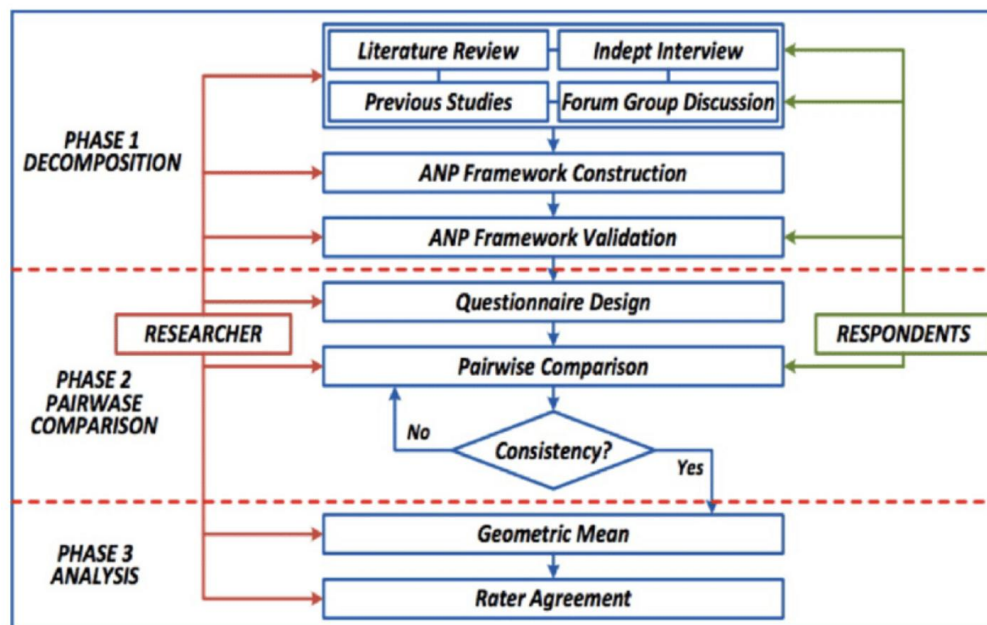


Figure 1. Stages of the ANP (Analytic Network Process)

The foundation of this analytical process rests on axiomatic principles. A theory's applicability and generalization increase when its axioms are minimal and straightforward. Key axioms in ANP include:

Reciprocal Axiom: If the pairwise comparison value between element A and B is $PC(EA, EB)$, then $PC(EB, EA) = 1 / PC(EA, EB)$.

Homogeneity Axiom: The compared elements should not differ excessively, as large disparities can introduce significant judgment errors (Ascarya, 2005).

Representational Axiom: Individuals must ensure that their beliefs are adequately represented in the final results, aligning outcomes with established expectations.

Hierarchy Axiom (not applicable in ANP): In contrast to AHP, ANP does not assume independence between levels; instead, it accommodates feedback and interdependence.

ANP allows for four types of models: simple network, two-level network, BOCR model (Benefits, Opportunities, Costs, Risks), and complex network (Saaty, 2003). This study adopts the complex network model, enabling a detailed analysis of problems, solutions, and strategies for collaborative BWM development. This model was selected for its ability to address intricate interdependencies, thus allowing for a more robust understanding of the development of Islamic microfinance institutions.

Tabel 3. Pairwise Comparison Scale

Level of Importance	Definition	Description
1	Equally Important	Both elements equally influence the criterion.
3	Slightly More Important	Judgment slightly favors one element over the other.
5	More Important	Experience and judgment strongly favor one element.
7	Very Strongly Important	One element is clearly preferred and dominates in practice.
9	Absolutely More Important	One element is conclusively more important than its counterpart.
2, 4, 6, 8	Intermediate Values	Used to express compromise between adjacent judgments.

4. axiom

This axiom posits that individuals who possess a foundational basis or rationale for their beliefs must ensure that their ideas are adequately represented in the final outcome, in accordance with the expectations or goals that have been previously established. In other words, an accurate and appropriate representation of those ideas is necessary to achieve alignment between belief and the desired outcome (Saaty, 2003; Von Winterfeldt & Edwards, 1986). This alignment serves as a critical component in rational decision-making processes, especially within systems that demand consistency between subjective judgments and objective results.

5. The hierarchical structure

The hierarchical structure—which is not applicable within the Analytic Network Process (ANP)—asserts that the assessment or prioritization of elements is independent of elements located at lower hierarchical levels. This structure necessitates the use of a strictly hierarchical approach. In contrast, the ANP accommodates a more flexible framework by allowing interdependence and feedback among elements at different levels. The ANP comprises four distinct modeling types: the simple model, the two-level network model, the BOCR (Benefits, Opportunities, Costs, Risks) model, and the complex network model (Saaty, 2003). In this study, the complex network model is employed to conduct a detailed analysis of the problems, solutions, and strategic directions involved in the development of collaborative-based Micro Waqf Banks (MWBs). This model is particularly suitable for capturing and analyzing complex interdependencies among elements, thereby enabling a more comprehensive understanding of the dynamics at play in the development of Islamic financial institutions (Ascarya, 2011; Ishizaka & Labib, 2009).

RESULTS

This research develops a *Collaborative-Based Development Model of Micro Waqf Banks* using the Analytical Network Process (ANP) approach. The ANP is particularly suitable for this type of analysis as it allows the integration of interrelated decision elements within a complex network structure, which is critical in evaluating multifaceted development strategies (Saaty, 2001; Saaty & Vargas, 2006). The primary objective of employing the ANP method is to construct a strategic development model that facilitates the enhancement of Micro Waqf Banks (MWBs) through collaborative partnerships. In line with previous studies emphasizing the role of Islamic

microfinance in addressing socio-economic challenges (Antonio et al., 2012; Ascarya, 2020), this research seeks to provide a more systematic approach to identifying core development priorities.

The research process involves several key stages: initially, the prioritization of the main problems encountered by Micro Waqf Banks is carried out. These issues often include limitations in funding, human capital, governance, and outreach effectiveness (Ascarya & Yumanita, 2008). Subsequently, potential solutions to these problems are explored, including capacity-building initiatives, digital infrastructure integration, and stakeholder engagement. Following the identification of problem-solution linkages, strategic alternatives are assessed and ranked based on their relevance and feasibility within the collaborative framework. This approach aligns with Chapra's (2000) vision of Islamic finance institutions functioning as development-oriented entities, where financial instruments are not merely profit-driven but also aim to achieve broader socio-economic goals.

The final step in this study involves synthesizing the priorities of problems, solutions, and strategies into a decision-making framework that can guide stakeholders—including policymakers, financial institutions, and civil society—in making informed and collaborative decisions for the sustainable development of MWBs. In adopting this approach, the study not only extends the theoretical application of ANP in Islamic finance but also contributes to the practical discourse on how Islamic social finance instruments can be effectively integrated within inclusive development policies (Huda & Heykal, 2010; Ascarya, 2020).

1. Results of Problem Criteria Analysis

The analysis commenced by determining the priority issues associated with the development of Micro Waqf Banks (MWBs) in general. Based on a comprehensive literature review and in-depth interviews with selected experts—including academicians, practitioners, and regulators in Indonesia—five key aspects were identified as critical criteria in the development challenges of MWBs. These include: (1) Human Resource (HR) capabilities within MWBs, (2) Technical/Operational aspects, (3) Regulatory and Policy frameworks, (4) Partnerships and Collaborations, and (5) Community engagement aspects.

A pairwise comparison questionnaire was designed based on these five criteria and was distributed to five respondents comprising one regulator, two academicians, and two Islamic microfinance practitioners. The analysis of the completed questionnaires revealed that all five problem criteria were perceived as important. This is supported by the fact that the inconsistency index values of all respondents were below 0.1 (Appendix 1), indicating acceptable consistency levels in their judgments. Furthermore, the rater agreement index ($W = 0.67$) signifies a high level of consensus among respondents, with a 67% agreement rate in problem prioritization (Saaty, 1980; Forman & Gass, 2001).

Among the five criteria, the Technical/Operational issues of MWBs were identified as the highest priority, with a weight of 0.257. This was followed by Regulatory and Policy issues (0.229), Partnership and Collaboration issues (0.204), Human Resource issues (0.160), and lastly, Community-related issues (0.109).

A further breakdown of the analysis by respondent group is as follows:

Regulator Perspective: From the viewpoint of the regulator, the Technical/Operational dimension of MWBs was identified as the most critical issue (0.344), followed by Partnership and Collaboration (0.2596), Regulatory and Policy frameworks (0.1598), Community (0.1394), and Human Resources (0.0967).

Academic Perspective: Among academicians, the Technical/Operational challenges were also prioritized (0.2678), followed by Regulatory and Policy concerns (0.2527), Human Resource-related issues (0.2492), Partnership and Collaboration (0.1313), and Community issues (0.0988).

Practitioner Perspective: In contrast, practitioners viewed Regulatory and Policy matters as the primary issue (0.2985), followed by Partnership and Collaboration (0.2515), Technical/Operational problems (0.1846), Human Resources (0.1708), and Community aspects (0.0943).

These variations across perspectives highlight the multi-dimensional and stakeholder-specific nature of challenges in MWB development. The level of agreement across all respondents regarding problem criteria is further illustrated in Table 4.5.

Table 4. Problem Clusters and Priority Rankings Based on Stakeholder Groups

Problem Cluster	Normalize Bay Cluster								Kendall's (W)
	Regulator	R	Academician	R	Practitioner	R	Total	R	
Human Resources	0,9671	5	0,24922	3	0,17083	4	0,160277591	4	0,667
Technical/Operational	0,34428	1	0,26781	1	0,18469	3	0,257272868	1	
Regulation and Policy	0,15983	3	0,25279	2	0,29859	1	0,29934951	2	
Partnership and Collaboration	0,25969	2	0,13136	4	0,25151	2	0,204718869	3	
Community Engagement	0,13949	4	0,09881	5	0,09437	5	0,10915894	5	

2. Results of the Solution Criteria Analysis

The analysis began by determining the priority solutions in the development of Micro Waqf Banks (Bank Wakaf Mikro, BWM) in general. Based on a literature review and in-depth interviews with several experts from academia, practitioners, and regulatory bodies in Indonesia, five key criteria were identified as part of the solution to address the challenges in developing Micro Waqf Banks. These five aspects consist of: Human Resources (HR) of BWM, Technical/Operational aspects, Regulation and Policy, Partnership and Collaboration, and Community Engagement.

A questionnaire using a pairwise comparison format was developed based on these five aspects and distributed to five respondents, comprising one regulator, two academics, and two practitioners from Islamic microfinance institutions. The results indicated that all five aspects were considered important, as evidenced by the consistency index being below 0.1 (Appendix 1) and a high level of rater agreement (W: 0.73), suggesting a 73% consensus among respondents in determining the priority of solutions.

In terms of priority, the technical/operational aspect emerged as the most crucial solution in developing BWM, with a weight of 0.248. This was followed by regulation and policy (0.227), partnership and collaboration (0.223), human resources (0.174), and community engagement (0.102). The prominence of the technical/operational aspect is consistent with previous findings that emphasize the importance of strengthening institutional and operational frameworks within Islamic microfinance institutions (Ascarya & Yumanita, 2008; Antonio et al., 2012). Further synthesis of the analysis reveals differences in solution priorities across respondent groups:

Regulator Perspective: Technical/Operational issues are the top priority (0.3142), followed by partnership and collaboration (0.2796), regulation and policy (0.1697), human resources (0.1227), and community engagement (0.1135). Academic Perspective: Technical/Operational issues also rank first (0.2635), followed by regulation and policy (0.2508), human resources (0.2360), partnership and collaboration (0.1474), and community engagement (0.1021). Practitioner Perspective: Regulation and policy emerge as the highest priority (0.2730), followed by partnership and collaboration (0.2697), technical/operational aspects (0.1837), human resources (0.1822), and lastly, community engagement (0.0912). These findings support the use of the Analytic Network Process (ANP) as an effective method for multi-criteria decision-making, particularly in prioritizing development strategies for Micro Waqf Banks (Saaty, 2001; Mardani et al., 2015).

Table 5. Solution Clusters and Priority Rankings Based on Stakeholder Groups

Problem Cluster	Normalize Bay Cluster								Kendall's (W)
	Regulator	R	Academician	R	Partition	R	Total	R	
Human Resources	0,23239	2	0,07512	5	0,06968	5	0,106748157	5	0,60
Technical/Operational	0,34887	1	0,34776	1	0,39231	1	0,362402243	1	
Regulation and Policy	0,18525	3	0,1779	3	0,21762	2	0,192846158	2	
Partnership and Collaboration	0,1386	4	0,17374	4	0,19831	3	0,168397596	3	
Community Engagement	0,09489	5	0,22548	2	0,12209	4	0,137721852	4	

DISCUSSION

The development model of Micro Waqf Banks (Bank Wakaf Mikro/BWM) based on collaboration represents an entrepreneurial ecosystem framework. This concept aligns with the entrepreneurial ecosystem model introduced by Daniel Isenberg in 2010 in his article “How to Start an Entrepreneurial Revolution” and later reinforced in his 2011 publication through the Institute of International and European Affairs (IIEA). Isenberg emphasizes that a well-functioning entrepreneurial ecosystem comprises several essential components, including market access, the availability of a skilled workforce, access to capital, and a robust support system involving mentors, consultants, and incubators. Moreover, the existence of enabling policies and regulations, adequate infrastructure, quality education and training systems, and active support from higher education institutions and communities play a vital role in nurturing new entrepreneurs and advancing MSMEs (Isenberg, 2010; Isenberg, 2011).

Isenberg identifies six fundamental pillars that form a dynamic and sustainable entrepreneurial ecosystem:

A conducive culture, with high tolerance for risk and failure, alongside positive societal attitudes toward entrepreneurship.

Supportive leadership and policy, involving government incentives and regulatory frameworks that foster business creation and growth.

Access to sufficient financing, including microcredit, venture capital, and other funding mechanisms.

Human capital, ensured through the presence of high-quality educational and vocational institutions focused on developing entrepreneurial competencies.

Open market access, allowing entrepreneurs to engage both domestic and international markets.

Infrastructure and support systems, such as digital infrastructure, business incubators, and advisory services (Isenberg, 2010; Mason & Brown, 2014).

These six pillars are interdependent and collectively provide the structural foundation for a resilient entrepreneurial ecosystem.

Enny Sri Hartati, a senior researcher at the Institute for Development of Economics and Finance (INDEF), asserts that strengthening the financing ecosystem for ultra-micro enterprises is urgently required. She argues that such businesses, which constitute approximately 97% of all micro-enterprises in Indonesia, are the backbone of the nation’s economic growth. Hence, reinforcing this segment is essential for enhancing household purchasing power and promoting economic sustainability. Strategic support from both government and non-governmental actors, including capacity-building in human resources, enterprise management, and financial systems, is pivotal for advancing ultra-micro and micro enterprises. These initiatives are crucial in tackling poverty reduction and economic inclusion (Nasution, 2022; Tambunan, 2019). In this context, forming synergistic partnerships between Micro Waqf Banks, government institutions, the Financial Services Authority (OJK), Islamic microfinance institutions, Islamic banks, state-owned and private enterprises, zakat management organizations, and NGOs could lead to the development of a comprehensive ultra-micro enterprise ecosystem. This approach is especially significant given that current efforts to empower ultra-micro and micro enterprises are fragmented across various institutions. A coordinated ecosystem would maximize existing resources and contribute to poverty alleviation through community empowerment. Moreover, the rapid growth of digital technology presents a unique opportunity to establish digital ecosystems that support the national economic recovery agenda. Such integration would facilitate faster and more equitable access to financing for ultra-micro and micro businesses across Indonesia’s diverse regions (Rizaldi & Permata, 2020; Wahyuni et al., 2023).

The realization of this collaborative model is expected to expand the formal financial inclusion of ultra-micro and micro enterprises, thereby broadening their opportunities for sustainable growth and upward economic mobility.

CONCLUSION

This study concludes that the development of collaborative-based Micro Waqf Banks is primarily challenged by five key issues: technical and operational difficulties, regulatory and policy constraints, partnership and collaboration gaps, human resource limitations, and community-related obstacles. Among these, technical and operational challenges were identified as the most critical, followed by regulatory and policy issues, partnership deficiencies, human resources, and community engagement. The analysis further highlights that addressing technical and operational problems should be the top priority for solutions, complemented by regulatory improvements, enhanced collaboration, capacity building for human resources, and community outreach. These solutions were derived through expert consensus using the Analytic Network Process (ANP) approach. Strategically, the most significant recommendation is to reform and optimize existing regulations and government policies to foster an enabling environment for Micro Waqf Bank development. This should be supported by initiatives such as building networks with Islamic Financial Institutions, zakat agencies, and business entities; leveraging digital technology for innovation; fostering partnerships with local governments; and establishing an apex institution to provide oversight and guidance.

Based on the findings, it is recommended that stakeholders and practitioners in the Micro Waqf Bank ecosystem use this research as a reference for informed decision-making. The proposed model offers insights into prioritizing management problems, identifying feasible solutions, and formulating strategic directions. However, this model has limitations, as it does not fully encompass opportunities, cost structures, or risk factors associated with the development of Micro Waqf Banks. Future research should seek to expand the framework to include these dimensions and evaluate the impact of each variable. Additionally, since this study employs a qualitative ANP-based approach to capture expert perspectives, further quantitative research is encouraged to empirically test the influence of each factor and validate the robustness of the proposed strategies.

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