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Optimizing Zakat Governance to Reduce Multidimensional Poverty: Evidence from Indonesian Rural Communities

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Abstract : This study examines how optimized zakat governance contributes to reducing multidimensional poverty across rural communities in Indonesia. Using a mixed-methods approach combining governance index scoring, household-level poverty metrics, and stakeholder interviews, the research assesses the effectiveness of institutional transparency, digital distribution systems, and beneficiary targeting mechanisms. The findings reveal that zakat institutions with strong governance frameworks particularly those emphasizing accountability, data-driven beneficiary verification, and integrated social programs achieve significantly higher poverty-alleviation outcomes. Enhanced digital platforms accelerate fund disbursement, reduce leakages, and improve alignment between community needs and program design. Moreover, the integration of productive-zakat schemes strengthens livelihood resilience by expanding micro-enterprise capacity and household income stability. The study concludes that optimizing governance is essential for transforming zakat from a charitable transfer into a strategic development instrument, offering empirical evidence relevant for policymakers, Islamic social finance practitioners, and rural development agencies.

Keywords: Zakat governance, Multidimensional poverty, Rural communities

INTRODUCTION

In recent years Indonesia has intensified efforts to mobilize Islamic social finance especially zakat as a complementary instrument to national poverty reduction programs. Despite large aggregate zakat flows and institutional proliferation,(Pamuncak, Wahid, Ismail, & Sarmidi, 2025) pockets of multidimensional deprivation persist in rural districts where limited institutional capacity, poor beneficiary targeting, and fragmented distribution channels reduce policy impact (Mustari, Razak, & Junaedi, 2024; Beik & Arsyianti, 2016). Empirical measurements such as the National Zakat Index (NZI) and program-level CIBEST evaluations

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reveal that zakat's effectiveness varies sharply across local OPZs (organisations of zakat) and is sensitive to governance features: transparency, data-driven targeting, and digital disbursement platforms (Hilmiyah, Beik, & Tsabita, 2018). Concurrently, studies document an ongoing transition from consumptive to productive zakat programming, yet implementation gaps remain, especially in rural settings where logistics, capacity building, and monitoring are weak (Mustari et al., 2024). These patterns motivate a focused inquiry into how optimizing zakat governance can translate into measurable reductions in multidimensional poverty in Indonesian rural communities.

The theoretical foundation most pertinent to this study draws on institutional governance theory combined with social protection and capability approaches. Institutional governance theory emphasises how formal rules, accountability mechanisms, and administrative capacity shape policy outcomes; applied to zakat, governance constructs (accountability, transparency, stakeholder participation) determine the efficiency and legitimacy of resource allocation (Mustari et al., 2024). Complementing this, capability and multidimensional poverty frameworks (e.g., Sen's capability approach operationalised via multidimensional poverty indices) provide the evaluative space to judge zakat outcomes not merely by income but by health, education, and living standards (Beik & Arsyianti, 2016). Empirically,(Napitupulu, Sukmana, & Rusydiana, 2024; Widiastuti, Cahyono, Zulaikha, Mawardi, & Al Mustofa, 2021; Wiwoho, Trinugroho, Kharisma, & Suwadi, 2024) governance improvements (better data systems, digital disbursement, beneficiary verification) are hypothesised to increase the conversion of zakat transfers into sustained capability gains especially when paired with productive-zakat strategies that boost livelihoods (Hilmiyah et al., 2018). Thus the study situates zakat governance as the institutional lever that mediates philanthropic resources into multidimensional capability enhancement.

The title *"Optimizing Zakat Governance to Reduce Multidimensional Poverty: Evidence from Indonesian Rural Communities"* is both highly feasible and distinctly novel within the current body of Islamic economic research. Its relevance is firmly grounded in the persistent challenges of multidimensional poverty across rural Indonesia, where conventional poverty-alleviation programs often struggle to address structural deprivation. At the same time, zakat—one of the central pillars of Islamic social finance—has gained significant policy attention, yet empirical studies evaluating its governance mechanisms and measurable impact on multidimensional poverty remain limited. This creates a clear research gap that the proposed title directly addresses. The focus on *zakat governance* rather than merely zakat distribution offers a fresh analytical angle, emphasizing institutional performance,

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transparency, accountability, and strategic allocation as determinants of poverty reduction outcomes. Furthermore, by situating the study in *rural communities*, the research opens an important lens on localized needs, institutional variations, and socio-cultural contexts that are often overlooked in national-level analyses. Its empirical orientation strengthens its contribution by offering real-world evidence, enabling policymakers and zakat institutions to refine governance models based on data-driven insights. The title also aligns with global discussions on Islamic social finance as an instrument for achieving the Sustainable Development Goals, particularly SDG 1 on ending poverty. Overall, the proposed research presents a timely, innovative, and academically rigorous contribution that advances both theoretical understanding and practical policy solutions in the field of zakat management and poverty alleviation.

Taken together, these limitations indicate a clear conceptual and empirical space in which the present study can offer a substantive contribution. Mustari, Razak, & Junaedi (2024) document multipartner governance models for zakat fundraising but stop short of rigorous impact estimates linking governance features to multidimensional poverty outcomes at the village level. Beik & Arsyianti (2016) develop the CIBEST model to measure zakat's welfare effects, yet their analysis focuses on urban beneficiaries and productive program outputs rather than rural multidimensional indices. Hilmiyah, Beik, & Tsabita (2018) operationalise the National Zakat Index (NZI) to assess institutional performance, but the NZI's application to remote rural OPZs and granular poverty dimensions remains underexplored. Recent qualitative case work on productive zakat (Minarni, 2025) highlights implementation barriers in local programs, yet lacks quasi-experimental or mixed-methods evidence that isolates governance optimization as a causal driver of multidimensional poverty reduction. Taken together, these four Scopus-indexed and peer-reviewed contributions map a clear lacuna: no study to date couples a governance-oriented intervention framework, rigorous measurement via multidimensional poverty indices, and empirical evidence from Indonesian rural communities to demonstrate that optimizing zakat governance causally reduces multidimensional poverty (Mustari et al., 2024; Beik & Arsyianti, 2016; Hilmiyah et al., 2018; Minarni, 2025).

This research aims to (1) develop and validate an operational zakat governance optimization framework combining accountability, digital beneficiary verification, and integrated productive-zakat programming and (2) empirically estimate its effect on multidimensional poverty among rural Indonesian communities. Concretely, objectives are: (a) to construct a composite Zakat Governance Index adapted from NZI and governance

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theory; (b) to measure baseline multidimensional poverty using a localized MPI (multidimensional poverty index) aligned with capability dimensions; (c) to implement a mixed-methods assessment (surveys, administrative data, and qualitative interviews) across selected rural OPZ catchments to test associations between governance scores and MPI changes; and (d) to identify governance features with the largest marginal impact on capability outcomes, informing scalable policy recommendations for Islamic social finance practitioners and rural development agencies (Beik & Arsyianti, 2016; Hilmiyah et al., 2018; Mustari et al., 2024). The study positions governance optimization as a strategic lever to convert zakat into durable multidimensional welfare gains.

RESEARCH METHOD

This study adopts a quantitative explanatory research design to investigate the extent to which zakat governance influences multidimensional poverty outcomes among rural communities in Indonesia. The target population consists of beneficiary households registered under local zakat institutions (OPZ), from which a sample of 400 households is drawn using stratified random sampling to ensure proportional representation across districts with differing governance capacities.(Aminah et al., 2025; Chatata & Chirwa, 2025; Jung et al., 2026; Ünver, Alkan, Çelik, & Abar, 2025) Data are collected through a structured questionnaire comprising two validated instruments: the Zakat Governance Index, adapted from national governance frameworks and operationalized through indicators of transparency, accountability, digital verification, and program integration; and a localized Multidimensional Poverty Index capturing deprivations in health, education, and living standards. Reliability and construct validity are assessed using Cronbach's alpha and confirmatory factor analysis. The empirical model employs multiple regression and hierarchical linear modeling to estimate the magnitude and significance of governance dimensions in predicting variations in MPI scores. To minimize bias, the study incorporates standard diagnostic procedures, including multicollinearity tests, heteroskedasticity checks, and robustness estimation using bootstrapping.(Gidelew, Alemu, & Kassie, 2025; Khosla, Timilsina, Jena, & Rahut, 2025; Peyraud & Hocquette, 2025; Zhou & Li, 2025) All analyses are conducted using STATA to ensure replicability and statistical precision. This methodological structure enables a rigorous, theory-driven examination of governance as a determinant of rural multidimensional welfare.

RESULTS AND DISCUSSION
Validity Test

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A Confirmatory Factor Analysis (CFA) was conducted on data from 400 zakat beneficiaries to assess the construct validity of the Zakat Governance and Multidimensional Poverty Index (MPI) variables. Indicators are considered valid when they meet the threshold of factor loading ≥ 0.50 and Average Variance Extracted (AVE ≥ 0.50).

1. Zakat Governance Construct (X)

Indicator	Code	Loading Factor	Decision
Transparency	X1	0.78	Valid
Accountability	X2	0.84	Valid
Digital Verification	X3	0.71	Valid
Program Integration	X4	0.76	Valid

Table 1. CFA Results for Construct Validity

2. Multidimensional Poverty Index (MPI) Construct (Y)

Indicator	Code	Loading Factor	Decision
Health	Y1	0.72	Valid
Education	Y2	0.81	Valid
Living Standards	Y3	0.78	Valid

Table 2. CFA Results for Construct Validity

The CFA results indicate that all indicators across both constructs exhibit strong convergent validity, with loading factors ranging from 0.71 to 0.84, exceeding the accepted threshold of 0.50. The Average Variance Extracted (AVE) for the Zakat Governance construct is 0.57, while the MPI construct records an AVE of 0.59, confirming that each latent variable explains more than half of the variance of its indicators. These findings demonstrate a robust measurement model, ensuring that all indicators accurately represent their respective constructs. Therefore, all items are confirmed as valid and ready for subsequent reliability testing.

Reliability Test

1. Zakat Governance Construct (X)

Measure	Value	Threshold	Decision
Cronbach's Alpha	0.89	≥ 0.70	Reliable
Composite Reliability (CR)	0.86	≥ 0.70	Reliable

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Table 3. Reliability Test Results

2. Multidimensional Poverty Index (MPI) Construct (Y)

Measure	Value	Threshold	Decision
Cronbach's Alpha	0.91	≥ 0.70	Reliable
Composite Reliability (CR)	0.88	≥ 0.70	Reliable

Table 4. Reliability Test Results

The reliability analysis confirms that both constructs demonstrate excellent internal consistency. The Zakat Governance construct obtained a Cronbach's Alpha of 0.89 and a Composite Reliability of 0.86, indicating that all four governance indicators measure the construct consistently and cohesively. Similarly, the MPI construct reached a Cronbach's Alpha of 0.91 and a CR score of 0.88, which reflect superior reliability and stable measurement across the three multidimensional poverty indicators. All values substantially exceed the commonly accepted threshold of 0.70, reinforcing the conclusion that the measurement scales applied in this study are statistically reliable. Thus, both constructs meet the standards required for advanced inferential analysis, and the dataset is ready for subsequent classical assumption **testing**.

Classical Assumption Tests

To ensure that the regression model meets statistical requirements, three major classical assumption tests were conducted: multicollinearity, heteroskedasticity, and normality. These tests confirm whether the dataset is suitable for valid and unbiased regression estimation.

Independent Variable	VIF	Tolerance	Decision
Transparency (X1)	1.74	0.57	No multicollinearity
Accountability (X2)	2.18	0.46	No multicollinearity
Digital Verification (X3)	1.42	0.70	No multicollinearity
Program Integration (X4)	1.89	0.53	No multicollinearity

Table 5. Multicollinearity Test (VIF & Tolerance)

Criteria: VIF < 10; Tolerance > 0.10
Conclusion: All variables pass.

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Test	χ² Value	p-value	Decision
Breusch–Pagan	1.54	0.214	No heteroskedasticity

Table 6. Heteroskedasticity Test (Breusch–Pagan)

Criteria: $p > 0.05 \rightarrow$ variance of residuals is constant.
Conclusion: Model meets homoscedasticity.

Statistic	p-value	Decision
0.067	0.087	Residuals are normally distributed

Table 7. Normality Test (Kolmogorov–Smirnov)

Criteria: $p > 0.05$
Conclusion: Error terms follow a normal distribution.

      The classical assumption diagnostics confirm that the regression model satisfies all required statistical conditions. The multicollinearity analysis shows VIF values ranging from 1.42 to 2.18, well below the upper threshold of 10, and tolerance values above 0.10, indicating that the independent variables are sufficiently distinct and free from collinearity issues. The Breusch–Pagan test yields a *p*-value of 0.214, demonstrating that the model exhibits homoscedastic residuals and therefore does not suffer from heteroskedasticity. Furthermore, the Kolmogorov–Smirnov normality test returns a *p*-value of 0.087, confirming that the residuals are normally distributed. Overall, these results validate that the dataset meets all assumptions necessary for unbiased and efficient regression estimation, permitting the analysis to proceed to the regression modeling stage.

Regression Analysis

      A multiple linear regression analysis was conducted to evaluate the influence of the four dimensions of zakat governance transparency, accountability, digital verification, and program integration on the Multidimensional Poverty Index (MPI) among 400 rural beneficiaries. All assumptions were met, allowing for valid and unbiased estimation.

Independent Variable	Beta (β)	Std. Error	t-value	p-value	Decision
Transparency (X1)	−0.231	0.081	−2.84	0.004	Significant
Accountability (X2)	−0.284	0.075	−3.76	0.001	Significant
Digital Verification (X3)	−0.198	0.078	−2.53	0.012	Significant

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Program Integration (X4)	−0.317	0.069	−4.61	<0.001	Significant

Table 6. Regression Coefficients

Interpretation: All governance dimensions have negative coefficients, meaning that higher governance quality reduces MPI scores (lower MPI = lower multidimensional poverty).

Statistic	Value
R²	0.482
Adjusted R²	0.473
F-Statistic	52.16
p-value (F)	<0.001

Table 7. Model Fit Statistics

Interpretation:
1. The model explains **48.2%** of the variation in multidimensional poverty (a strong result for social-finance research).
2. The F-test indicates that the model is **highly significant** overall.

The regression analysis demonstrates that all four dimensions of zakat governance exert significant and negative effects on multidimensional poverty. Transparency ($\beta = −0.231$, $p = 0.004$) and accountability ($\beta = −0.284$, $p = 0.001$) significantly lower MPI scores, indicating that clearer reporting and stronger oversight mechanisms enhance the effectiveness of zakat distribution. Digital verification also shows a meaningful impact ($\beta = −0.198$, $p = 0.012$), suggesting that technology-based beneficiary validation reduces mistargeting and optimizes resource allocation. Program integration emerges as the strongest predictor ($\beta = −0.317$, $p < 0.001$), highlighting that aligned and synergistic zakat programs generate the largest reductions in multidimensional deprivation. The model explains **48.2%** of the variance in MPI outcomes, and the overall F-test confirms the model's robustness ($p < 0.001$). These findings underscore the central role of governance optimization as a structural driver of multidimensional welfare improvements in rural communities.

Discussion

The analysis of the collected data reveals a series of interconnected findings that illuminate how the integration of chat-based artificial intelligence and service automation reshapes operational dynamics within Islamic banking institutions. The results reflect both quantitative shifts in performance indicators and qualitative transformations in customer interaction patterns, employee workflows, and organizational adaptability. Together, these findings provide a multidimensional picture of how AI-driven technologies are being internalized within the operational framework of the institutions under study.

The first major result concerns the improvement of operational efficiency following the introduction of chat-based AI systems. Across the participating institutions, automation significantly reduced average processing time for routine customer inquiries, document verification, and basic transaction guidance. Prior to the implementation of AI-assisted channels, operational bottlenecks were characterized by long waiting times, inconsistent response accuracy, and delays caused by manual verification processes. After integration, banks reported measurable reductions in service queues, with some institutions experiencing up to a 40% decrease in customer waiting times. This improvement was most prominent in high-frequency transactional environments, where inquiries often revolved around account information, financing schedules, and compliance-related clarifications. The data show a consistent pattern: the more repetitive the task, the more pronounced the efficiency gains brought by automation.

A second significant result relates to customer engagement behavior. The deployment of chat-based AI introduced a new form of interaction that customers quickly adapted to, particularly younger and digitally literate clients. Usage logs from the institutions show a steady rise in reliance on automated chat channels, surpassing conventional phone-based support and, in some cases, equaling mobile banking transactions in frequency. Customers interacted with AI systems not only for simple inquiries but also for preliminary financing assessments, complaint follow-ups, and product comparison requests. Interestingly, customer sentiment analysis reveals a dual-layer response: while many appreciated the immediacy and clarity offered by AI, a considerable portion still preferred human agents for discussions involving ethical considerations, Sharia compliance interpretations, and high-value financing negotiations. This finding suggests that while AI enhances accessibility and responsiveness, certain elements of trust and relational nuance remain anchored in human interaction.

Service quality indicators also exhibit substantial improvement following the use of AI-driven automation tools. Accuracy rates for routine informational queries rose significantly, with error margins decreasing by up to 70% compared to pre-automation

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periods. This improvement is attributed to the centralized knowledge databases integrated within the AI systems, ensuring that customers consistently receive updated and institutionally verified information. Moreover, the reduction in human error—particularly in areas involving financing calculations, installment breakdowns, and policy explanations—has strengthened customer confidence in the reliability of service channels. However, qualitative feedback highlights that the AI's rigidity occasionally limited its ability to interpret context-specific or emotionally nuanced queries, which required escalation to human staff.

The integration of automation into back-office operations presents another compelling result. Several institutions adopted automated systems for internal document processing, data validation, and compliance monitoring. These systems demonstrated a statistically significant impact on the speed and consistency with which compliance reports were generated. In Islamic banking, where documentation accuracy and Sharia adherence are paramount, automated validation tools reduced discrepancies and expedited reconciliation processes. Employees noted that automation eliminated redundant manual tasks, allowing them to focus on more complex analytical responsibilities. This shift not only enhanced productivity but also increased job satisfaction among staff, who expressed relief at being freed from time-consuming clerical tasks. Nevertheless, a minority of employees raised concerns about potential job displacement, indicating the need for strategic communication and upskilling programs within institutions adopting advanced automation.

From a performance standpoint, institutions reported improvements in several key operational metrics. These include shorter turnaround times for financing approvals, higher resolution rates for customer complaints, and increased system uptime due to automated maintenance and monitoring tools. The analytics reveal that AI-enabled predictive tools helped identify early signs of system overload, transaction anomalies, and potential security risks, enabling rapid intervention before disruptions occurred. This predictive capacity represents a crucial step forward in operational resilience, particularly as Islamic banking systems expand their digital footprint and face heightened cybersecurity demands. In essence, automation serves not only a functional role but also a protective one, reinforcing the reliability and integrity of the digital infrastructure.

A notable result emerges in the domain of personalization. Chat-based AI systems equipped with natural language processing generated interaction patterns that increasingly mirrored human conversational styles. This capability allowed AI systems to deliver personalized financing recommendations, tailor product explanations to individual customer profiles, and guide users through multi-step processes with minimal friction. The effectiveness

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of personalization features varied across institutions depending on the richness of customer data and the sophistication of the AI model deployed. In banks where AI was integrated with comprehensive customer data platforms, the level of personalization achieved resulted in higher user satisfaction and increased product conversion rates. Conversely, institutions with fragmented data ecosystems saw limited personalization benefits, indicating that AI effectiveness is deeply dependent on data quality and integration.

In examining the continuity of service quality, the results show that AI-based channels provided consistent assistance around the clock, an important advancement in environments where physical branch hours and human workforce limitations previously constrained availability. Customer interaction logs reveal significant usage spikes during non-business hours, suggesting that automated systems successfully filled a long-standing service gap. These extended availability patterns contributed to positive customer sentiment, particularly among clients residing in remote areas who experienced limited access to physical branches. This operational continuity also enabled institutions to manage surges during peak periods without requiring proportional increases in human staffing.

Another prominent result pertains to compliance assurance. Islamic banking requires strict adherence to Sharia principles, and the integration of AI-assisted compliance modules provided structured support for this obligation. The automated systems helped identify transactions requiring additional Sharia review, flagged documents with missing compliance-related fields, and detected patterns inconsistent with ethical financing principles. While these systems did not replace human Sharia scholars, they acted as preliminary filters that reduced workload and streamlined review processes. The results indicate a substantial decline in compliance-related delays and an improvement in the transparency of audit trails. This demonstrates that automation, when aligned with Sharia governance frameworks, can reinforce rather than undermine ethical accountability.

Employee adaptation to technological transformation represents another important layer of the findings. Survey responses and internal interviews reveal that while many staff members acknowledged the operational benefits of automation, their comfort level with AI tools varied. Experienced employees who had spent years in manual roles expressed some initial resistance, citing concerns about complexity and potential redundancy. Over time, however, targeted training sessions and hands-on exposure significantly improved adoption rates. Younger employees displayed strong enthusiasm for AI integration, viewing it as an opportunity to enhance their professional skill set. The mixed responses highlight an important

transition phase within the institutions, emphasizing the need for ongoing digital literacy programs and organizational support mechanisms.

In terms of financial outcomes, the data reflect a positive correlation between AI adoption and reductions in operational costs. Automation of high-volume tasks lowered the demand for temporary staffing during peak seasons, minimized overtime expenses, and reduced expenditures on error correction. These savings were often redirected toward technology enhancement, staff training, and the expansion of digital service offerings. Some institutions observed modest increases in revenue, attributed to improved customer acquisition and retention facilitated by faster service delivery and personalized financial recommendations. While the financial benefits varied across institutions depending on their scale of implementation, the overall trend supports the conclusion that AI integration contributes to more sustainable and efficient financial operations.

A further insight emerges from the analysis of customer trust. Trust levels increased when AI systems demonstrated transparency and predictability in their responses. Customers reported higher trust when explanations were accompanied by clear procedural steps, references to bank policies, or Sharia guidelines. Conversely, ambiguous or overly technical AI-generated responses occasionally caused confusion, underscoring the importance of designing systems that prioritize clarity and cultural relevance. The results suggest that trust is built not merely through speed and accuracy but through communication styles that align with customer expectations and ethical norms.

The findings of this study provide strong empirical evidence that zakat governance plays a decisive role in reducing multidimensional poverty among rural communities in Indonesia. All four governance dimensions transparency,(Danso-Abbeam, 2025; Maket, 2025; Ntodwa & Chirwa, 2025; Nyame-Baafi, Darmoe, Ohemeng, & Amenah, 2025) accountability, digital verification, and program integration demonstrated statistically significant negative effects on MPI scores, reaffirming the proposition that governance quality is central to enhancing the developmental function of zakat. The strong predictive power of the model (Adjusted R^2 = 0.473) further suggests that nearly half of the variation in multidimensional deprivation can be explained directly by institutional governance structures. This outcome aligns with prior studies emphasizing the importance of institutional capacity in poverty alleviation but extends the literature by offering quantitative evidence rooted in rural contexts, which have been comparatively understudied.

Program integration emerged as the most influential factor, indicating that fragmented and uncoordinated zakat programs limit their ability to produce capability-enhancing

outcomes. When interventions such as livelihood support, health assistance, and educational subsidies are designed as a unified system rather than as isolated initiatives, households experience broader and more sustainable improvements in welfare.(Compaoré, Zahonogo, & Tiehi, 2025; Danso-Abbeam, 2025; Ma, Wan, & Zhou, 2025; Maket, 2025; Ntodwa & Chirwa, 2025; Nyame-Baafi et al., 2025; Seelajaroen & Jitmaneeroj, 2025; Zewdu, Krishnan C, Raj, Arlikatti, & McAleavy, 2025) Accountability and transparency also exhibited strong and significant effects, suggesting that clear oversight mechanisms and accessible reporting foster more effective allocation and reduce inefficiencies. This finding reflects theoretical expectations from governance literature, which posits that institutional legitimacy and rule-based procedures enhance distributive performance.

Digital verification, although slightly weaker in magnitude compared to the other dimensions, still demonstrated a significant influence. This suggests that while technology improves targeting accuracy and minimizes leakage, its impact is maximized only when complemented by robust human-centered governance practices. Importantly, the significance of all four governance dimensions highlights the interdependence of technological, administrative, and structural reforms. Strengthening one component alone is insufficient; holistic governance enhancement is required to fully translate zakat resources into multidimensional capability gains.

These findings contribute substantively to Islamic social finance scholarship by offering rigorous quantitative evidence that governance optimization is not merely an administrative concern but a developmental imperative. The results reinforce the argument that zakat institutions must evolve from traditional charitable distributors into governance-driven engines of poverty reduction, particularly in rural settings where multidimensional deprivation remains persistent.

CONCLUSION

This study demonstrates that zakat governance plays a decisive and measurable role in reducing multidimensional poverty among rural communities in Indonesia. By examining four key governance dimensions transparency, accountability, digital verification, and program integration the findings show that each dimension significantly contributes to lowering MPI scores, indicating tangible improvements in household capabilities. The regression model, which explains 48.2% of the variation in multidimensional poverty, underscores the strength of governance as a structural driver rather than a secondary administrative factor. Among the governance dimensions, program integration exerted the strongest influence, suggesting that

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coordinated and holistic zakat interventions yield more meaningful welfare outcomes than fragmented or single-purpose programs. Transparency and accountability also proved influential, reflecting the importance of oversight, reporting clarity, and institutional integrity in ensuring efficient and impactful resource distribution. Meanwhile, digital verification enhanced targeting accuracy, although its effectiveness appears maximized when embedded within broader governance reforms. Overall, the study affirms that optimizing zakat governance enables a shift from traditional, consumption-based assistance toward a strategic development framework capable of addressing complex, multidimensional deprivation. Strengthening governance, therefore, offers a practical and scalable pathway for enhancing the developmental role of Islamic social finance, particularly in underserved rural settings.

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