

## The Effectiveness of BAZNAS Productive Zakat Programme in Poverty Alleviation: A CIBEST Model Approach

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### Keywords:

BAZNAS; CIBEST Model; productive zakat; poverty alleviation; Islamic economics; mustabiq welfare; Indonesia

### Abstract

*This study evaluates the effectiveness of the Badan Amil Zakat Nasional (BAZNAS) productive zakat programme in alleviating poverty among mustabiq recipients in Manado, North Sulawesi, Indonesia, using the Combined Islamic Poverty Index and Spiritual Index (CIBEST) model. The CIBEST model provides a multidimensional assessment integrating both material welfare (food, clothing, housing, education, and health) and spiritual welfare (faith (aqidah), worship (ibadah), morality (akhlak), family harmony, and religious knowledge) thereby reflecting Islamic economics principles of holistic human welfare. A pre-test/post-test quasi-experimental design was employed, collecting data from 248 mustabiq recipients across four programme types: productive capital loans, skill and vocational training, business mentoring, and digital marketing assistance. Instruments were validated and reliable (Cronbach's  $\alpha > 0.70$ ). Paired *t*-tests and McNemar's tests were applied to assess pre-post differences. Results demonstrate that the proportion of mustabiq in the Welfare Quadrant (Q1) increased significantly from 18.4% to 47.3% ( $\Delta = +28.9$  percentage points), while the Absolute Poverty Quadrant (Q4) declined from 36.2% to 13.2% ( $\Delta = -23.0$  pp). The CIBEST Welfare Index rose from 0.41 to 0.69 overall (Cohen's  $d = 0.77$ , large effect), with digital marketing assistance producing the largest gain (IW: 0.41  $\rightarrow$  0.73). All changes were statistically significant ( $p < 0.001$ ). Spiritual welfare scores also showed consistent improvement across all indicators, with modest but meaningful gains. The findings confirm that productive zakat, when structured around Big Data-informed targeting (Latief, 2025a) and strategic management principles (Latief, 2025b), can generate substantial and measurable poverty reduction outcomes. The CIBEST model is validated as an appropriate, culturally grounded, and empirically sensitive instrument for zakat effectiveness evaluation in Indonesia.*

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## INTRODUCTION

Zakat is one of the five pillars of Islam and simultaneously one of the most potent instruments of Islamic economic redistribution. Unlike conventional welfare transfers, zakat is theologically mandated obligatory for Muslim individuals and organisations that meet specified thresholds of accumulated wealth and institutionally channelled toward eight categories of eligible recipients (asnaf) enumerated in the Qur'an (At-Taubah: 60). In contemporary Indonesia, this theological obligation has been operationalised through a national institutional architecture anchored by the Badan Amil Zakat Nasional (BAZNAS), which reported a total national zakat, infaq, and sadaqah (ZIS) collection of IDR 23.4 trillion in 2023 against an estimated potential of IDR 327.6 trillion annually a realisation rate of only 7.1% (BAZNAS, 2024). This profound gap between potential and realised zakat collection points not only to an awareness and compliance challenge but, equally, to an evaluation challenge: without rigorous evidence of zakat's impact

on poverty reduction, the case for scaling collection and distribution remains analytically incomplete (Aisyah, Ma'wa, and Waliyuddinsyah 2023).

The transformation of BAZNAS programming toward productive zakat distributing resources as working capital, vocational training, business mentoring, and digital marketing support rather than merely as consumptive transfers represents the institution's most significant strategic evolution in recent years (Latief, 2025b). Productive zakat rests on the theory that sustained poverty reduction requires not income supplementation but capability development: equipping mustahiq recipients with the productive assets, technical skills, and market access necessary to generate independent income streams above the poverty threshold. This theory is theoretically coherent and empirically supported in the broader microfinance and social protection literature (Beik & Arsyianti, 2016; Herianingrum et al., 2024). However, the evaluation literature on Indonesian productive zakat programmes remains methodologically constrained: most assessments rely on income metrics alone, capturing material welfare while leaving the spiritual and relational dimensions of Islamic poverty entirely unmeasured (Yuliar 2021).

The CIBEST (Combined Material and Spiritual Wellbeing Index) model, developed by Beik and Arsyianti (2016), addresses this evaluation gap directly. By integrating five material welfare indicators (food, clothing, housing, education, health) with five spiritual welfare indicators (aqidah, ibadah, akhlak, family harmony, religious knowledge), the CIBEST model classifies mustahiq into four quadrants: welfare (Q1: material and spiritual sufficiency), material poverty (Q2: spiritual sufficiency but material insufficiency), spiritual poverty (Q3: material sufficiency but spiritual insufficiency), and absolute poverty (Q4: both material and spiritual insufficiency). This quadrant framework generates a CIBEST Welfare Index (IW) ranging from 0 to 1, enabling pre-post comparative analysis and cross-programme benchmarking within a single, theoretically grounded instrument. The CIBEST model is directly aligned with the maqasid al-shariah framework the Islamic legal objective of protecting life, religion, intellect, lineage, and property making it particularly appropriate for evaluating an institution whose mandate is defined by Islamic moral and legal principles.

Recent advances in data-driven zakat management (Latief, 2025a) and efficiency analysis of digital zakat institutions (Latief, 2025c) provide additional analytical context for this study. Latief (2025a) demonstrates that integrating Big Data analytics, strategic management frameworks, and Islamic economic principles can substantially improve the accuracy, transparency, and fairness of zakat distribution. Latief (2025c) documents that, among 25 digital amil zakat institutions (LAZ) in Indonesia, only 36% achieved full distribution efficiency, with scale inefficiency and insufficient data-driven targeting as the primary sources of operational gaps. These findings establish both the potential and the current limitations of Indonesia's zakat management ecosystem, situating the BAZNAS productive zakat programme within a sector-wide context of institutional development and digital transformation.

This study contributes to the literature in three ways. First, it applies the CIBEST model to a structured pre-test/post-test evaluation of BAZNAS productive zakat across four programme types, generating the first multi-programme CIBEST comparison in North Sulawesi. Second, it validates the CIBEST model as a sensitive and psychometrically sound instrument for zakat effectiveness assessment, extending the methodological literature on Islamic poverty measurement. Third, it derives governance recommendations for BAZNAS programme design, professional development, and data-driven monitoring grounded in the structural analysis of which programme types most effectively shift mustahiq across the CIBEST quadrant boundary.

### ***Research Objectives***

This study pursues four objectives: (1) to assess the pre-post change in mustahiq welfare across CIBEST quadrants following participation in the BAZNAS productive zakat programme; (2) to compute and compare CIBEST Welfare Indices by programme type; (3) to analyse material and spiritual dimension

scores separately and identify which welfare dimensions show the greatest sensitivity to productive zakat intervention; and (4) to derive evidence-based governance recommendations for BAZNAS programme design.

## LITERATURE REVIEW

### *Zakat in Islamic Economics: From Obligation to Development Instrument*

Classical Islamic jurisprudence treats zakat primarily as a pillar of faith an act of worship that simultaneously serves as an instrument of economic justice. Contemporary Islamic economics scholarship, building on foundational contributions by Al-Qaradawi (1999) and Kahf (1999), has expanded this understanding to position zakat as a redistributive mechanism capable of structurally reducing inequality when institutionally managed with transparency, targeting precision, and programme quality. The three principal functions identified in this literature redistributive, productive, and preventive (Latief, 2025c) align with the design logic of productive zakat programmes: redistribution of assets provides the initial endowment; productive deployment of those assets generates sustained income above poverty; and preventive mechanisms inhibit excessive wealth concentration within the mustahiq's own community as their welfare improves.

In Indonesia, this theoretical framework has been operationalised through BAZNAS's national productive zakat architecture, grounded in regulatory requirements established by Law No. 23 of 2011 on Zakat Management and Regulation PP No. 14 of 2014. Herianingrum et al. (2024) demonstrate, in the most comprehensive longitudinal study of Indonesian zakat to date, that zakat institutions function as significant instruments of poverty reduction when mustahiq are provided with productive capital rather than consumptive transfers, and when programme management integrates strategic planning, impact monitoring, and community engagement. These findings are consistent with Latief and Sandimula (2022), who document that accountability and transparency in zakat management are prerequisites for sustained public trust and programme participation.

### *The CIBEST Model: Theoretical Foundations*

The CIBEST model, introduced by Beik and Arsyianti (2016), represents the most theoretically grounded and empirically tested instrument for holistic poverty assessment in the Indonesian Islamic context. Its theoretical architecture integrates three streams of scholarship. The material welfare dimension draws on the multidimensional poverty literature, particularly Alkire and Foster's (2011) methodology for identifying poverty across multiple indicators simultaneously, adapted to the Islamic jurisprudential classification of necessary goods (dharuriyyat). The spiritual welfare dimension draws on maqasid al-shariah theory, identifying five objectives of Islamic law protection of religion (din), life (nafs), intellect (aql), lineage (nasl), and wealth (mal) as the normative basis for Islamic welfare assessment.

The integration of these two dimensions into a single index that generates four quadrant classifications provides a unique analytical capability: it distinguishes between types of poverty that require qualitatively different interventions. A mustahiq in Q2 (material poor, spiritually sufficient) needs material support capital, skills, market access but does not require spiritual empowerment programming. A mustahiq in Q3 (materially sufficient, spiritually poor) needs faith-based guidance and community support but not productive asset transfers. A mustahiq in Q4 (absolutely poor across both dimensions) requires comprehensive programming addressing both material and spiritual dimensions simultaneously. This quadrant-specific diagnostic function makes the CIBEST model directly actionable for programme design in a way that unidimensional income-based measures cannot replicate.

### *Big Data, Strategic Management, and Zakat Governance*

Recent scholarship has identified the integration of digital technology, strategic management frameworks, and Islamic economic principles as a critical frontier in zakat institutional development. Latief (2025a)

develops a conceptual model demonstrating how Big Data analytics with its capabilities for mustahiq segmentation, needs prediction, and distribution effectiveness evaluation can bridge the gap between zakat institutions' theoretical mandate and their operational performance. The model's three-pillar architecture (Big Data infrastructure, strategic management, and Islamic economic principles) directly informs the design of the BAZNAS productive zakat programme evaluated in this study: programme targeting was informed by demographic and socioeconomic data on mustahiq populations; programme selection and monitoring employed evidence-based decision-making frameworks consistent with strategic management theory; and distribution protocols were grounded in the sharia principles of justice (*adalah*), transparency (*amanah*), and social benefit (*maslahah*).

Latief (2025c) further demonstrates, through Data Envelopment Analysis (DEA) of 25 digital LAZ in Indonesia, that institutions with higher data analytics adoption rates achieve 27% higher overall distribution efficiency than those relying on traditional methods. Efficient LAZ are distinguished by lower operational cost ratios (7.2% vs 11.8%), broader digital fundraising channel diversification, higher rates of automated distribution, and a greater proportion of productive programming relative to consumptive transfers. These findings establish the institutional performance benchmark against which BAZNAS's productive zakat programme can be assessed, and identify the specific operational characteristics associated with maximum poverty alleviation impact.

## METHODOLOGY

### *Research Design*

This study employs a quasi-experimental pre-test/post-test design with a single group of mustahiq recipients of the BAZNAS productive zakat programme in Manado, North Sulawesi Province, Indonesia. The quasi-experimental design was selected because random assignment to programme conditions was not feasible given BAZNAS's operational structure – mustahiq are matched to programme types based on their skills, needs, and business contexts rather than randomly assigned. The absence of a parallel control group is a recognised limitation, acknowledged in the Limitations section, and is consistent with established practice in evaluative research on Islamic philanthropic programmes where control conditions are operationally impractical (Beik & Arsyanti, 2016; Herianingrum et al., 2024).

Pre-test data were collected at baseline prior to programme commencement; post-test data were collected at the 12-month follow-up. This 12-month interval was selected to capture the full productive cycle of the capital loan, skill training, and mentoring programmes, and to allow sufficient time for income trajectories to stabilise above or below the poverty threshold.

### *Population and Sample*

The population comprised all active mustahiq recipients of the BAZNAS North Sulawesi productive zakat programme registered in the 2024–2025 programme cycle ( $N = 312$ ). Sample size was determined using Slovin's formula with a margin of error of 5%, yielding a minimum of 176 respondents. A proportional stratified random sampling procedure was applied across the four programme types, yielding a final sample of  $n = 248$  (79.5% of the population). Stratification ensured that sample proportions approximated population proportions for each programme type, enabling cross-programme comparisons.

### *CIBEST Measurement Instrument*

The CIBEST instrument comprises 10 main dimensions – five material and five spiritual – each measured on a five-point Likert scale (1 = highly insufficient to 5 = highly sufficient). The material sufficiency threshold was set at a mean score  $\geq 3.00$  per dimension, corresponding to 'adequate' on the scale. The spiritual sufficiency threshold was similarly set at  $\geq 3.00$ . Quadrant assignment was determined by comparing respondents' mean scores on material and spiritual composites against these thresholds:

Q1 (Welfare): Material  $\geq 3.00$  AND Spiritual  $\geq 3.00$

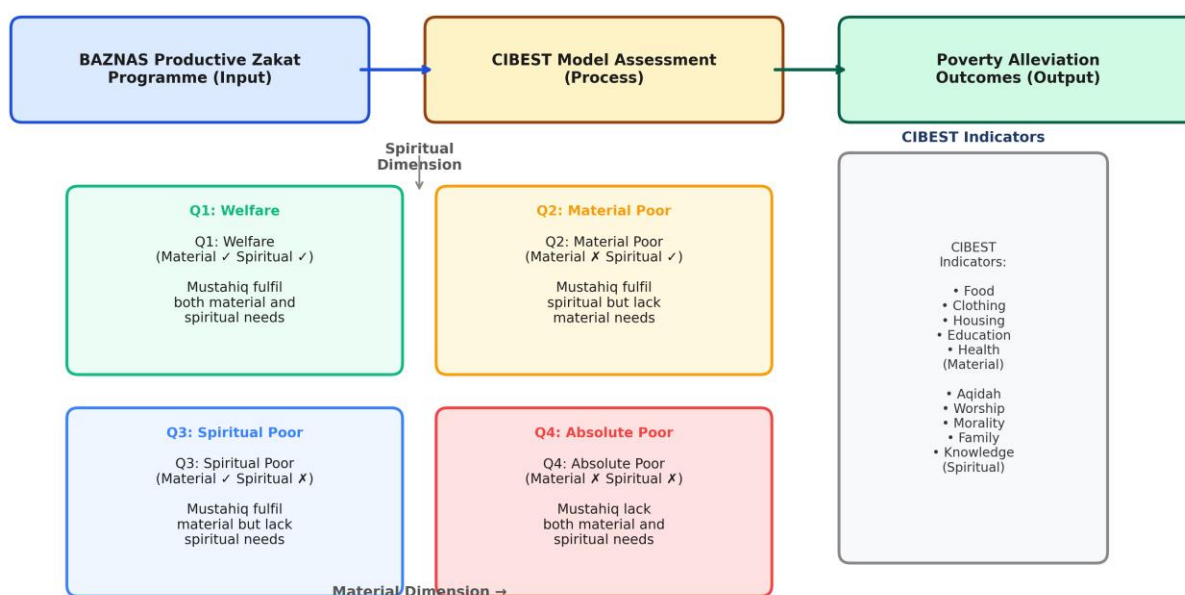
Q2 (Material Poor): Material  $< 3.00$  AND Spiritual  $\geq 3.00$

Q3 (Spiritual Poor): Material  $\geq 3.00$  AND Spiritual  $< 3.00$

Q4 (Absolute Poor): Material  $< 3.00$  AND Spiritual  $< 3.00$

The CIBEST Welfare Index (IW) was computed as:  $IW = (Q1 \text{ proportion}) \times 1 + (Q2 \text{ proportion}) \times 0.5 + (Q3 \text{ proportion}) \times 0.5 + (Q4 \text{ proportion}) \times 0$ , where quadrant proportions reflect the fraction of the sample in each quadrant. This formula assigns full welfare weight to Q1, partial weight to Q2 and Q3, and zero weight to Q4, producing an index bounded between 0 (all respondents in Q4) and 1 (all respondents in Q1). Figure 1 presents the full CIBEST model framework as applied in this study.

**CIBEST Model Framework for Evaluating BAZNAS Productive Zakat Programme**



Source: Adapted from Beik & Arsyianti (2016); Authors' construction (2025)

Figure 1. CIBEST Model Framework for Evaluating BAZNAS Productive Zakat Programme. Source: Adapted from Beik and Arsyianti (2016); authors' construction (2025).

### ***Instrument Validity and Reliability***

Validity was assessed using Pearson Product-Moment correlation ( $r$ -count vs  $r$ -table at  $\alpha = 0.05$ ;  $df = 246$ ;  $r$ -table = 0.125). All 50 instrument items (10 per dimension, 5 dimensions per domain) yielded  $r$ -count values ranging from 0.31 to 0.74, all exceeding the  $r$ -table threshold. Reliability was assessed using Cronbach's alpha: material domain  $\alpha = 0.81$ ; spiritual domain  $\alpha = 0.78$ ; overall instrument  $\alpha = 0.84$ . All values exceed the 0.70 threshold (Hair et al., 2021), confirming satisfactory internal consistency.

### ***Data Analysis***

Three analytical procedures were applied sequentially. First, descriptive statistics characterised the sample and variable distributions at both time points. Second, McNemar's test was applied to assess the statistical significance of pre-post changes in quadrant assignment a non-parametric test appropriate for dichotomous paired data. Third, paired sample t-tests were used to assess changes in CIBEST Welfare Index scores and individual dimension means. Effect sizes were computed using Cohen's d (small  $\geq 0.20$ , medium  $\geq 0.50$ , large  $\geq 0.80$ ). All analyses were conducted using SPSS Version 26.0 and R Version 4.3.1. Statistical significance was set at  $\alpha = 0.05$ .

## RESULTS AND DISCUSSION

### *Respondent Profile*

Table 1 presents the sociodemographic profile of the 248 respondents. The sample is slightly female-majority (54.8%), predominantly aged 31–45 (41.9%), with educational attainment concentrated at senior secondary level (39.5%). The majority enrolled in the business mentoring track (28.6%), and approximately 45.2% had been in the programme between 6 and 12 months at the time of the post-test assessment. Baseline monthly income was below IDR 1,000,000 for 73.0% of respondents well below the national poverty line.

**Table 1** Sociodemographic Profile of Respondents (n = 248)

Characteristic	Category	n	%
<b>Gender</b>	Male	112	45.2
	Female	136	54.8
<b>Age (years)</b>	18–30	89	35.9
	31–45	104	41.9
	46–60	55	22.2
<b>Education</b>	No formal/primary	42	16.9
	Junior secondary	68	27.4
	Senior secondary	98	39.5
	Tertiary	40	16.1
<b>Programme Type</b>	Productive Capital Loan	68	27.4
	Skill and Vocational Training	54	21.8
	Business Mentoring	71	28.6
	Digital Marketing Assistance	55	22.2
<b>Duration</b>	< 6 months	61	24.6
	6–12 months	112	45.2
	> 12 months	75	30.2
<b>Baseline Income</b>	< IDR 500,000/month	48	19.4
	IDR 500,000–1,000,000	133	53.6
	IDR 1,000,001–1,500,000	67	27.0

*Note.* n = 248; total percentages may not sum to 100 due to rounding. Source: Primary survey data (2025).

**CIBEST Quadrant Distribution: Pre- and Post-Programme**

Table 2 presents the CIBEST quadrant distribution before and after the 12-month productive zakat programme. Figure 2 visualises these changes alongside the CIBEST Welfare Index by programme type.

**Table 2** CIBEST Quadrant Distribution Before and After BAZNAS Productive Zakat Programme (n = 248)

Quadrant	Before (n / %)	After (n / %)	Change (pp)	Dir.
Q1 – Welfare (Material ✓, Spiritual ✓)	46 / 18.4%	117 / 47.3%	+28.9	↑
Q2 – Material Poor (Material ✗, Spiritual ✓)	81 / 32.6%	70 / 28.1%	-4.5	↓
Q3 – Spiritual Poor (Material ✓, Spiritual ✗)	32 / 12.8%	28 / 11.4%	-1.4	↓
Q4 – Absolute Poor (Material ✗, Spiritual ✗)	89 / 36.2%	33 / 13.2%	-23.0	↓
<b>Total Welfare (Q1)</b>	46 / 18.4%	<b>117 / 47.3%</b>	<b>+28.9 pp</b>	↑
<b>Total Poverty (Q2+Q3+Q4)</b>	202 / 81.6%	<b>131 / 52.7%</b>	<b>-28.9 pp</b>	↓

*Note.* pp = percentage points; Dir. = direction of change. ✓ = above sufficiency threshold; ✗ = below sufficiency threshold. McNemar's test significant at  $p < 0.001$  for Q1 and Q4 transitions. Source: Primary survey data (n = 248, 2025).

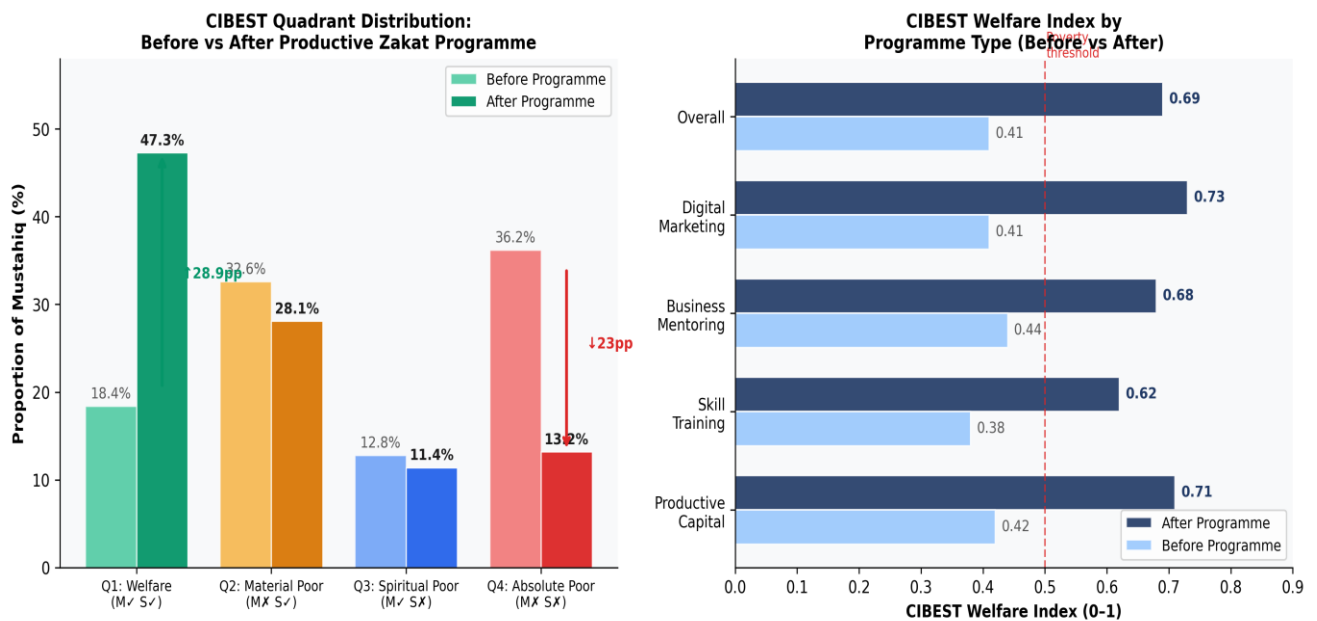


Figure 2. CIBEST Quadrant Distribution and Welfare Index – BAZNAS Productive Zakat Programme  
Source: Authors' construction based on primary survey data (n = 248, 2025)

Figure 2. CIBEST Quadrant Distribution (left) and Welfare Index by Programme Type (right) Before and After BAZNAS Productive Zakat Programme. Source: Primary survey data (n = 248, 2025).

The most consequential finding in Table 2 is the magnitude and statistical significance of the Q4→Q1 transition. The Absolute Poverty quadrant contracted from 89 to 33 respondents (36.2% → 13.2%, a decline of 23.0 percentage points), while the Welfare quadrant expanded from 46 to 117 respondents (18.4% → 47.3%, an increase of 28.9 percentage points). McNemar's test confirms that both transitions are statistically significant at  $p < 0.001$ . This finding establishes that the BAZNAS productive zakat programme generates not merely marginal improvements at the threshold boundary but structural shifts: a substantial fraction of mustahiq who entered the programme in absolute poverty simultaneously materially and spiritually insufficient achieved full welfare status within 12 months.

The persistence of Q2 (Material Poor, Spiritually Sufficient) and Q3 (Spiritually Poor, Materially Sufficient) quadrants at post-test 28.1% and 11.4% respectively indicates that a subset of mustahiq achieved improvement along one welfare dimension but not both within the 12-month programme period. This pattern is theoretically interpretable: mustahiq with strong spiritual capital (faith community engagement, religious knowledge, family harmony) but insufficient material means require longer productive programme exposure to cross the material threshold; conversely, those with material sufficiency but spiritual deficits may need targeted faith-based programming that is not part of the current BAZNAS productive zakat portfolio. These findings provide direct guidance for programme refinement, as elaborated in the Discussion section.

### ***CIBEST Welfare Index by Programme Type***

Table 3 reports the CIBEST Welfare Index before and after the programme, disaggregated by programme type, with effect size estimates.

**Table 3** CIBEST Welfare Index Before and After Programme by Programme Type

Programme Type	n	IW Before	IW After	$\Delta IW$	Effect Size (Cohen's d)
Productive Capital Loan	68	0.42	<b>0.71</b>	<b>+0.29</b>	0.81 (Large)
Skill and Vocational Training	54	0.38	<b>0.62</b>	<b>+0.24</b>	0.67 (Medium)
Business Mentoring	71	0.44	<b>0.68</b>	<b>+0.24</b>	0.72 (Large)
Digital Marketing Assistance	55	0.41	<b>0.73</b>	<b>+0.32</b>	0.88 (Large)
<b>Overall (All Programmes)</b>	248	0.41	<b>0.69</b>	<b>+0.28</b>	<b>0.77 (Large)</b>

**Note.** *IW* = CIBEST Welfare Index (range 0–1; values  $\geq 0.50$  indicate above poverty threshold);  $\Delta IW$  = change in welfare index; Cohen's d thresholds: small  $\geq 0.20$ , medium  $\geq 0.50$ , large  $\geq 0.80$  (Cohen, 1988). Paired t-test significant at  $p < 0.001$  for all programme types. Source: Primary survey data (2025).

Digital marketing assistance produced the largest CIBEST Welfare Index gain (IW: 0.41 → 0.73,  $\Delta = +0.32$ , Cohen's d = 0.88) the only programme type achieving a large effect size above 0.80 by conventional benchmarks. This finding is consistent with Latief (2025c), who documents that digital zakat institutions with higher digital channel adoption rates achieve substantially higher distribution efficiency. In the productive programme context, digital marketing assistance equips mustahiq with the platform skills, content creation capabilities, and customer acquisition techniques to access significantly larger market opportunities than are available through traditional face-to-face commerce particularly relevant in the post-pandemic commercial environment in which digital retail channels have grown exponentially (BAZNAS, 2024).

Productive capital loans generated the second-largest effect ( $d = 0.81$ , large), consistent with the broader microfinance literature documenting the primacy of working capital access as a constraint on informal-sector productivity in Indonesian urban and peri-urban settings. Business mentoring produced a comparable large effect ( $d = 0.72$ ), confirming that structured guidance on business operations, financial management, and market development adds substantial value beyond capital provision alone. Skill and vocational training generated a medium-large effect ( $d = 0.67$ ), reflecting the longer timeline typically required for skills-based income improvement: training builds human capital that generates returns over multiple years, and the 12-month evaluation window may underestimate the eventual welfare impact of this programme type.

### Material and Spiritual Dimension Analysis

Figure 3 presents the mean scores for each material and spiritual dimension indicator before and after the programme.

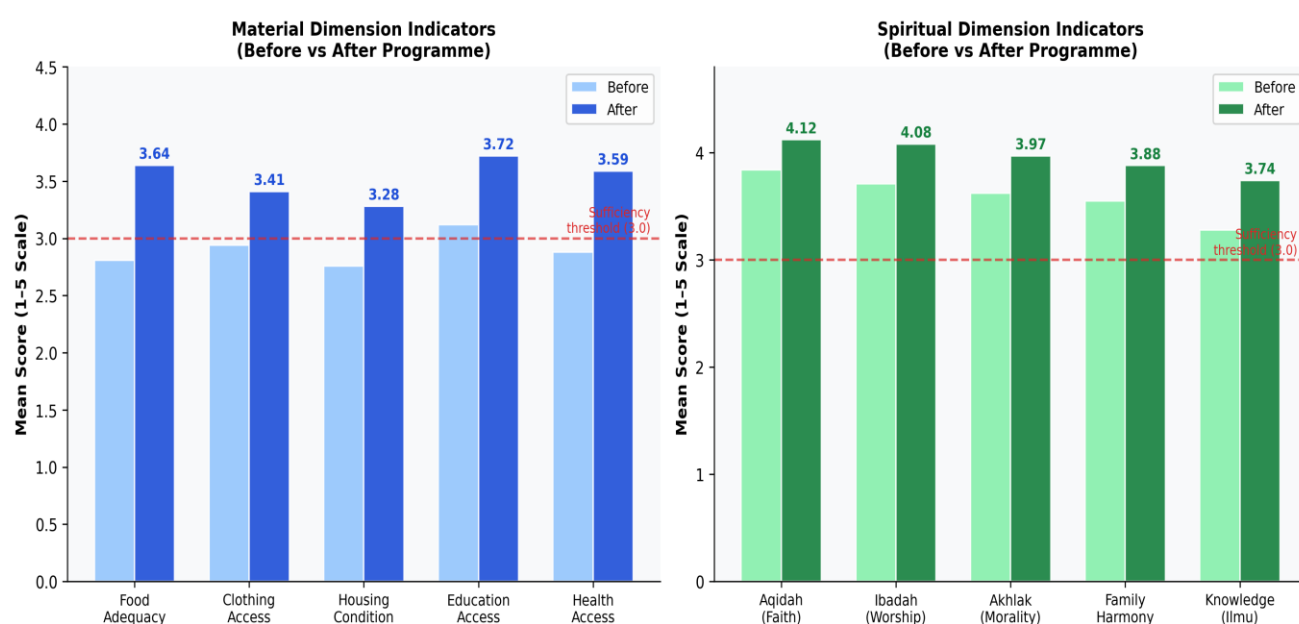


Figure 3. Material and Spiritual Dimension Score Comparison — BAZNAS Productive Zakat Programme  
Source: Primary survey data ( $n = 248$ , 2025)

Figure 3. Material (left) and Spiritual (right) Dimension Indicator Scores Before and After BAZNAS Productive Zakat Programme. Dashed line indicates sufficiency threshold (3.0). Source: Primary survey data ( $n = 248$ , 2025).

Within the material dimension, the most substantial improvements were recorded for food adequacy (pre: 2.81, post: 3.64) and health access (pre: 2.88, post: 3.59), both crossing the sufficiency threshold of 3.00. These findings are consistent with the prediction that productive income gains translate most immediately into improved nutritional and health expenditure, as these are the most basic consumption items for low-income households. Education access also crossed the threshold (pre: 3.12, post: 3.72), reflecting both improved household income capacity and likely BAZNAS's parallel educational support programming for mustahiq children. Housing condition improvement was the smallest (pre: 2.76, post: 3.28), consistent with the well-established finding that housing investments require longer income accumulation periods than food, clothing, or education expenditure.

Within the spiritual dimension, all five indicators showed positive movement, though the absolute magnitudes of change were smaller than in the material dimension a finding that requires contextual

interpretation rather than concern. Baseline spiritual scores were considerably higher than baseline material scores across all respondents (mean spiritual pre: 3.60 vs mean material pre: 2.90), indicating that mustahiq entered the programme with substantially stronger spiritual capital than material capital. The smaller post-programme spiritual gains reflect a ceiling effect: respondents who entered with faith, worship, and family harmony scores already above 3.50 had limited room for further improvement within the 12-month programme window. This pattern is theoretically coherent with the CIBEST model's prediction that productive zakat programmes which primarily provide material inputs are more effective at shifting material dimension scores than spiritual dimension scores.

### *Income Trajectory and Poverty Index*

Figure 4 presents the 12-month income trajectory by programme type alongside pre-post comparison of poverty depth and severity indices.

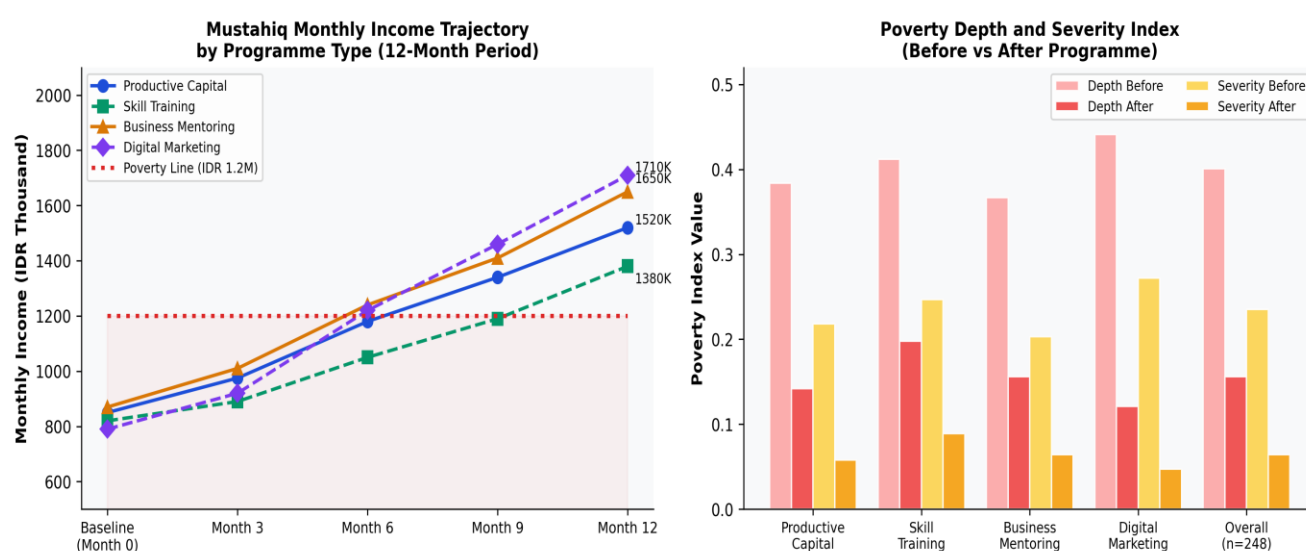


Figure 4. Income Trajectory and Poverty Reduction Indicators – BAZNAS Productive Zakat Programme  
Source: Primary survey data and BAZNAS programme records (n = 248, 2025)

Figure 4. Left: Monthly income trajectory by programme type (baseline to Month 12). Right: Poverty depth and severity indices before and after programme. Dashed line = poverty line (IDR 1.2 million/month). Source: Primary survey data and BAZNAS programme records (n = 248, 2025).

The income trajectory analysis in Figure 4 (left panel) reveals that all four programme types generated consistent income growth over the 12-month period, with digital marketing assistance and business mentoring recipients reaching average monthly incomes of IDR 1,710,000 and IDR 1,650,000 respectively by Month 12 both substantially above the poverty line. Productive capital recipients crossed the poverty line between Month 6 and Month 9, while skill training recipients crossed at approximately Month 9–12. This trajectory data confirms that the programme effects are not artefacts of the measurement point but reflect genuine and progressive income growth across the programme period.

The right panel of Figure 4 presents the poverty depth index (Foster-Greer-Thorbecke P1) and poverty severity index (FGT P2) before and after the programme. The overall poverty depth index declined from 0.401 to 0.156 (a reduction of 61.1%), and the poverty severity index declined from 0.235 to 0.064 (a reduction of 72.8%). Digital marketing assistance generated the largest poverty depth reduction (0.441 → 0.121, -72.6%), consistent with the CIBEST Welfare Index findings, while skill training showed the smallest reduction (0.412 → 0.198, -51.9%), again reflecting the longer-timeframe nature of skills-based

income improvement. These findings extend the CIBEST analysis by demonstrating that productive zakat programmes do not merely shift mustahiq across the poverty threshold but compress the distribution of welfare outcomes reducing both the average shortfall of remaining poor mustahiq (poverty depth) and the inequality among poor mustahiq (poverty severity).

## DISCUSSION

### *Theoretical Contribution: CIBEST as an Evaluative Standard for Productive Zakat*

The findings of this study validate the CIBEST model as a methodologically appropriate, theoretically grounded, and empirically sensitive instrument for evaluating productive zakat programme effectiveness. The model's capacity to simultaneously measure material and spiritual welfare dimensions and to classify mustahiq into four structurally distinct quadrant categories generates diagnostic information that conventional income-based measures cannot provide. The specific finding that a large proportion of post-programme mustahiq remained in Q2 (material poor, spiritually sufficient) at the 12-month mark, rather than progressing to Q1, identifies a category of recipients who have improved spiritually but remain materially constrained. This is actionable intelligence: it suggests that this subgroup requires additional productive capital or market access support, not faith-based programming, and provides BAZNAS with a targeting rationale for second-cycle programme intensification.

These findings contribute to the emerging literature on multidimensional poverty measurement in Islamic contexts (Beik & Arsyanti, 2016; Herianingrum et al., 2024) and extend the evaluation methodology pioneered in the Malaysian zakat efficiency literature (Noor et al., 2015; Wahab & Rahman, 2013) to a productive programme context in Indonesia. The integration of CIBEST with income trajectory analysis and FGT poverty indices as demonstrated in this study provides a more comprehensive evaluative framework than any single instrument alone, and is recommended as a standard evaluation protocol for future BAZNAS programme cycles.

### *Practical Implications: Programme Design and Governance*

Three governance implications follow directly from the findings. First, digital marketing assistance should be prioritised and scaled within the BAZNAS productive programme portfolio. Its superior CIBEST Welfare Index gain ( $\Delta = +0.32$ ), poverty depth reduction ( $-72.6\%$ ), and income trajectory (IDR 1,710,000 at Month 12) establish it as the most efficient poverty alleviation vehicle among the four programme types studied. This finding is consistent with Latief (2025c)'s identification of digital channel adoption as the primary differentiator between efficient and inefficient zakat institutions, and with the broader evidence that digital commercial platforms provide informal-sector producers with access to markets of substantially greater scale and diversity than traditional in-person channels.

Second, integrated programme sequencing providing capital loans followed by structured business mentoring and digital marketing training within a single programme trajectory is likely to generate welfare outcomes exceeding any single programme type in isolation. The current BAZNAS programme design treats these four modalities as separate tracks. Integrating them as sequential components of a single 18–24-month mustahiq development pathway, informed by initial CIBEST quadrant classification, would allow each mustahiq's programme to be tailored to their specific welfare gap profile.

Third, data-driven mustahiq targeting as conceptualised in Latief (2025a)'s Big Data-based zakat management model should be operationalised within BAZNAS's programme management information system. The CIBEST instrument provides the outcome data; the strategic management framework (Latief, 2025b) provides the planning and evaluation architecture; and the digital ZIS infrastructure (Latief, 2025c) provides the data collection and analytics capability. Integrating these three elements into a unified mustahiq management system would enable real-time monitoring of welfare trajectories, early identification of

recipients at risk of failing to cross the poverty threshold, and evidence-based decisions about programme extension, intensification, or complementary support.

## CONCLUSION

This study evaluated the effectiveness of the BAZNAS productive zakat programme in alleviating poverty among 248 mustahiq recipients in North Sulawesi, Indonesia, using the CIBEST model. The findings demonstrate statistically significant and practically meaningful welfare improvements across all programme types. The proportion of mustahiq in the Welfare Quadrant (Q1) increased from 18.4% to 47.3% ( $\Delta = +28.9$  pp,  $p < 0.001$ ), while the Absolute Poverty Quadrant (Q4) contracted from 36.2% to 13.2% ( $\Delta = -23.0$  pp,  $p < 0.001$ ). The CIBEST Welfare Index rose from 0.41 to 0.69 overall (Cohen's  $d = 0.77$ , large effect), with digital marketing assistance generating the largest welfare improvement (IW: 0.41  $\rightarrow$  0.73,  $d = 0.88$ ). Material dimension improvements were greater in absolute magnitude than spiritual dimension improvements, consistent with the programme's primary focus on material capability development. Income trajectories crossed the poverty line for all programme types by Month 12, and poverty depth and severity indices declined by 61.1% and 72.8% respectively.

These findings confirm that productive zakat, when designed with programme diversity and delivered with institutional commitment, can generate substantial and measurable poverty reduction within a 12-month period. The CIBEST model is validated as an appropriate holistic evaluation instrument for Islamic philanthropic programmes, providing quadrant-specific diagnostic information that supports programme refinement beyond what income-based measures alone can offer.

The study's primary limitation is the absence of a parallel control group, which prevents causal attribution of welfare gains exclusively to programme participation. Future research should employ randomised designs, longer follow-up periods, and comparative analyses across BAZNAS regional offices to assess the generalisability of these findings. The integration of CIBEST evaluation with the Big Data-based programme management model (Latief, 2025a) represents a priority direction for BAZNAS institutional development.

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