

Business Model Canvas for Strengthening Productive Waqf Ecosystems: Evidence from IPB's Livestock Waqf Project

Mutiara Probokawuryan¹, Alla Asmara², Iyep Komala³,
Muhammad Nur Faaiz F. Achsan⁴, Haifa Salsabila Huda⁵,
Muhammad Zigan Alsofi⁶, Achnaf Thariq Al-Khaliel⁷

^{1,4,5,6,7}Department of Islamic Economics, ²Department of Economics, ³Department of Animal Production, IPB University, Bogor, Indonesia.

Corresponding Author: Muhammad Nur Faaiz F Achsan

DOI: <https://doi.org/10.52403/ijrr.20260136>

ABSTRACT

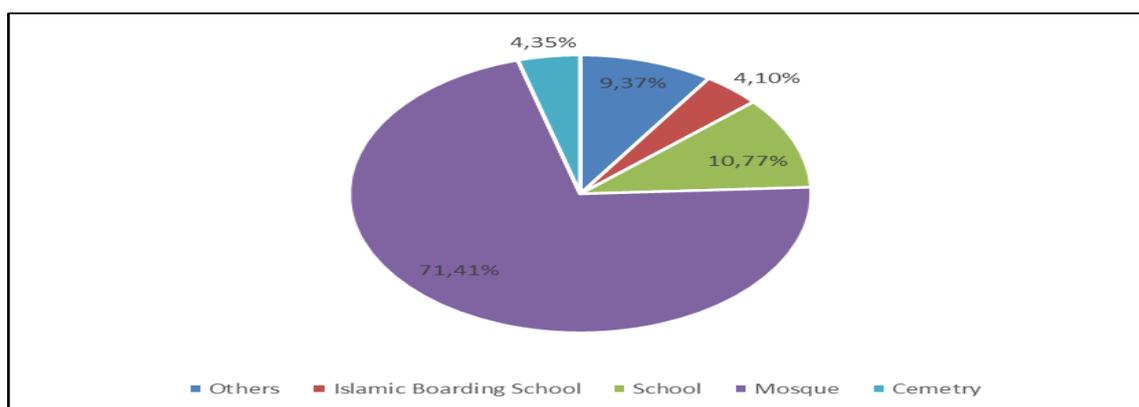
This study examines how productive waqf assets can be transformed into a sustainable business ecosystem through the application of the Business Model Canvas (BMC), using the Integrated Livestock Waqf Project at IPB University as a case study. Indonesia possesses a large potential of waqf land, yet most of these assets remain underutilized for productive economic activities. Responding to this gap, the study adopts a qualitative case study approach, drawing on field observations, semi-structured interviews with key stakeholders, and document analysis to develop a comprehensive BMC for a livestock-based productive waqf initiative. The results show that the proposed model integrates upstream livestock breeding and fattening, downstream meat processing and distribution, and livestock-based educational tourism within a faith-based business framework. The BMC highlights the importance of multi-stakeholder partnerships, professional governance, diversified activities, and multiple revenue streams in ensuring both financial sustainability and social impact. By linking waqf principles with modern business modeling, this study demonstrates that productive waqf can function as a form

of Islamic social enterprise capable of supporting economic empowerment and community welfare. The findings contribute to the literature by offering an implementable framework for designing productive waqf ecosystems, particularly in the agricultural and livestock sectors, and provide practical insights for waqf managers, policymakers, and practitioners seeking to optimize waqf asset utilization.

Keywords: Business model canvas; Islamic social finance; Livestock waqf; Productive waqf; Sustainable business model;

INTRODUCTION

Waqf has long served as a cornerstone of socio-economic development in Muslim societies, functioning as an Islamic philanthropic instrument aimed at preserving public wealth and promoting social welfare for all members of society. Indonesia holds one of the largest waqf asset potentials in the world. According to the Ministry of Religious Affairs' *Sistem Informasi Wakaf (SIWAK)*, the total recorded waqf land area reached 57,263.69 hectares across 440,512 locations throughout the country (SIWAK, 2025). However, the majority of these assets remain underutilized in terms of productive economic activity.



Source: National Waqf Information System (SIWAK), Ministry of Religious Affairs of the Republic of Indonesia (2025)

Figure 1. Percentage of Waqf Land Usage in Indonesia

As stated in Law No. 41 of 2004, waqf is no longer restricted to purely social or religious functions; it may also be allocated for productive economic activities that can generate ongoing benefits for society (Maulana et al., 2023; Yasniwati, 2023). Productively managed waqf land holds significant potential to support socio-economic development, particularly within agricultural and agribusiness sectors. Several institutions have begun implementing more structured, outcome-oriented models for waqf management, with the expectation that such approaches will enhance waqf's contribution to community welfare and local economic development (Arofah & Fauziyah, 2022; Arijuddin & Nurwahidin, 2023).

Productive waqf plays an essential role in financing educational institutions, healthcare facilities, and community development programs. When incorporated into broader development strategies, productive waqf can generate sustainable socio-economic outcomes. Case studies from Indonesia and Malaysia provide evidence of successful productive waqf initiatives that contribute to poverty alleviation and community empowerment, in line with the principles of Islamic social finance (Sholihah et al., 2024; Faisal et al., 2024; Muhammedi et al., 2024; Nurhaida et al., 2023).

Despite these emerging successes, the productive use of waqf land in Indonesia remains limited and underdeveloped. According to SIWAK (2025), 43.51% of all waqf land is used for mosques and 27.90%

for prayer rooms (*mushalla*), meaning that approximately 71.41% of waqf land is still dedicated primarily to social purposes. Productive waqf is not yet a dominant category. Previous studies similarly estimate that only 10–15% of waqf land nationwide is managed for productive activities, whereas the vast majority remains in non-productive use (Yasniwati, 2023; Arofah & Fauziyah, 2022; Sofyan & Sofyan, 2023). This gap indicates a missed opportunity for transforming waqf assets into engines of economic empowerment.

Effective management of productive waqf requires a strategic and professional approach, emphasizing governance quality, operational efficiency, and business-driven planning. Weak governance and poor operational practices often hinder the optimization of waqf assets (Muhardi et al., 2023; Sayuti et al., 2020). Conversely, the establishment of structured business units—such as agricultural enterprises or microfinance operations—can significantly increase the productivity of waqf assets, generating income, creating jobs, and improving beneficiary livelihoods (Suyatno, 2023; Hasbi & Widayanti, 2022).

In 2020, IPB University was formally designated as a Nazhir (authorized waqf manager), granting legal authority to collect and manage waqf and other social funds (Wakaf IPB, 2024). In September 2022, IPB issued a term-cash waqf placement of IDR 200 billion through the *Sukuk Wakaf Private Placement SWR004* to support its

educational, research, and community service activities (BWI, 2022). The IDR 50 billion return from the sukuk is allocated to fund operational needs of IPB's waqf programs under the *Cash Waqf Linked Sukuk (CWLS)* scheme.

As part of its efforts to develop productive waqf, IPB's Waqf and Social Fund Unit is currently managing a 1.3-hectare waqf land planned as an integrated livestock zone. Basic infrastructure—including access roads, fencing, and water supply—has been constructed. The site is projected to support 120 sheep and 10 cattle for fattening programs (Unit Wakaf dan Dana Sosial IPB, 2024). This initiative demonstrates strong potential for business development, value-chain integration, and community involvement, as livestock outputs can feed into downstream agribusiness activities.

Such a development requires well-structured collaboration between the Nazhir and local community stakeholders, along with clear agreements regarding rights, responsibilities, and revenue-sharing mechanisms (Sofyan & Sofyan, 2023; Faradis et al., 2020). These conditions highlight the importance of designing an optimal productive waqf business ecosystem, particularly for agriculture-based waqf models such as livestock production.

However, despite promising initiatives, there is still limited research offering practical, implementable frameworks for building productive waqf business ecosystems—especially using modern strategic tools like the Business Model Canvas (BMC). Existing literature predominantly discusses governance and regulation but rarely explores how business modeling can enhance the sustainability of productive waqf enterprises.

This study addresses this gap by developing a Business Model Canvas (BMC) for IPB's Integrated Livestock Waqf Project, aimed at constructing a comprehensive and sustainable productive waqf ecosystem. The BMC framework enables systematic analysis of key business components—value propositions, customer segments, key

partners, resources, revenue structures, and costs—while ensuring alignment with waqf objectives and Islamic social finance principles.

By doing so, this research contributes academically by integrating business model theory into waqf studies, and practically by offering a replicable model for waqf managers, policymakers, and practitioners seeking to optimize productive waqf assets. Ultimately, the study supports Indonesia's broader agenda to strengthen Islamic social finance and enhance the socio-economic impact of waqf.

LITERATURE REVIEW

The application of the Business Model Canvas (BMC) in productive waqf studies has expanded in recent years, reflecting attempts to integrate Islamic social finance with modern business planning tools. Overall, the literature shows that BMC is useful for mapping value creation, key partners, resources, channels, and governance arrangements in productive waqf ecosystems. Rahman et al. (2022) demonstrate how BMC can be used to reformulate business strategies for zakat, infaq, sadaqah, and waqf (ZISWAF) in Islamic banks, highlighting the importance of optimizing channels through digital media and branch networks, and strengthening key resources such as technology and customer databases to improve fund collection and distribution. Similarly, Firdaus (2024) develops a blockchain-based waqf business model using BMC, emphasizing transparency, accountability, and data security as mechanisms to enhance public trust in digital waqf programs; the study also underlines that key activities and customer relationships become central when donor engagement and reporting depend on digital traceability.

Beyond the use of BMC as a strategic tool, the broader productive waqf literature identifies multiple implementation schemes across sectors, including property development, cash waqf, enterprise-based waqf, and agricultural or livestock waqf.

Cash waqf and crowdfunding have also been conceptualized using BMC. Joe & Tanjung (2025) show that crowdfunding-enabled cash waqf, operationalized through a BMC, supports free meal programs by broadening donor participation, strengthening transparency and governance, mobilizing sustainable investment, and fostering cross-sector collaboration to deliver accountable and lasting welfare impacts. In the Indonesian context, Sulistya et al., (2020) integrate BMC with ANP–SWOT analysis to design cash waqf development strategies, suggesting that donor segments should be expanded beyond Muslim individuals to include legal entities and even non-Muslims, while key channels should be strengthened through LKS-PWU and digital wallets. Their ANP–SWOT findings also identify major threats such as portfolio risk, rising operational costs, moral hazard, and consumption behavior that weakens waqf's social mission, leading to recommendations that prioritize nazhir professionalization (“waqf-preneur” management), stronger good corporate governance, increased transparency via blockchain, institutional revitalization of BWI–LKS-PWU coordination, and reinforcement of operational funding.

Institutional and enterprise models of productive waqf further show how partnerships shape sustainability. Akhlaq et al. (2021) emphasize that productive waqf performance depends on the alignment between key partners (nazhir, Islamic financial institutions, and government) and key activities (business mentoring, asset management, and distribution of returns), and they note that cooperatives often function as intermediary institutions connecting nazhir, farmers (or producers), and markets. This cooperative role can be interpreted within BMC both as a key partner and, in certain designs, as part of the customer segment supporting ecosystem continuity. Other studies also discuss institutional integration of waqf assets into productive ventures, including pesantren-based enterprises, where diversified revenue

streams and stakeholder engagement strengthen sustainability (Afif et al., 2025; Mubarrak & Ramly, 2025).

Livestock waqf is increasingly discussed as a productive waqf model that requires careful adaptation of the BMC blocks due to biological and market uncertainties. Piero et al. (2023) combine BMC with SEM-LISREL to examine the feasibility of a sheep farming waqf model at MT Farm and find that several BMC indicators—customer relationships, value proposition, channels, and key resources—were not yet significant, implying the need for public education and stronger managerial capacity. The study proposes an integrated portfolio strategy allocating waqf assets across land, livestock, and operational costs (60%:30%:10%) to reduce mortality risk while retaining economic value through land appreciation. It also highlights downstream value-added strategies, such as processed meat innovation, market expansion, and full utilization of livestock by-products through artisan collaboration, to stabilize cash flows and strengthen ecosystem resilience. These findings underline that productive livestock waqf is not only about production capacity but also about governance, marketing, supply-chain coordination, and multi-stakeholder support.

Across the wider productive waqf scholarship, recurring themes include governance and accountability constraints, liquidity limitations, fragmented legal frameworks, low public awareness, and uneven institutional capacity, all of which hinder the scaling of productive waqf despite its strong potential for social development (Yakob et al., 2022). Risk management is consistently highlighted as a crucial yet often underdeveloped dimension, with financial, operational, governance, Shariah compliance, and market risks appearing across property, cash, and livestock waqf models (Sulistya et al., 2020; Piero et al., 2023). Yakob et al. (2022) specifically recommend stronger adoption of enterprise risk management (ERM) structures to improve monitoring, clarify risk appetite,

and strengthen institutional performance in waqf organizations. At the same time, digital transformation emerges as a key opportunity, particularly through crowdfunding and blockchain, which can widen donor reach, reduce transaction costs, and strengthen transparency and trust (Joe & Tanjung 2025; Firdaus, 2024). Multi-stakeholder collaboration is also repeatedly positioned as essential, as productive waqf implementation often requires coordination among nazhir, regulators, Islamic financial institutions, technology providers, and community actors (Akhlaq et al., 2021; Mahmud & Noordin, 2024).

Overall, the merged literature indicates that BMC offers a structured approach for translating productive waqf principles into an implementable business ecosystem, but sustainability depends on more than a well-designed canvas. The evidence consistently points to the importance of professional governance, transparent reporting, operational efficiency, risk management capacity, technology-enabled channels, and collaborative partnerships. These insights provide a strong foundation for constructing a BMC for the IPB integrated livestock waqf initiative, particularly by clarifying how value is created for donors and beneficiaries, how operations and partnerships are organized, and how risks specific to livestock-based productive waqf can be mitigated through governance and value-chain strategies.

MATERIALS & METHODS

This study employs a qualitative case study design to examine and develop a Business Model Canvas (BMC) for a productive waqf initiative, focusing on the Integrated Livestock Waqf Project managed by IPB University. A qualitative approach is appropriate because the research aims to explore governance arrangements, operational processes, and stakeholder interactions in depth, rather than to test causal relationships or estimate statistical effects. Previous studies on productive waqf and Islamic social finance have widely

adopted qualitative and case-based approaches when applying the BMC framework, as this method allows researchers to capture contextual, managerial, and institutional complexities that cannot be fully observed through quantitative techniques alone (Rahman et al., 2022; Firdaus, 2024; Piero et al., 2023).

The unit of analysis in this research is the business model of the productive waqf project, examined through the nine building blocks of the Business Model Canvas: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. This framework has been increasingly applied in waqf studies to systematically assess how waqf assets are transformed into sustainable economic activities while remaining aligned with Shariah principles and social objectives (Sulistya et al., 2020; Akhlaq et al., 2021). Using the BMC enables a structured analysis of both the current conditions and the proposed development of the livestock waqf ecosystem.

Data collection relies on multiple qualitative sources to ensure analytical depth and triangulation. Primary data were obtained through semi-structured interviews with key stakeholders involved in the waqf project, including nazhir, project managers, and individuals with technical expertise in livestock operations and waqf governance. Interview questions were designed to correspond with the BMC components, allowing respondents to explain how each element of the business model is organized and how it is expected to function in practice. This approach follows earlier productive waqf studies that relied on expert judgment and stakeholder insights to operationalize BMC elements in contexts where quantitative data are limited (Sulistya et al., 2020; Piero et al., 2023). In addition, direct field observation of the waqf land and existing infrastructure was conducted to understand physical conditions, resource availability, and operational readiness, which

is particularly relevant for agricultural and livestock-based waqf models.

In addition to individual interviews, this study incorporated two rounds of Focus Group Discussions (FGDs) to capture collective insights, validate field findings, and refine the proposed productive waqf ecosystem model. The first FGD, conducted on 16 June 2025, involved practitioners and stakeholders across the upstream livestock value chain, including representatives from the Indonesian Association of Sheep and Goat Breeders (HPDKI), livestock farmers, feed and veterinary input providers, and actors involved in cattle placement (*titip sapi*) schemes. This FGD focused on identifying practical constraints and opportunities in financing, input provision, production practices, market access, risk mitigation, and partnership arrangements. Discussions highlighted challenges such as price standardization, treatment and quality variation, fraud risks, capacity limitations of slaughterhouses, seasonal market dependence, and the difficulty of upgrading farmers from conventional to modern livestock practices.

The second FGD, conducted on 31 October 2025, aimed to finalize the productive waqf ecosystem model and strengthen its alignment with Islamic social finance principles. Participants included academic experts, waqf practitioners, and technical specialists in livestock management. This FGD emphasized the philosophical foundation of productive waqf (spiritual, social, and commercial dimensions), cost structure—particularly feed costs as the dominant expenditure—risk mitigation strategies, revenue diversification, branding and positioning, and the integration of research outputs into value-added livestock products. The discussion also highlighted the importance of incorporating Cash Waqf Linked Sukuk (CWLS) returns, alternative social finance instruments, Shariah contracts such as *musyarakah* and *ijarah*, and structured governance mechanisms within the BMC.

Secondary data were collected through document analysis, including institutional reports from IPB's Waqf and Social Fund Unit, official publications from waqf authorities, regulatory documents related to waqf management, and relevant academic literature on productive waqf, business model innovation, and Islamic social finance. Document analysis is commonly used in waqf research to capture formal governance structures, legal arrangements, and strategic plans, and it complements interview and observation data by providing an institutional and regulatory context (Sulistya et al., 2020). Data analysis was conducted using thematic qualitative analysis, with the Business Model Canvas serving as the main analytical lens. Interview transcripts, observation notes, and documentary materials were coded and categorized according to the nine BMC building blocks. The findings within each block were then synthesized to construct an integrated and coherent business model for the Integrated Livestock Waqf Project. This analytical strategy is consistent with prior studies that map qualitative findings onto BMC components to assess feasibility, sustainability, and governance quality in productive waqf initiatives (Akhlaq et al., 2021; Piero et al., 2023). To enhance validity, triangulation was applied by cross-checking information across different data sources, while methodological consistency with established waqf research supports the reliability of the results.

Overall, this methodological approach enables a comprehensive and context-sensitive understanding of how a productive waqf business ecosystem can be designed and operationalized, while remaining aligned with Islamic social finance principles and addressing practical challenges identified in the existing literature.

RESULT

The results of this study are presented by translating empirical findings from field observations, interviews, and document analysis into a structured Business Model Canvas (BMC) for the Integrated Livestock

Waqf Project at IPB University. This section focuses on describing how the productive waqf ecosystem is configured across the nine BMC building blocks, reflecting the operational logic, stakeholder relationships, value creation mechanisms, and financial sustainability of the model. The BMC serves as an integrative tool that synthesizes qualitative evidence into a coherent representation of the waqf-based livestock business, highlighting how waqf assets are

transformed into productive activities while maintaining their social and religious objectives. The results are supported by visual presentation of the Business Model Canvas and are explained systematically to show the role of key partners, resources, activities, value propositions, customer segments, channels, cost structure, and revenue streams within the proposed productive waqf ecosystem.



Figure 1. Business Model Canvas of the Integrated Livestock Waqf Project at IPB University

Figure 1 presents the updated Business Model Canvas (BMC) for the Integrated Livestock Waqf Project at IPB University, depicting a refined productive waqf ecosystem that links upstream livestock production, downstream meat processing, and education-based services within a maqasid al-shariah-oriented, faith-based business framework. The model illustrates how waqf assets are mobilized through structured partnerships, clearly defined activities, and segmented markets to achieve both economic viability and social welfare objectives. Overall, the BMC reflects a deliberate emphasis on professional management, value-chain integration, and sustainability-driven value creation.

In terms of key partners, the model highlights collaboration primarily with livestock farmers and MSME partners, IPB University experts and academics, feed and veterinary medicine producers, Islamic financial institutions, and the waqf manager (nazhir). These partnerships form the backbone of operational execution and governance, combining technical expertise, financial support, and institutional oversight. The involvement of academic experts strengthens standard-setting, innovation, and supervision, while partnerships with Islamic financial institutions and the waqf manager ensure alignment with Shariah principles and productive waqf objectives. The key activities span the full livestock value chain and supporting services. Core

activities include livestock breeding and fattening, distribution and sale of live livestock, and the production and distribution of both fresh and processed meat products. These are complemented by edu-livestock tourism activities, which position the project not only as a production unit but also as a center for education and awareness on productive waqf and halal livestock management. This combination of activities indicates a vertically integrated approach designed to stabilize income flows and enhance value addition.

Key resources underpinning the model consist of human resources, IPB waqf land, and IPB waqf funds. Human resources play a central role in managing livestock operations, partnerships, and service delivery, while waqf land and funds constitute the core productive assets enabling long-term operations. The reliance on waqf-based resources reinforces the sustainability of the model by ensuring that economic activities remain anchored to social and religious objectives.

The value proposition emphasizes standardized and professionally managed livestock production, halal livestock products, and educational tourism grounded in productive waqf principles. By explicitly framing the business as maqasid al-shariah based, the model underscores that value creation extends beyond commercial outputs to include ethical production, social benefit, and educational impact. This positioning differentiates the project from purely commercial livestock enterprises.

Customer relationships are designed around long-term and trustworthy partnerships, supported by strong customer care and social responsibility. Such relationships reflect the waqf principle of amanah and aim to sustain engagement with customers, partners, and beneficiaries through transparency and reliability.

The channel structure is organized across upstream livestock supply, downstream meat products, and educational services. Upstream channels rely on partnerships with local farmers, training and technical assistance

through cooperatives or training units, digital platforms for livestock sales, and direct distribution to buyers. Downstream channels include direct sales to households and MSMEs, halal distribution networks, retail and wholesale outlets, and social media marketing. For education-based services, channels focus on digital promotion and collaboration with schools and educational communities to facilitate visits and programs.

Customer segments are clearly differentiated according to product and service lines. Upstream products target qurban and hajj sacrificial animal markets and aqiqah service providers at household and institutional levels. Downstream meat products serve daily household consumers, culinary MSMEs such as restaurants and catering services, and hotels. Service-oriented segments focus on education-based productive waqf and agriculture or livestock learning activities, particularly for schools and educational institutions.

The cost structure reflects the operational realities of managing multiple value streams. Upstream products are primarily driven by feed and labor costs, while downstream meat processing incurs slaughtering, processing, and marketing costs. Edu-livestock tourism involves service and promotion costs. This differentiated cost structure illustrates the complexity of operating an integrated waqf-based enterprise and the need for careful cost management across activities.

Finally, the revenue streams demonstrate a diversified income base derived from sales of live sheep and cattle, fresh meat, packaged and processed meat products, productive waqf investment packages, livestock educational tourism programs, and by-products such as organic fertilizer. This diversity of revenue sources enhances financial resilience while ensuring that economic returns remain aligned with the social mission of productive waqf.

In addition to mapping the proposed business model, the field findings also reveal a set of structural and operational constraints that may affect the implementation and

scalability of the integrated livestock waqf ecosystem at IPB University. In line with the research objective to identify opportunities and challenges in designing a productive waqf business ecosystem, interviews with livestock farmers indicate that the main constraints are concentrated across four key nodes of the value chain: financing, production inputs, market access, and technical–managerial assistance. Quantitatively, limited access to capital emerged as the most pressing constraint, with the highest average score (3.07), followed by the need for continuous assistance and mentoring (2.93). Meanwhile, labor limitations (2.36), marketing difficulties (2.29), and limited availability of production inputs (2.14) remain relevant operational barriers. This pattern suggests that enabling factors—particularly financing and mentoring—pose more urgent challenges than day-to-day operational issues, while market and input constraints, although relatively lower in score, still restrict business scale and cash-flow stability.

Insights from Focus Group Discussions (FGDs) with the Indonesian Association of Sheep and Goat Breeders (HPDKI) and actors involved in cattle placement (*titip sapi*) schemes further confirm and enrich the understanding of upstream and downstream challenges. On the upstream (on-farm) side, participants highlighted difficulties in price standardization for cultivation, animal treatment, and raw materials, alongside variations in production practices and input quality that affect cost structures and pricing. Transaction risks such as brokerage practices, fraud schemes (including tripartite fraud), and livestock theft were identified as significant concerns. Moreover, the process of upgrading farmers from conventional to modern livestock management remains challenging, resulting in slow adoption of technology and standard operating procedures (SOPs).

On the downstream side, limitations in slaughterhouse (RPH) capacity, increasingly selective consumer preferences with narrow meat specifications, and the difficulty of

identifying reliable partners or operators—particularly those capable of maintaining low mortality rates and providing mitigation mechanisms for unsold livestock—were identified as critical bottlenecks. In addition, inadequate waste disposal and livestock waste management systems generate environmental externalities and regulatory risks, potentially eroding profit margins and long-term sustainability.

When synthesized within the Business Model Canvas framework, these findings clearly indicate priority intervention areas for strengthening the productive waqf ecosystem at IPB University. Constraints related to capital access and mentoring reflect weaknesses in key resources, particularly Shariah-compliant financing instruments and trained human resources, as well as in key activities such as technical–managerial assistance, quality control, and biosecurity management. Issues of price standardization, partner curation, and highly specific consumer demand signal the need to strengthen the value proposition through quality assurance, traceability, and animal welfare standards, while also improving channels through curated off-taker partnerships, specialized e-commerce platforms, and formal supply contracts with slaughterhouses. At the same time, slaughterhouse capacity constraints and waste management challenges highlight the importance of orchestrating key partners—including RPH operators, local governments, off-takers, HPDKI, and universities—and redesigning the cost structure through investments in cold-chain systems and waste processing solutions such as rendering, biogas, or composting. Taken together, these findings position IPB's productive waqf land as a potential orchestrator–aggregator within the ecosystem, functioning as a hub for standardization, targeted Shariah financing, mentoring incubation, partner curation, and integrated upstream–downstream coordination that aligns SOPs, financing, markets, and waste management to optimize productivity and social impact.

DISCUSSION

The Business Model Canvas developed for the Integrated Livestock Waqf Project at IPB University provides an integrated interpretation of how productive waqf assets can be transformed into a sustainable, market-oriented, and socially driven enterprise. The findings indicate that productive waqf is most viable when it is embedded within a multi-stakeholder ecosystem, professionally managed, and structured along a complete value chain rather than operating as an isolated charitable activity. This reinforces the broader productive waqf literature, which consistently emphasizes that institutional design and governance quality are decisive factors in determining waqf performance (Sukmana, 2020).

The configuration of key partners reflects a stakeholder-based governance model in which regulatory authorities, financial institutions, technical experts, producer organizations, and operational partners collectively support the waqf enterprise. Stakeholder theory suggests that organizational sustainability depends on the alignment of interests and coordinated roles among diverse actors (Freeman, 1984). In the context of productive waqf, this coordination is particularly critical due to the dual obligation to preserve the waqf corpus while generating economic and social returns. Prior studies show that waqf initiatives often underperform when nazhir lack institutional backing or operate without formal partnerships (Sulistiya et al., 2020; Akhlaq et al., 2021). The inclusion of BWI, Islamic financial institutions, cooperatives, and sector-specific associations such as HPDKI therefore strengthens both governance legitimacy and operational feasibility. This structure mirrors empirical findings in livestock-based waqf models, where cooperative intermediaries and institutional partners play a central role in connecting producers, markets, and regulators (Piero et al., 2023).

The range of key activities identified in the BMC—spanning livestock breeding, meat

processing, distribution, and educational tourism—demonstrates a deliberate strategy of vertical integration. From a value-chain perspective, integrating upstream production with downstream processing and service activities allows the waqf enterprise to capture greater value, stabilize income flows, and reduce exposure to biological and market risks (Porter, 1985). This is especially relevant for livestock-based waqf, where reliance on a single activity, such as live animal sales, can expose the institution to seasonal demand shocks and price volatility. The inclusion of processed meat products and edu-livestock tourism aligns with findings by Piero et al. (2023), who show that diversification across production and service activities enhances both financial resilience and social impact in livestock waqf initiatives.

The key resources identified in the model highlight the central importance of human capital and institutional capacity alongside physical waqf assets. Productive waqf theory emphasizes that land and funds alone do not guarantee success unless accompanied by professional management, technical expertise, and clear operational systems (Sukmana, 2020). The involvement of IPB University experts and trained human resources addresses one of the most persistent weaknesses in waqf institutions, namely the limited professionalism of nazhir and operational staff. This integration of academic and technical expertise supports institutional theory, which holds that organizational outcomes are shaped by internal capabilities and knowledge structures rather than assets alone.

The value proposition articulated in the BMC reflects the core logic of Islamic social finance by combining economic viability with ethical and social objectives. The emphasis on halalan tayyiban livestock products, standardized production, and expert supervision aligns with the Islamic principle that economic activities should promote both material benefit and moral integrity. Sukmana (2020) argues that productive waqf must function as a hybrid

institution—simultaneously a business enterprise and a social instrument—to remain sustainable. The framing of the livestock waqf as a faith-based business oriented toward public welfare demonstrates how this dual objective can be operationalized in practice. Moreover, the inclusion of educational tourism expands the social value proposition beyond financial outcomes by promoting awareness, learning, and community engagement, which are often underemphasized in conventional livestock enterprises.

Customer relationship strategies centered on long-term partnerships, transparency, and accountability further reinforce the governance dimension of the model. Trust is a foundational element in waqf institutions, as donors, beneficiaries, and customers rely on *nazhir* to manage assets responsibly and in accordance with Shariah principles. Weak transparency and limited disclosure have been widely identified as factors that erode public confidence in waqf management (Firdaus, 2024). By explicitly embedding transparency and social responsibility into its customer relationship framework, the IPB livestock waqf model responds directly to these governance challenges. This finding supports the argument that governance mechanisms in productive waqf must extend beyond formal compliance to include relational accountability and ethical engagement with stakeholders.

The channel structure identified in the BMC reflects a hybrid distribution strategy that combines traditional cooperative-based channels with digital platforms and direct sales. This approach aligns with contemporary distribution and digital transformation theories, which emphasize the importance of channel diversification to reduce transaction costs and expand market access. In the context of Islamic social finance, Rahman et al. (2022) show that integrating digital channels with institutional networks enhances both outreach and operational efficiency. For the livestock waqf model, diversified channels also mitigate dependency on seasonal religious markets,

such as *qurban* and *aqiqah*, by supporting continuous engagement with households, MSMEs, and institutional buyers.

The cost structure and revenue streams further demonstrate a sustainability-oriented business model. By distinguishing costs and revenues across upstream livestock production, downstream meat processing, and edu-livestock tourism, the BMC reflects a strategic approach to financial management that reduces concentration risk. Financial sustainability theory in productive waqf emphasizes that diversified revenue sources are essential to maintaining operations without compromising the waqf corpus (Sukmana, 2020). The inclusion of productive waqf investment packages and by-products such as organic fertilizer illustrates innovative asset utilization, consistent with prior findings that value maximization within Shariah boundaries enhances long-term waqf performance (Piero et al., 2023).

Taken together, the BMC results suggest that the sustainability of productive waqf is determined not by individual components in isolation, but by the coherence and alignment of governance, operations, market strategy, and social objectives. The Integrated Livestock Waqf Project at IPB University illustrates how modern business modeling tools can be applied within an Islamic philanthropic framework to translate waqf principles into an operationally viable and socially impactful enterprise. This reinforces the broader literature that positions productive waqf as a form of Islamic social enterprise, capable of contributing meaningfully to economic empowerment and community welfare when supported by professional management, multi-stakeholder collaboration, and strategic design.

CONCLUSION

This study developed a Business Model Canvas (BMC) for IPB University's Integrated Livestock Waqf Project to demonstrate how waqf assets can be operationalized into a sustainable productive waqf ecosystem. The resulting BMC

highlights that the viability of livestock-based productive waqf depends on coherent alignment across the entire model: a multi-stakeholder governance network (involving regulators, Islamic social finance institutions, cooperatives, technical experts, and operational partners), an integrated set of value-chain activities (breeding and fattening, live animal distribution, fresh and processed meat production, and edu-livestock tourism), and a value proposition that combines halal tayyiban standards with professional management and faith-based social impact orientation. The model also shows that diversification is central to sustainability, both in market reach—serving religious markets (qurban, hajj, aqiqah) and daily meat consumers—and in income structure, through multiple revenue streams including livestock and meat sales, productive waqf investment packages, educational tourism programs, and by-products such as organic fertilizer. In practical terms, the findings suggest that strengthening productive waqf ecosystems requires professional human resources, transparent stakeholder relationships, and channel strategies that combine cooperative-based networks with digital platforms to enhance reach and efficiency.

Academically, this research contributes by extending the application of BMC as a structured planning tool for productive waqf ecosystems, particularly in agriculture and livestock contexts where operational and market risks are more complex. Practically, it offers a replicable model that can guide nazhir, universities, and policymakers in designing productive waqf initiatives that are both economically resilient and socially impactful. Future research may strengthen this framework by incorporating quantitative feasibility analysis (costing, profitability, and sensitivity testing), formal risk mapping (biological risk, price volatility, operational and governance risks), and longitudinal impact assessment to measure how the model performs over time in generating benefits for beneficiaries and local communities.

Declaration by Authors

Acknowledgement: None

Source of Funding: This study was funded through the Program Penelitian Dosen Muda (Young Lecturer Research Program) Fiscal Year 2025, an internal research grant provided by IPB University. The funding supported the development of a Business Model Canvas-based framework for strengthening a productive waqf ecosystem, with particular emphasis on Islamic social finance and integrated livestock waqf. Financial support was used for key research activities, including qualitative data collection through interviews and discussions with stakeholders, field observations at the IPB integrated livestock waqf site, data analysis, and dissemination of research outputs through an international journal publication. The funding scheme is designed to enhance the research capacity of early-career lecturers and to encourage applied research that contributes to sustainable business models, community empowerment, and institutional innovation in waqf management. The funding provider had no involvement in the study design, data collection, analysis, interpretation of results, or manuscript preparation.

Conflict of Interest: No conflicts of interest declared.

REFERENCES

1. Afif, M., Supandi, M. D., Maulana, H., & Sa'id, R. H. (2025, July). The Role of Islamic Social Finance in Enhancing Productive Waqf for Sustainable Islamic Boarding School Education. In *Proceeding of International Conference on Islamic Boarding School* (Vol. 2, No. 1).
2. Akhlaq, S. K., Possumah, B. T., & Anwar, E. S. (2021). Analisis Strategi Pengelolaan Wakaf sebagai Bisnis Sosial Islam-Study Kasus Yayasan Wakaf Produktif Pengelola Aset Islami Indonesia. *ILTIZAM Journal of Shariah Economics Research*, 5(2), 127–145.
3. Badan Wakaf Indonesia. (2022, September 22). *BWI kerjasama IPB investasikan wakaf 200 milyar di sukuk wakaf*. <https://www.bwi.go.id/8346/2022/09/22/bwi-kerjasama-ipb-investasikan-wakaf-200->

- milyar-di-sukuk-wakaf-prof-nuh-contoh-bagi-kampus-lain/
4. Firdaus, A. W. Y. (2024). Analisis Model Bisnis Wakaf Blockchain di Indonesia Menggunakan Model Bisnis Canvas. *Al-Awqaf: Jurnal Wakaf Dan Ekonomi Islam*, 17(1), 23–36.
 5. Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
 6. Joe, H., & Tanjung, H. (2025). Integrating cash waqf into Indonesia's free meal program using the business model canvas. *Al-Falah: Journal of Islamic Economics*, 10(1), 1–20. <https://journal.iaincurup.ac.id/index.php/alfalah/article/view/14737>.
 7. Mahmud, S., & Noordin, N. H. (2024). Constructive collaboration in ensuring the sustainability of waqf fund in Malaysia: a case study of myWakaf initiative. *Journal of Islamic Social Finance*, 2(2).
 8. Ministry of Religious Affairs of the Republic of Indonesia. (2025). *Waqf Information System (SIWAK)*. <https://siwak.kemenag.go.id>
 9. Mubarrak, H., & Ramly, A. (2025, August). Unlocking the Potential of Enterprise Structured Waqf for Business Based Pesantren in Indonesia. In *Proceeding of International Conference on Islamic Boarding School (Vol. 2, No. 1)*.
 10. Osterwalder, A., & Pigneur, Y. (2011). *Business model generation*. John Wiley & Sons.
 11. Piero, L. M. D., Arsyanti, L. D., & Setiawan, B. S. (2023). Development of Waqf with a Sheep Farming Model (Case Study of Mitra Tani Farm). *IQTISHODUNA: Jurnal Ekonomi Islam*, 12(1), 57–72.
 12. Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
 13. Rahman, A., Fahmi, I., & Teguh Saptono, I. (2022). Strategy and Business Model Reformulation for Development of Zakat, Infaq, Alms, and Waqf (ZISWAF) (Case Study Bank XYZ, Pekanbaru). *Journal of Consumer Sciences*, 7(2), 149–168.
 14. Sukmana, R. (2020). Critical assessment of Islamic endowment funds (waqf) literature: Lesson for government and future directions. *Heliyon*, 6(10), e05074. <https://doi.org/10.1016/j.heliyon.2020.e05074>
 15. Sulistya, I., Hasanah, N & Irfany, M. I. (2020). *Strategi pengelolaan wakaf uang oleh Badan Wakaf Indonesia (BWI)*. *Al-Awqaf: Jurnal Wakaf dan Ekonomi Islam*, 13(1), 39–58.
 16. Yakob, R., Bangaan Abdullah, M. H. S., Yakob, S., Yakob, N., Md. Razali, N. H., & Mohamad, H. (2022). Analysis of enterprise risk management practices in Malaysian waqf institutions. *International Journal of Islamic and Middle Eastern Finance and Management*, 15(3), 569-585.
 17. Wakaf IPB. (2024). *Laporan dan informasi pengelolaan wakaf IPB*. Retrieved from: <https://wakaf.ipb.ac.id/laporan/>.

How to cite this article: Mutiara Probokawuryan, Alla Asmara, Iyep Komala, Muhammad Nur Faaiz F. Achsani, Haifa Salsabila Huda, Muhammad Zigan Alsofi et al. Business model canvas for strengthening productive waqf ecosystems: evidence from IPB's livestock waqf project. *International Journal of Research and Review*. 2026; 13(1): 387-399. DOI: <https://doi.org/10.52403/ijrr.20260136>
