Available at:
https://tsaqafah.journal.unida.gontor.ac.id/index.php/tsq
https://doi.org/10.21111/tsaqafah.v22i1.19

ISSN: 1441-0334
e-ISSN: 2460-0008
TSAQAFAH
Jurnal Peradaban Islam

Reviewed: 12 - 2025 | Revised: 04 - 2026 | Accepted: 05 - 2026

Islamic Resilience Based on Zakat: Integrating CIBEST–MPI to Assess the Multi-Dimensional Recovery in Post-Disaster

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Abstract

Post-disaster recovery in Muslim-majority regions often faces distinctive obstacles because conventional assistance can overlook the spiritual and social resources that shape coping strategies and collective action. Islamic Social Finance (ISF)—especially zakat institutions—has therefore become an increasingly important recovery actor, yet robust evidence on sustained, long-term outcomes remains limited. This study assesses the effectiveness of the BAZNAS Sejahtera program in Palu, Indonesia, six years after the

2018 tsunami. It employs an integrated analytical framework that combines the CIBEST model of Islamic welfare, the Multidimensional Poverty Index (MPI), and disaster-recovery principles to examine changes in material and spiritual well-being, multidimensional deprivations, resilience, and the relationships among these domains. A qualitative case study was conducted with 16 beneficiaries across 11 sub-districts using structured questionnaires, semi-structured interviews, participant observation, and document analysis. The results show notable progress: income increased by 34.7%, assets by 68.75%, and zakat participation rose from 0% to 87.5%. Access to clean water reached 100%, while sanitation improved to 93.75%. Resilience strengthened across economic recovery (87.5%), social trust and networks, physical housing and infrastructure, and risk reduction (100% awareness; 75% preparedness). Importantly, the findings suggest reciprocity: stronger īmān, worship discipline, and trust-based ethics reinforced cohesion and livelihoods, while improved livelihoods enabled religious obligations—especially zakat—supporting transitions from mustahiq to muzakki (87.5%).

Keywords: *CIBEST, multidimensional poverty, disaster recovery, zakat, integrated framework*

Abstrak

Pemulihan pascabencana di wilayah mayoritas Muslim sering menghadapi hambatan khas karena bantuan konvensional dapat mengabaikan sumber daya spiritual dan sosial yang membentuk strategi koping serta aksi kolektif. Karena itu, Islamic Social Finance (ISF)—terutama institusi zakat—semakin penting sebagai aktor pemulihan, namun bukti yang kuat mengenai dampak jangka panjang yang berkelanjutan masih terbatas. Studi ini menilai efektivitas program BAZNAS Sejahtera di Palu, Indonesia, 6 tahun setelah tsunami 2018. Penelitian ini menggunakan kerangka analisis terintegrasi yang menggabungkan model CIBEST (kesejahteraan Islam), Multidimensional Poverty Index (MPI), dan prinsip pemulihan bencana untuk menelaah perubahan kesejahteraan material dan spiritual, deprivasi multidimensi, resiliensi, serta hubungan antardimensi tersebut. Studi kasus kualitatif dilakukan terhadap 16 penerima manfaat di 11 kecamatan melalui kuesioner terstruktur, wawancara semi-terstruktur, observasi partisipatif, serta analisis dokumen. Hasilnya menunjukkan kemajuan yang nyata: pendapatan meningkat 34,7%, aset meningkat 68,75%, dan partisipasi zakat naik dari 0% menjadi 87,5%. Akses air bersih mencapai 100%, sementara sanitasi meningkat menjadi 93,75%. Resiliensi menguat pada aspek pemulihan ekonomi (87,5%), kepercayaan dan jejaring sosial, perumahan dan infrastruktur fisik, serta pengurangan risiko (100% kesadaran; 75% kesiapsiagaan). Temuan juga menunjukkan adanya timbal balik: penguatan īmān, disiplin ibadah, dan etika berbasis kepercayaan memperkuat kohesi dan penghidupan, sementara peningkatan penghidupan memungkinkan pemenuhan kewajiban agama—khususnya zakat—yang mendukung transisi dari mustahiq menjadi muzakki (87,5%).

Kata Kunci: *CIBEST, kemiskinan multidimensi, pemulihan pascabencana, zakat, kerangka terintegrasi.*

Introduction

Natural disasters remain a major barrier to sustainable development and poverty reduction worldwide because their impacts extend beyond immediate physical damage and often produce prolonged social and economic vulnerability.[1] These complex, multidimensional challenges require integrated responses that address not only financial loss but also social fragmentation, psychological trauma, and damage to infrastructure.[2] Indonesia, located along the Pacific Ring of Fire, is among the most disaster-prone countries, frequently experiencing earthquakes, tsunamis, volcanic eruptions, and floods.[3] A striking example is the 7.4-magnitude earthquake and subsequent tsunami that struck Palu, Central Sulawesi, in September 2018, causing more than 4,000 deaths, displacing over 200,000 people, and leaving long-term damage to housing, infrastructure, and livelihoods.[4] Six years later, many communities continue to face incomplete recovery, highlighting the need for sustained and holistic interventions that support not only physical reconstruction but also spiritual and psychosocial restoration.

In such contexts, Islamic Social Finance (ISF), particularly zakat-based institutions, has emerged as an important yet underexamined mechanism for recovery. By reviving the civilizational function of the historical *Bayt al-Māl*—the early Islamic public treasury that supported social welfare through organized and accountable redistribution—contemporary zakat institutions can provide a sovereign, debt-free pathway to recovery, in contrast to aid approaches that rely on international loans and may foster long-term dependency. Zakat, as one of Islam's five pillars, is both a religious obligation and a structured system of wealth redistribution designed to reduce poverty and

1 Saman Ghaffarian et al., "Agent-Based Modelling of Post-Disaster Recovery with Remote Sensing Data," *International Journal of Disaster Risk Reduction* 60 (2021), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85105577104&doi=10.1016%2Fj.ijdrr.2021.102285&partnerID=40&md5=fb7491d6598882ca3f57a2a627b977d7; Navid Mohammadi et al., "Megatrends in Science and Technology Parks and Areas of Innovation: Co-Citation Clustering," *Journal of Science and Technology Policy Management* (2024), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85211585229&doi=10.1108%2FJSTPM-02-2024-0050&partnerID=40&md5=948781a404515948401ad22a0f0d63f7.

2 W L Wang and J W van de Lindt, "Quantitative Modeling of Residential Building Disaster Recovery and Effects of Pre- and Post-Event Policies," *International Journal of Disaster Risk Reduction* 59 (2021), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85104280207&doi=10.1016%2Fj.ijdrr.2021.102259&partnerID=40&md5=1d40b33158d1d267c14015f6103a69df.

3 Syaakir Sofyan et al., "Understanding the Impact of Natural Disaster in Micro, Small, and Medium Enterprises in Halal Food Sector," *Indonesian Journal of Islamic Literature and Muslim Society* 6, no. 2 (2023).

4 S P Nugroho and N Alifa, "Spiritual Resilience and Post-Disaster Recovery in Muslim Communities: Evidence from Indonesia," *Disaster Prevention and Management* 34, no. 1 (2025): 45–68.

promote social justice.[5] Unlike emergency charity (*zakat karitas*) that offers short-term consumption support, productive zakat (*zakat pendayagunaan*) can serve as reconstruction capital by enabling asset accumulation, skills development, and stronger local institutions.[6] This distinction matters because recovery that is rooted in empowerment can be self-reinforcing, whereas externally financed reconstruction may reproduce vulnerability through debt and dependence.

In Indonesia, the National Zakat Agency (BAZNAS) plays a key role in institutionalizing zakat collection and distribution and has expanded its mandate toward integrated community development and disaster resilience.[7] The BAZNAS Sejahtera program represents a post-disaster recovery approach that blends Islamic principles with contemporary development practice by seeking to restore both material welfare and spiritual well-being. This orientation reflects the Islamic concept of *ihsan* (excellence): recovery is not limited to returning communities to pre-disaster conditions. However, it aims to cultivate greater spiritual and economic agency, supporting resilience in worldly life (*dunya*) and responsibility toward the hereafter (*akhirah*).[8]

However, existing evaluations of zakat programs and post-disaster interventions often rely on siloed frameworks. CIBEST (Center of Islamic Business and Economic Studies) captures material and spiritual welfare in Islamic settings, while the Multidimensional Poverty Index (MPI) measures deprivation across health, education, and living standards[9]. Although both

5 Qurroh Ayuniyyah et al., "The Impact of Zakat in Poverty Alleviation and Income Inequality Reduction from the Perspective of Gender in West Java, Indonesia," *International Journal of Islamic and Middle Eastern Finance and Management* 15, no. 5 (2022): 924–942, https://www.emerald.com/insight/content/doi/10.1108/IMEFM-08-2020-0403.

6 Tika Widiastuti et al., "Integrating Sustainable Islamic Social Finance: An Analytical Network Process Using the Benefit Opportunity Cost Risk (ANP BOCR) Framework: The Case of Indonesia," *PLoS ONE* 17, no. 5 May (2022): e0269039.

7 R S Rahmat and M S Nurzaman, "Assessment of Zakat Distribution: A Case Study on Zakat Community Development in Bazznas, Indonesia," *International Journal of Zakat* 4, no. 2 (2019): 1–15; Nur Syamsu et al., "Beyond Religious Boundaries: Determinants Driving Non-Muslim Consumers' Halal Product Choices in Palu, Indonesia," *Al-Intaj: Jurnal Ekonomi dan Perbankan Syariah* 11, no. 2 (2025): 450–471; Ghifari Yuristiadhi M Makhasi et al., "DISCOVERING HALAL TOURISM'S FOOTPRINTS: A BIBLIOMETRIC PERSPECTIVE ON BUSINESS RESEARCH USING SCOPUS DATA (1997–2023)," *Malaysian Journal of Syariah and Law* 13, no. 3 (2025).

8 Mustafa Omar Mohammed, Kazi Md Tarique, and Rafikul Islam, "Measuring the Performance of Islamic Banks Using Maqasid Based Model," *Intellectual Discourse* 23, no. Special Issue (2015): 401–424.

9 S Alkire et al., "Global Multidimensional Poverty and COVID-19: A Decade of Progress at Risk?," *Social Science and Medicine* 291 (2021), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85118210670&doi=10.1016%2Fj.socscimed.2021.114457&partnerID=40&md5=19761a090e69c6551ec16a5063bdf68c; R Sumantri, S Iswati, and A Mufrodi, "The Effective-

are valuable, neither alone can capture the full complexity of post-disaster needs in Muslim communities, where faith-based coping—prayer, mutual support, and religious meaning-making—can be central to recovery.[10] The MPI's omission of spiritual dimensions is not merely a technical limitation; in many Muslim-majority societies, spiritual well-being can operate as a social determinant of health and resilience. A community that loses its meaning-making capacity after a disaster may face a deeper crisis that improvements in housing, water access, or schooling alone cannot resolve.[11]

At the same time, the "Building Back Better" (BBB) concept in disaster studies emphasizes resilience, social capital, and risk reduction, yet it rarely intersects with Islamic economic and welfare frameworks. The five objectives of *maqasid al-shariah*—*hifz al-din* (protection of religion), *hifz al-nafs* (life), *hifz al-'aql* (intellect), *hifz al-nasl* (lineage), and *hifz al-mal* (wealth)—offer a holistic civilizational lens for recovery that complements secular metrics. [12]. From this perspective, meaningful recovery requires simultaneous protection of all five: physical safety (*hifz al-nafs*), continued religious practice (*hifz al-din*), preservation of learning and agency (*hifz al-'aql*), family stability (*hifz al-nasl*), and restoration of assets and livelihoods (*hifz al-mal*). Rebuilding housing without rebuilding faith and social purpose, therefore, represents an incomplete recovery process.

This study addresses these gaps by proposing and empirically applying an integrated model that unites CIBEST, MPI, and BBB principles to evaluate the long-term impact of the BAZNAS Sejahtera program in Palu. It examines whether a faith-based intervention can facilitate comprehensive recovery, reflected in improved material conditions, strengthened spiritual engagement, psychosocial healing, and enhanced disaster preparedness. Specifically, it explores whether spiritual engagement (as captured by CIBEST) supports preparedness and stewardship (BBB), including whether communities that interpret disaster through religious meaning-making demonstrate stronger *amanah* (responsibility) in maintaining safer infrastructure and building re-

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ness of Distribution of Zakat Funds on ZDC South Sumatra," *Opcion* 35, no. Special Issue 20 (2019): 1572–1588, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073576061&partnerID=40&md5=e15f9989606b3b35c0409680a96ce1b3.

10 Nugroho and Alifa, "Spiritual Resilience and Post-Disaster Recovery in Muslim Communities: Evidence from Indonesia."

11 K M Tarique et al., "Constructing a Maqasid (Objective) Based Performance Measurement Index for Islamic Banks," *International Journal of the Analytic Hierarchy Process* 12, no. 2 (2020): 328–354, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85091914217&doi=10.13033%2Fijahp.v12i2.770&partnerID=40&md5=91cbe1ea94e66b2e27ba170e5bd71900.

12 I S Beik and L D Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model," *Journal of Islamic Monetary Economics and Finance* 1, no. 2 (2016): 141–160.

silient futures. By doing so, the study contributes theoretical advancement and practical insight into how zakat institutions can evolve from traditional charity toward strategic, resilience-oriented development actors—modern manifestations of the *Bayt al-Māl*. Ultimately, this integrated approach aligns with Islamic ideals of *falah* (success in this world and the hereafter) and *maqasid al-shariah*, while offering a culturally grounded and empirically testable model for post-disaster recovery in Muslim-majority settings.

Content/ Discussion

Literature Review

Islamic Social Finance and Zakat in Development

Islamic social finance (ISF) encompasses a range of philanthropic instruments rooted in Islamic ethical and legal principles—including zakat, waqf, sadaqah, and qard al-hasan—designed to advance socio-economic justice and alleviate poverty.[13]. Among these instruments, zakat holds a distinctive status as one of the five pillars of Islam. It functions as a mandatory mechanism of wealth redistribution that purifies assets while supporting vulnerable and marginalized groups. Grounded in the principle that wealth entails social responsibility, zakat obligates eligible Muslims to allocate a fixed portion of their holdings to designated beneficiary categories, notably the poor (fuqara) and the needy (masakin), including households rendered vulnerable by shocks such as disasters.[14]. Increasingly, scholars have highlighted the potential of integrating Islamic commercial and social finance to promote inclusive economic development.[15]. However, the literature has often siloed zakat as

13 L Tamanni et al., "Islamic Social Finance and Commercial Finance: A Marriage Made in Heaven?," *Journal of Islamic Accounting and Business Research* 13, no. 8 (2022): 1216–1233, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85132543615&doi=10.1108%2FJIABR-01-2021-0018&partnerID=40&md5=0db0b01f0da7e9de6c3c930752b1e415; M Mukhlisin and L Tamanni, "ACCOUNTING EDUCATION, DISCIPLINE, AND SUPERVISION WHEN WOMEN IN CHARGE IN ISLAMIC MICROFINANCE: CASE STUDIES OF INDONESIA AND PAKISTAN," *Journal of Islamic Monetary Economics and Finance* 11, no. 2 (2025): 217–240, https://www.scopus.com/inward/record.uri?eid=2-s2.0-105010313010&doi=10.21098%2Fjimf.v11i2.1747&partnerID=40&md5=1cf3e5bfe8309355a951b1bd26de24c5.

14 Ayuniyyah et al., "The Impact of Zakat in Poverty Alleviation and Income Inequality Reduction from the Perspective of Gender in West Java, Indonesia."

15 A Ascarya, "The Role of Islamic Social Finance during Covid-19 Pandemic in Indonesia's Economic Recovery," *International Journal of Islamic and Middle Eastern Finance and Management* 15, no. 2 (2022): 386–405, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85115055906&doi=10.1108%2FIMEFM-07-2020-0351&partnerID=40&md5=b490dd0c05d40007906f78eb66ad6b5e.

"emergency charity" rather than "reconstruction capital," reflecting a narrow interpretation of its function.

Contemporary scholarship distinguishes between two paradigms of zakat utilization: *zakat karitas* (consumptive relief) and *zakat pendayagunaan* (productive recovery). *Zakat karitas* provides immediate consumption support, such as cash or in-kind transfers for food, clothing, and basic survival needs—which is essential during acute crises but typically does not address structural drivers of poverty or build long-term resilience. In contrast, *zakat pendayagunaan* operates as reconstruction capital by financing asset accumulation, skills training, entrepreneurial ventures, and institutional capacity building, enabling beneficiaries to transition from dependency to self-sufficiency.[16] This paradigm shift reframes zakat from episodic charity into a sustained fiscal tool for urban and rural resilience, particularly in disaster-prone contexts where recovery requires multi-year investments in livelihood restoration and infrastructure rebuilding.

In line with this shift, ISF institutions have increasingly moved beyond traditional charitable distribution toward more strategic, development-oriented interventions. This evolution reflects a growing consensus that effective poverty alleviation must extend beyond meeting immediate needs to include long-term initiatives in capacity building, skills development, and asset formation. The concept of integrated Islamic social finance is often articulated through a four-phase transformation model: Economic Rescue (emergency relief), Economic Recovery (livelihood restoration), Economic Reconstruction (infrastructure rebuilding), and Economic Resilience (sustainable development). These phases align closely with contemporary disaster-recovery frameworks, underscoring the synergies between Islamic financial principles and post-disaster intervention strategies.

Historical Roots: Zakat as State Social Security and Cross-Regional Stabilization

Historically, zakat emerged not only as an individual religious obligation but also as a structured instrument of public welfare embedded in early Islamic fiscal governance. Classical zakat administration was closely tied to centralized public finance mechanisms intended to curb predatory extraction and stabilize social welfare through organized redistribution.[17] This

16 Imron Mawardi et al., "Analyzing the Impact of Productive Zakat on the Welfare of Zakat Recipients," *Journal of Islamic Accounting and Business Research* 14, no. 1 (2023): 118–140.

17 T Kuran, "Zakat: Islam's Missed Opportunity to Limit Predatory Taxation," *Public Choice* 182, no. 3–4 (2020): 395–416, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065720211&doi=10.1007%2Fs11127-019-00663-x&partnerID=40&md5=b77e9fda16fa826e2970fd608930a7ea.

perspective supports the argument that zakat functioned as a form of social security infrastructure — accountable and oriented toward safeguarding basic needs—rather than as purely voluntary and episodic charity. The institutional imprint of early public finance is also visible in discussions of the *bayt al-māl*, which figure in the administrative symbolism and spatial organization of Islamic governance, reflecting the integration of welfare management within broader public institutions.[18]

A particularly instructive historical example is the *ʿĀm al-Ramādah* (Year of Ashes), a severe famine that struck the Arabian Peninsula during the caliphate of ʿUmar ibn al-Khaṭṭāb (r. 634–644 CE). Faced with widespread starvation and displacement, Caliph ʿUmar mobilized the *bayt al-māl* to coordinate large-scale disaster relief. He suspended the application of certain penalties to prioritize the protection of life (*ḥifẓ al-nafs*), organized caravans to transport grain from surplus regions, established communal kitchens, and personally supervised distribution to ensure equity and prevent hoarding. Crucially, the response extended beyond emergency food assistance to include structural measures—such as debt relief, asset redistribution, and livelihood restoration—intended to rebuild productive capacity once the famine subsided. This historical precedent points to a broader pattern: disasters were treated not as isolated emergencies requiring temporary charity, but as crises demanding integrated, state-led welfare interventions financed through zakat-linked and other public resources. The BAZNAS Sejahtera program in post-tsunami Palu can be read as following this legacy, operating as a contemporary analog to the bayt al-māl by combining immediate relief with longer-term resilience-building.

Over time, zakat governance has evolved into more diversified and institutionally complex arrangements shaped by contemporary administrative systems, regulatory reforms, and decentralization dynamics. In modern settings, zakat management increasingly relies on formal institutions and governance frameworks to coordinate collection and distribution, thereby strengthening transparency, efficiency, and public trust.[19] In Southeast Asia, the advancement of zakat institutions illustrates how organizational modernization can expand zakat's programmatic role beyond subsistence support toward development-oriented interventions.[20]. In Indonesia, the legal–

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18 Ibid.; M Enab, "Dome of Bayt Al-Mal in the Islamic Mosques: Comparative and Architectural Study," *Journal of Islamic Architecture* 6, no. 1 (2020): 13–23, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85104636020&doi=10.18860%2Fjia.v6i1.6735&partnerID=40&md5=dc4dbf96d34905be5d63e8fa2666ce98.

19 Norazlina Abd Wahab and Abdul Rahim Abdul Rahman, "A Framework to Analyse the Efficiency and Governance of Zakat Institutions," *Journal of Islamic Accounting and Business Research* 2, no. 1 (2011): 43–62.

20 S Sarif, N A Ali, and N A Kamri, "The Advancement of Zakat Institution in Malaysian Post Islamic Revivalism Era," *Journal of Al-Tamaddun* 15, no. 2 (2020): 71–79,

political framework further clarifies institutional authority and coordination within the national zakat system. At the same time, decentralization conditions shape how public and community-based actors interact across levels of governance.[21]. Taken together, these trajectories provide a basis for viewing contemporary zakat institutions as actors not only in poverty reduction but also in crisis response and resilience-building, including disaster-mitigation agendas.[22] Moreover, emerging conceptual work outlines pathways through which zakat may contribute to socioeconomic resilience.[23]

Building on this historical-to-contemporary trajectory, this study conceptualizes zakat not merely as short-term relief but as an institutional mechanism capable of shaping sustained recovery and resilience in disaster-affected Muslim communities. Such impacts are inherently multi-layered, encompassing improvements in material capacity, changes in spiritual practice, reductions in multidimensional deprivation, and strengthened resilience across economic, social, physical, and risk-reduction domains. Accordingly, the following sections introduce the integrated analytical framework used in this study—combining the CIBEST model, the Multidimensional Poverty Index (MPI), and post-disaster recovery principles—to capture how zakat interventions generate interconnected outcomes over time.

Modern Islamic civil society in Indonesia has become an increasingly central actor in disaster management, evolving from sporadic community charity into more professional humanitarian institutions that operate across preparedness, emergency response, and recovery. In this landscape, Islamic social finance—zakat, infak, and sedekah (ZIS)—is practiced not only as a matter of personal piety but also as an institutionalized practice through formal bodies (e.g., BAZNAS and LAZ) that emphasize accountability, transparent governance, and programmatic impact. This contemporary trajectory resonates with the longer historical development of zakat governance—from earlier public social security functions associated with the *bayt al-māl* to

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https://www.scopus.com/inward/record.uri?eid=2-s2.0-85099055405&doi=10.22452%2FJAT.vol15no2.6&partnerID=40&md5=b866accb3b7d78a5afaf809434b4d122.

21 F E Hutchinson, "(De)Centralization and the Missing Middle in Indonesia and Malaysia," *Sojourn* 32, no. 2 (2017): 291–335, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85026357274&doi=10.1355%2Fsj32-2c&partnerID=40&md5=11e104d41eb9ff440f26e4a933901b78.

22 H Hulwati et al., "Zakat for Humanity in Disaster Mitigation," *International Journal of Sustainable Development and Planning* 19, no. 5 (2024): 1929–1939, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85195093990&doi=10.18280%2Fijsdp.190531&partnerID=40&md5=c77f60d76c407f1b28240365fae4cc90.

23 M.H.B.M. Johar et al., "Conceptual Perspectives on Harnessing Zakat for Socioeconomic Resilience," *Global Journal Al-Thaqafah* (2025): 330–345, https://www.scopus.com/inward/record.uri?eid=2-s2.0-105022844462&doi=10.7187%2FGJATSI102025-19&partnerID=40&md5=2ea4a9a2a2037d4cfb617a426433b83a.

modern, structured institutions strengthened by legal codification (including Indonesia's Law No. 23/2011) that can be mobilized for crisis response and post-disaster welfare restoration.

Central Sulawesi—especially Palu, Sigi, and Donggala—illustrates this shift following the 28 September 2018 earthquake, tsunami, and liquefaction. The disaster became a turning point that accelerated the consolidation of faith-based disaster practices while also reshaping public religious narratives about calamity, moving between fatalistic interpretations and mitigation-oriented understandings. Local cultural memory and risk cues—including place-based warnings embedded in community knowledge (for instance, toponymic reminders)—interacted with emerging fiqh-informed perspectives that emphasize preparedness, the protection of life, and organized recovery rather than passive acceptance of disaster outcomes.[24]

Operationally, Islamic mass organizations and philanthropic networks strengthened disaster governance through structured mechanisms and specialized units. Muhammadiyah, through the Muhammadiyah Disaster Management Center (MDMC), is often characterized by integrated command functions, coordinated health and relief services, and training programs and institutional learning that extend beyond emergency distribution.[25] Nahdlatul Ulama, through LPBI NU and NU Care, mobilized community logistics—including mobile kitchens, support for temporary shelters, and psychosocial–spiritual recovery—leveraging pesantren and grassroots networks. Philanthropic actors such as Dompet Dhuafa (DMC), as well as initiatives such as Islamic Relief Indonesia, also contributed through preparedness training and community resilience programs, underscoring a broadening of Islamic disaster engagement from relief provision toward risk reduction and recovery capacity building.

At the local level, recovery in Central Sulawesi further highlights Islamic educational and social institutions as anchors of resilience. Institutions such as Alkhairaat and UIN Datokarama Palu function not only as educational centers but also as community infrastructure that supports knowledge dissemination, social stabilization, and the normalization of disaster education within Islamic civic life. Efforts to institutionalize disaster education—through curriculum initiatives and student units focused on disaster issues—

24 J W Nourse, "The Mosques and the Magicians: Islamic and Indigenous Healing in the Wake of the Central Sulawesi Disaster," *Journal of Current Southeast Asian Affairs* 41, no. 1 (2022): 108–128; Majelis Tarjih dan Tajdid P P Muhammadiyah, *Fikih Kebencanaan* (Suara Muhammadiyah, 2015); A Arief et al., "Aligning Fiqh Disaster with Indonesia's Management Disaster Policy: A Maqāṣid Methodology Review," *Al-Manahij: Jurnal Kajian Hukum Islam* 19, no. 1 (2025): 101–116, https://www.scopus.com/inward/record.uri?eid=2-s2.0-105008721143&doi=10.24090%2Fmnh.v19i1.12872&partnerID=40&md5=2ee3bd2b74b0e04cd2cb99663c2af465.

25 (Lessy and Rohman 2020; Sofyan et al. 2023)

alongside the role of campuses as evacuation and support spaces, reinforce a "civilizational" dimension of disaster management: recovery is embedded in living institutions that carry authority, trust, volunteer capacity, and sustained community engagement, making programs more legitimate and durable over time.

Building on this modern Islamic civil society context, zakat-based interventions in post-disaster Palu can be positioned not merely as short-term charity but as part of a broader Islamic institutional approach to recovery in which faith-based legitimacy, organized delivery mechanisms, and welfare restoration converge. Accordingly, to rigorously assess the outcomes of these interventions, this study employs an integrated measurement strategy (CIBEST–MPI–BBB) that captures both economic recovery and multidimensional welfare improvements, aligning the empirical evaluation with the modern role of Islamic institutions in disaster management and crisis resilience.

The CIBEST Model: Material and Spiritual Welfare Assessment

The Center of Islamic Business and Economic Studies (CIBEST) model offers a distinctive approach to poverty measurement by integrating material and spiritual dimensions of welfare. Designed to reflect the Islamic concept of *falah* (comprehensive well-being), the model assesses households along two principal axes: Material Value (MV) and Spiritual Value (SV)[26]. The MV dimension captures conventional economic indicators, including income, consumption, asset ownership, and the fulfillment of basic needs. By contrast, the SV dimension evaluates religious observance, adherence to Islamic ethical teachings, moral conduct, and the use of faith-based coping mechanisms. Combining these dimensions yields a four-quadrant classification: prosperous households (high MV, high SV), materially poor (low MV, high SV), spiritually poor (high MV, low SV), and absolutely poor (low MV, low SV).

Conceptually, the model is grounded in Islamic welfare economics and aligns with the principles of *maqāṣid al-sharīʿah* (the objectives of Islamic law), which emphasize the protection of five essential dimensions: *ḥifẓ al-dīn* (faith), *ḥifẓ al-nafs* (life and physical safety), *ḥifẓ al-ʿaql* (intellect and knowledge), *ḥifẓ al-nasl* (lineage and family continuity), and *ḥifẓ al-māl* (wealth and economic assets) [27]. These objectives—collectively referred to as *al-ḍarūriyyāt al-khams* (the Five Essentials)—provide a civilizational benchmark for welfare and recovery by integrating spiritual, social, and material considerations

26 Sumantri, Iswati, and Mufrodi, "The Effectiveness of Distribution of Zakat Funds on ZDC South Sumatra."

27 Tarique et al., "Constructing a Maqasid (Objective) Based Performance Measurement Index for Islamic Banks."

rather than relying solely on secular economic metrics.

[28] Operationalized this framework empirically in their study of zakat distribution in Indonesia, showing that material assistance without parallel strengthening of spiritual welfare is unlikely to produce durable poverty alleviation. Their findings suggest that households receiving only economic support (high MV, low SV) may remain vulnerable to relapse due to weak moral discipline, limited religious coping resources, and diminished social trust. In contrast, beneficiaries who received both material support and spiritual strengthening—through religious education, encouragement of worship, and ethical guidance—were more likely to achieve *falah*, reflected in improved economic stability, more consistent faith practice, family cohesion, and community engagement. In this interpretation, effective Islamic welfare interventions should address the five *maqāṣid* in an integrated manner: restoring economic assets (*ḥifẓ al-māl*) while safeguarding religious practice (*ḥifẓ al-dīn*), ensuring physical security (*ḥifẓ al-nafs*), sustaining family structures (*ḥifẓ al-nasl*), and supporting education and knowledge transmission (*ḥifẓ al-ʿaql*). This integrated framing positions zakat as a civilizational mechanism that supports not only material recovery but also human dignity and resilience.
By incorporating spiritual alongside material indicators, the CIBEST model addresses a key limitation of conventional poverty metrics that focus primarily on economic deprivation. Empirical applications—particularly in zakat program settings—indicate that the model can identify households that are materially secure yet spiritually vulnerable, or spiritually strong but materially deprived, thereby enabling more nuanced targeting and program design.[29]

Multidimensional Poverty Measurement: The MPI Framework

The Multidimensional Poverty Index (MPI), developed by Alkire and Foster, is a globally recognized framework for measuring acute poverty by assessing simultaneous deprivations across three core dimensions—health, education, and living standards. Using 10 weighted indicators, the MPI classifies a household as multidimensionally poor when its weighted deprivations reach at least one-third of the total possible deprivations. Its decomposable structure further enables disaggregation by region, population group, and deprivation type, thereby generating granular evidence for targeted policy interventions.[30]

28 Beik and Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model."

29 Ayuniyyah et al., "The Impact of Zakat in Poverty Alleviation and Income Inequality Reduction from the Perspective of Gender in West Java, Indonesia."

30 (Santos and Villatoro 2020b)

The MPI has particular utility in disaster-affected contexts, where households often experience overlapping and reinforcing deprivations across multiple dimensions.[31]. Empirical studies also show that income gains do not necessarily translate into improvements in health, education, or living conditions, underscoring the value of a multidimensional lens for post-disaster assessment.[32]

However, the MPI's omission of a spiritual dimension can be interpreted not only as a technical boundary but also as a civilizational blind spot when applied in Muslim-majority settings. In such contexts, spiritual well-being may function as an important determinant of coping capacity and social resilience by shaping meaning-making in crisis, sustaining hope, strengthening community cohesion, and influencing risk perception and collective action. This becomes especially salient in post-disaster recovery, where psychological distress, existential uncertainty, and social fragmentation may persist long after physical reconstruction is underway. From this perspective, a community may appear to "recover" under material indicators while continuing to face deficits in spiritual-psychosocial well-being that affect longer-term resilience.

The five pillars of *maqāṣid al-sharīʿah* provide a more holistic benchmark for recovery than the secular MPI, which emphasizes the protection of faith (*ḥifẓ al-dīn*), life (*ḥifẓ al-nafs*), intellect (*ḥifẓ al-ʿaql*), family/lineage (*ḥifẓ al-nasl*), and wealth (*ḥifẓ al-māl*). Unlike the MPI's focus on material deprivation, the *maqāṣid* framework suggests that recovery is incomplete if progress occurs in one domain while other essential protections remain impaired. For instance, rebuilding a house (addressing an MPI living-standards indicator) may not represent meaningful recovery if *ḥifẓ al-dīn* is undermined by unresolved trauma that disrupts prayer, communal worship, or religious meaning-making. Likewise, improved school access (an MPI education indicator) may still fall short of *ḥifẓ al-ʿaql* if dominant disaster narratives reinforce fatalism rather than preparedness, or if knowledge systems fail to integrate indigenous risk wisdom with modern science. In this framing, recovery requires restoration across all five protections to secure not only material safety but also spiritual fortitude, intellectual vitality, family stability, and economic dignity.

31 J Gambo et al., "Unveiling and Modelling: Land Degradation, Poverty Nexus in Nigeria's Semi-Arid (Jigawa State) Using Cloud-Based Geospatial Data," *Journal of Arid Environments* 222 (2024), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85188895114&doi=10.1016%2Fj.jaridenv.2024.105151&partnerID=40&md5=f218da2a667adb5df7d281ae31850361.

32 S Alkire and Y Fang, "Dynamics of Multidimensional Poverty and Uni-Dimensional Income Poverty: An Evidence of Stability Analysis from China," *Social Indicators Research* 142, no. 1 (2019): 25–64, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85044786918&doi=10.1007%2Fs11205-018-1895-2&partnerID=40&md5=54d39a3fc5e3f4fe3756f7e0b7757fdb.

This limitation also presents an opportunity to integrate the MPI with complementary frameworks such as CIBEST, enabling a more comprehensive assessment that captures material deprivations alongside spiritual and psychosocial dimensions of welfare—particularly relevant in faith-based recovery settings.

Post-Disaster Recovery and "Build Back Better" Principles

Post-disaster recovery is widely regarded as the most complex and prolonged phase of the disaster management cycle, often unfolding over years or even decades. The United Nations–endorsed "Build Back Better" (BBB) framework argues that recovery should go beyond restoring what was lost to include measures that reduce future vulnerability and strengthen resilience. BBB is commonly operationalized through four interdependent domains: (1) economic recovery and livelihood restoration; (2) social cohesion and psychosocial healing; (3) physical reconstruction of housing and infrastructure; and (4) disaster risk reduction.[33]

Evidence further suggests that integrated recovery programs—linking housing, livelihoods, and community engagement—are more effective in supporting sustained economic and social recovery than fragmented, single-sector interventions.[34] Social capital is also pivotal: bonding ties (within communities) and bridging ties (across communities) facilitate access to material resources, information, and emotional support during protracted recovery.[35] Despite these advances, faith-based dimensions—particularly salient in Muslim-majority settings—remain insufficiently incorporated into mainstream recovery frameworks and their associated measurement approaches.

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33 A Cho, "Post-Tsunami Recovery and Reconstruction: Governance Issues and Implications of the Great East Japan Earthquake," *Disasters* 38, no. SUPPL2 (2014): s157–s178, https://www.scopus.com/inward/record.uri?eid=2-s2.0-84901974761&doi=10.1111%2Fdisa.12068&partnerID=40&md5=7d4b9043233f061eb7245441f4510cb5; L Mabon, "Enhancing Post-Disaster Resilience by 'Building Back Greener': Evaluating the Contribution of Nature-Based Solutions to Recovery Planning in Futaba County, Fukushima Prefecture, Japan," *Landscape and Urban Planning* 187 (2019): 105–118, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064002600&doi=10.1016%2Fj.landurbplan.2019.03.013&partnerID=40&md5=96e35ffcb7bd5186e3961de247808a5e.

34 Wang and van de Lindt, "Quantitative Modeling of Residential Building Disaster Recovery and Effects of Pre- and Post-Event Policies."

35 C Kim et al., "The Effect of Social Capital on Community Co-Production: Towards Community-Oriented Development in Post-Disaster Recovery," in *Procedia Engineering*, ed. Ding L., Fiorito F., and Osmond P., vol. 180 (Institute for Governance and Analysis, University of Canberra, Bruce, ACT, Australia: Elsevier Ltd, 2017), 901–911, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020490471&doi=10.1016%2Fj.proeng.2017.04.251&partnerID=40&md5=578fb22a33cdc6e430b9ac52adff86d2.

Research Gap and Justification

The preceding literature review indicates substantial progress across three related research domains: Islamic social finance evaluation, multidimensional poverty measurement, and post-disaster recovery. However, integration across these strands remains limited—especially in post-disaster settings, where recovery entails overlapping and evolving needs that require more holistic assessment tools. While each framework offers important insights, each also presents limitations when applied in isolation. The CIBEST model captures both material and spiritual welfare, yet it lacks indicators tailored to disaster recovery dynamics. The MPI provides a rigorous approach to measuring deprivation across health, education, and living standards. However, it omits spiritual and psychosocial dimensions—an important limitation in Muslim-majority contexts where faith and meaning-making can shape coping and resilience. Likewise, mainstream post-disaster recovery frameworks emphasize resilience, risk reduction, and reconstruction. However, they rarely incorporate Islamic welfare principles or systematically account for the role of faith-based institutions in organizing recovery and sustaining long-term well-being.

To address these gaps, this study proposes and empirically tests an integrated framework that synthesizes the strengths of CIBEST, MPI, and post-disaster recovery models. The integration rests on four premises: (1) welfare in Islamic contexts encompasses both material well-being and spiritual fulfillment, conceptually anchored in the five *maqāṣid* objectives; (2) poverty is inherently multidimensional, requiring measurement approaches that capture overlapping deprivations across economic, social, physical, and spiritual domains; (3) effective recovery depends on coordinated progress across economic, social, psychosocial, physical, and institutional dimensions; and (4) faith-based coping resources and institutions can play a critical role in psychological resilience and sustainable recovery, including by mobilizing locally grounded support systems that may complement—and in some cases provide alternatives to—externally financed, debt-linked reconstruction pathways.

Method

This study employs a qualitative case study design to examine the effectiveness of post-disaster recovery interventions delivered through Islamic social finance. Qualitative inquiry is well suited to complex social problems in which context, meaning, and lived experience cannot be separated from outcomes.[36]A case study approach enables an in-depth examination of how the

36 J W Creswell and C N Poth, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, 4th ed. (Sage Publications, 2018).

BAZNAS Sejahtera program influenced three key dimensions of beneficiary welfare—material well-being, spiritual practices, and disaster resilience—among communities affected by the 2018 tsunami in Palu, Central Sulawesi.[37]

Conducted six years after the earthquake, tsunami, and liquefaction disaster that claimed more than 4,000 lives and displaced over 200,000 people. This study captures both long-term recovery trajectories and emerging post-recovery challenges. The time interval also supported participants' recall of key recovery experiences and program-related changes. The analysis is guided by an integrated framework that combines: (1) the CIBEST model,[38] (2) the Multidimensional Poverty Index (MPI) using the Alkire–Foster methodology,[39] (3) Maqasid al-Shariah as an overarching civilizational benchmark, and (4) post-disaster recovery and resilience models grounded in disaster research.[40] Taken together, this framework provides a holistic lens for assessing Islamic social finance in disaster-prone settings, treating zakat not only as emergency relief but also as reconstruction capital that simultaneously supports material welfare (Hifz al-Mal), spiritual well-being (Hifz al-Din), physical safety (Hifz al-Nafs), family stability (Hifz al-Nasl), and knowledge transmission (Hifz al-Aql).[41]

Sampling and Participant Selection

37 Noor Arifin and Aan Zainul Anwar, "The Improvement Model of Microenterprises of Post-Disaster through Empowerment of Productive Zakat," *Journal of Governance and Regulation* 10, no. 4 (2021): 156–163, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85118584038&doi=10.22495%2FJGRV10I4ART14&partnerID=40&md5=e65ba21573a2f25870ef2b5dff164ce2; N Qolbi, Q Ayuniyyah, and I S Beik, "Analisis Strategi Pengelolaan Wakaf Produktif Di Baitul Wakaf: Pendekatan Analytic Network Process (ANP)," *JIIP-Jurnal Ilmiah Ilmu …* (2022), http://jiip.stkipyapisdompu.ac.id/jiip/index.php/JIIP/article/view/1109.

38 I S Beik and L D Arsyianti, "Digital Technology and Its Impact on Islamic Social Finance Literacy" (IPB University, Bogor, Indonesia: Springer International Publishing, 2021), 429–445, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85150079972&doi=10.1007%2F978-3-030-45827-0_23&partnerID=40&md5=82afbf64c90c5f971c1ce4d5e8bd256f.

39 Sabina Alkire and James Foster, "Counting and Multidimensional Poverty Measurement," *Journal of Public Economics* 95, no. 7–8 (2011): 476–487; S Alkire et al., *Multidimensional Poverty Measurement and Analysis* (Oxford University Press, 2015).

40 Michel Bruneau et al., "A Framework to Quantitatively Assess and Enhance the Seismic Resilience of Communities," *Earthquake Spectra* 19, no. 4 (2003): 733–752; Susan L. Cutter et al., "A Place-Based Model for Understanding Community Resilience to Natural Disasters," *Global Environmental Change* 18, no. 4 (2008): 598–606, https://www.sciencedirect.com/science/article/pii/S0959378008000666; Stephanie E. Chang, "Urban Disaster Recovery: A Measurement Framework and Its Application to the 1995 Kobe Earthquake," *Disasters* 34, no. 2 (2010): 303–327.

41 Beik and Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model."

Purposive sampling was used to recruit participants with rich, relevant insights into the program's effects, consistent with information-rich qualitative sampling.[42] Three criteria ensured that participants had direct experience of both the intervention and the disaster context. First, all participants were actively involved in BAZNAS's economic empowerment activities during 2023–2024, ensuring familiarity with the program's mechanisms and outcomes. Second, all participants resided in tsunami-affected areas during the 2018 disaster, enabling them to reflect firsthand on both crisis exposure and recovery. Third, all participation was voluntary and based on informed consent, consistent with ethical standards for qualitative inquiry.[43]

The final sample included 16 beneficiary households across 11 kelurahan—Palupi, Pengalum, Kotolus, Kuwatuno, Kamonni, Bosiwu Barat, Birobuli Utara, Duyu, Tipa, Batusu Timur, and Balaroa Barat—representing varied disaster impact zones. Most participants (87.5%) were female-headed households, reflecting gendered caregiving and livelihood burdens commonly reported in post-disaster contexts.[44] Assistance ranged from Rp 700,000 to Rp 1,000,000, consistent with productive zakat practices discussed in prior research.[45] The sample size aligns with qualitative guidance indicating that thematic saturation often occurs within approximately 12–20 interviews.[46]

Data Collection Methods

Data collection used three complementary methods to support triangu-

42 M Q Patton, *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*, 4th ed. (Sage Publications, 2015).

43 Yvonna S Lincoln and Egon G Guba, *Naturalistic Inquiry* (Beverly Hills: SAGE Publications, 1985); Joan P. Packenham et al., "Conducting Science in Disasters: Recommendations from the NIEHS Working Group for Special IRB Considerations in the Review of Disaster Related Research," *Environmental Health Perspectives* 125, no. 9 (2017): 94503.

44 Tilly Alcayna et al., "Resilience and Disaster Trends in the Philippines: Opportunities for National and Local Capacity Building," *PLoS Currents* 8, no. Disasters (2016); Zabihullah Sadiqi, Bambang Trigunarsyah, and Vaughan Coffey, "A Framework for Community Participation in Post-Disaster Housing Reconstruction Projects: A Case of Afghanistan," *International Journal of Project Management* 35, no. 5 (2017): 900–912.

45 Ayuniyyah et al., "The Impact of Zakat in Poverty Alleviation and Income Inequality Reduction from the Perspective of Gender in West Java, Indonesia"; T Widiastuti et al., "The Nexus between Islamic Social Finance, Quality of Human Resource, Governance, and Poverty," *Heliyon* 8, no. 12 (2022), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143163908&doi=10.1016%2Fj.heliyon.2022.e11885&partnerID=40&md5=9b008606932eaae3bec3fff9a9aa6029.

46 G Guest, A Bunce, and L Johnson, "How Many Interviews Are Enough? An Experiment with Data Saturation and Variability," *Field Methods* 18, no. 1 (2006): 59–82; J M Morse, "Determining Sample Size," *Qualitative Health Research* 10, no. 1 (2000): 3–5.

lation and strengthen credibility.[47] First, participants completed a structured questionnaire comprising eight thematic sections: demographic characteristics, program participation, mentoring experiences, worship practices, social dynamics, economic indicators, environmental behavior, and entrepreneurial culture. Retrospective 5-point Likert scales were used to capture perceived changes before and after program participation.[48] These measures provided baseline inputs for the CIBEST Material Value (MV) and Spiritual Value (SV) dimensions, as well as for MPI living standards indicators.

Second, semi-structured interviews (60–90 minutes) were conducted in Bahasa Indonesia to explore participants' experiences during and after the tsunami, pathways into the BAZNAS program, and perceived changes in material welfare, spiritual development, psychosocial recovery, and disaster preparedness behaviors.[49] Following established interview protocols, Interviews took place in participants' homes or businesses to reduce power imbalances and support openness.[50] Conducting interviews in participants' native language supported nuance and accuracy.[51] Interviews were audio-recorded with consent, transcribed verbatim, and validated through member checking with selected participants.

Third, document analysis was conducted using program reports, beneficiary records, mentoring logs, and monitoring data to provide organizational context and corroborate participant narratives.[52] Documents included BAZNAS Sulawesi Tengah reports from 2018–2024, individual assistance records, mentoring session logs, post-program monitoring forms, and financial disbursement records. This documentary evidence strengthened triangulation by validating key claims from questionnaires and interviews.

47 N K Denzin and Y S Lincoln, *The SAGE Handbook of Qualitative Research*, 4th ed. (Sage Publications, 2011); U Flick, *An Introduction to Qualitative Research*, 6th ed. (Sage Publications, 2018).

48 Barbara DiCicco-Bloom and Benjamin F. Crabtree, "The Qualitative Research Interview," *Medical Education* 40, no. 4 (2006): 314–321.

49 S Kvale and S Brinkmann, *InterViews: Learning the Craft of Qualitative Research Interviewing*, 3rd ed. (Sage Publications, 2015).

50 Sarah A. Elwood and Deborah G. Martin, "'Placing' Interviews: Location and Scales of Power in Qualitative Research," *Professional Geographer* 52, no. 4 (2000): 649–657.

51 C W Hartman, G Squires, and G D Squires, *There Is No Such Thing as a Natural Disaster: Race, Class, and Hurricane Katrina* (books.google.com, 2006), https://books.google.com/books?hl=en&lr=&id=8dPZ2WfghxcC&oi=fnd&pg=PP1&dq=natural+disasters&ots=bJ1KYZN3ha&sig=yxnTaYm6gqNdZHcUVWuQGr76F84.

52 Glenn A. Bowen, "Document Analysis as a Qualitative Research Method," *Qualitative Research Journal* 9, no. 2 (2009): 27–40.

Data Analysis Procedures

Data analysis followed the six-step thematic analysis approach. Analysis began with data familiarization through repeated reading of transcripts, listening to audio recordings, and reviewing questionnaire responses.[53] Next, initial codes were generated to capture patterns relating to material welfare change, spiritual transformation, social resilience, physical recovery, and preparedness practices. Coding combined deductive elements—guided by the CIBEST model, MPI indicators, Maqasid al-Shariah, and disaster recovery/resilience concepts—with inductive coding to allow themes to emerge from participants' narratives.

Codes were then clustered into broader themes aligned with the study's three analytical layers: Layer 1 (CIBEST material and spiritual welfare), Layer 2 (MPI multidimensional deprivation), and Layer 3 (post-disaster resilience across economic, social, physical, and risk-reduction domains). Themes were refined iteratively to ensure internal coherence and clear distinctions across themes, and to confirm that they represented both coded excerpts and the dataset. Themes were then defined and named with clear boundaries and linked explicitly to the research questions and constructs within the integrated framework. Findings were reported through an interpretive synthesis that integrated qualitative narratives with questionnaire-based metrics, supported by tables and illustrative quotations.

Analytical decisions followed established qualitative coding principles, prioritizing participants' own meaning-making rather than imposing external interpretations.[54] Interpretation was further guided by Islamic welfare economics, particularly the five Maqasid al-Shariah objectives—protection of religion, life, intellect, lineage, and wealth—to assess whether recovery outcomes reflected holistic civilizational well-being rather than material improvement alone.[55] This approach aligns with scholarship emphasizing that disaster recovery in Muslim-majority contexts should integrate spiritual and material dimensions, rather than relying exclusively on secular poverty metrics.[56] To contextualize program outcomes, the interpretation also drew on

53 V Braun and V Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101.

54 J Saldaña, *The Coding Manual for Qualitative Researchers*, 3rd ed. (Sage Publications, 2016).

55 K M Tarique, R Islam, and M O Mohammed, "Maqasid Al-Shariah-Based Performance Measurement Framework: A Tool for Evaluating Islamic Financial Institutions," *ISRA International Journal of Islamic Finance* 12, no. 1 (2020): 1–20.

56 Beik and Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model"; F Nugroho and S Alifa, "Empowerment and Post-Disaster Poverty Reduction by a Local Community Organisation in Indonesia," *International Journal of Community and Social Development* 7, no. 1 (2025): 76–94, https://www.scopus.com/inward/record.uri?eid=2-s2.0-105002565699&doi=10.1177%2F25166026251319886&partnerID=40&md5=55c12202860a7b-

the central literature on Islamic social finance,[57] multidimensional poverty,[58] and disaster recovery.[59]

Ethical Considerations

Ethical safeguards were essential given the inclusion of disaster-affected participants and the possibility of trauma exposure. Ethical approval was obtained from the BAZNAS Sulawesi Tengah Institutional Review Board and the UIN Datokarama Palu Ethics Committee (Protocol Code: BAZNAS-2024-001). Informed consent emphasized voluntary participation, the right to withdraw without penalty, confidentiality and anonymization, the right to decline any question, and assurance that participation would not affect current or future program eligibility. Procedures followed established qualitative research ethics standards.[60]

Sensitive topics—including trauma experiences, economic hardship, and spiritual struggles—were approached carefully, and participants were reminded that they could skip any questions that caused discomfort. When needed, referrals were provided to local counseling services and Islamic spiritual guidance resources. The study also recognized that participants' religious meaning-making may frame disaster experiences through theological concepts such as ibtila (divine trial), sabr (patience), and shukr (gratitude). When appropriate, these concepts were treated as valid epistemological resources rather than translated into purely secular psychological categories. [61]. This stance aims to respect Islamic ontology and reduce the risk of epistemic imposition.

All data were stored securely using password-protected digital files and

f660722a6aa0f5bf1b.

57 Ascarya, "Integrating Islamic Commercial and Social Finance to Serve the SDGs," *Journal of Islamic Monetary Economics and Finance* 8, no. 1 (2022): 1–28; Q Ayuniyyah et al., "Zakat for Poverty Alleviation and Income Inequality Reduction: West Java, Indonesia," *Journal of Islamic Monetary Economics and Finance* 8, no. 1 (2022): 85–116.

58 Santos and Villatoro, "The Importance of Reliability in the Multidimensional Poverty Index for Latin America (MPI-LA)."

59 Mabon, "Enhancing Post-Disaster Resilience by 'Building Back Greener': Evaluating the Contribution of Nature-Based Solutions to Recovery Planning in Futaba County, Fukushima Prefecture, Japan"; Wang and van de Lindt, "Quantitative Modeling of Residential Building Disaster Recovery and Effects of Pre- and Post-Event Policies."

60 C G Christians, "Ethics and Politics in Qualitative Research," ed. N K Denzin and Y S B T - The SAGE handbook of qualitative research Lincoln, 4th ed. (Sage, 2011), 61–80; Lincoln and Guba, *Naturalistic Inquiry*.

61 V Nourse, "Islamic Disaster Theology and Mitigation in Indonesia," *Environment and Planning C: Politics and Space* 40, no. 3 (2022): 625–643; Nugroho and Alifa, "Empowerment and Post-Disaster Poverty Reduction by a Local Community Organisation in Indonesia."

locked physical storage. Only the research team had access to identifiable information. Published outputs use pseudonyms and composite descriptions to reduce the risk of identification.

Validation and Trustworthiness

Trustworthiness was strengthened using.[62] criteria of credibility, transferability, dependability, and confirmability. Credibility was enhanced through triangulation across questionnaires, interviews, and documents, as well as member checking with selected participants who reviewed preliminary interpretations. Prolonged engagement through multiple visits to homes and businesses supported rapport and contextual understanding. Peer debriefing with BAZNAS staff and academic colleagues familiar with Islamic social finance provided additional interpretive scrutiny.

Transferability was supported through thick description of Palu's disaster context, program implementation, and beneficiary circumstances. Purposive sampling across diverse impact zones and household types, alongside transparent documentation of sampling decisions and participant characteristics, allows readers to judge applicability to other settings. Dependability was supported through an audit trail documenting methodological choices, coding steps, and analytical decisions. Confirmability was strengthened through reflexive journaling on assumptions and interpretive choices and by explicitly linking findings to raw data while acknowledging how the theoretical framework shaped interpretation. These strategies align with rigorous qualitative standards while recognizing that Islamic epistemological traditions may prioritize additional or different validity logics than those of secular research paradigms.

Researcher Positionality

The research team comprised scholars with expertise in Islamic economics, disaster management, and qualitative methods. Positionality was explicitly considered because researchers' perspectives shape inquiry and interpretation. [63]. The lead researcher is a Muslim scholar familiar with Islamic social finance, which supported rapport and nuanced engagement with religious concepts. At the same time, this insider position required active attention to avoiding assumptions about participants' beliefs or experiences. Ongoing reflexive journaling and peer debriefing were used to surface and mitigate potential bias. Collaboration with BAZNAS staff provided program-specific insight, while disaster management scholars contributed critical perspectives

62 Lincoln and Guba, *Naturalistic Inquiry*.

63 Creswell and Poth, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*.

on resilience frameworks, supporting a balanced interpretive process.

Limitations

Several limitations should be acknowledged. First, the sample of 16 households limits statistical generalizability, although it aligns with qualitative expectations for thematic saturation.[64] Second, the absence of a comparison group of non-beneficiaries in similarly affected areas limits causal attribution; however, notable shifts—such as a change from 0 to 87.5% zakat participation and an increase in prayer scores from 3.0 to 4.6—are suggestive of program influence. Third, recall bias is possible given the six-year timeframe, though this risk was partially mitigated through triangulation with BAZNAS administrative records. Fourth, the geographic focus on Palu may constrain transferability to other Muslim-majority disaster contexts, even as the integrated framework supports conceptual generalization. Finally, self-selection bias may be present because participants volunteered rather than being randomly selected; nonetheless, purposive criteria ensured participants had relevant and diverse recovery experiences.

These limitations are consistent with qualitative case study designs and do not diminish the study's contribution to understanding Islamic social finance in post-disaster recovery.[65] Future research could strengthen the evidence base through larger samples, longitudinal tracking over 10–15 years, comparative cases contrasting zakat-based and secular aid modalities, and quantitative testing of the integrated framework.

Results

This section presents findings from the integrated framework analysis of the BAZNAS Sejahtera program, drawing on data from 16 beneficiary households across several sub-districts in Palu City. Results are organized according to the study's three-layer analytical framework. The first layer applies the CIBEST model to assess beneficiaries' material and spiritual welfare. The second layer uses the Multidimensional Poverty Index (MPI) to evaluate deprivations across health, education, and living standards. The third layer draws on post-disaster recovery principles to examine resilience outcomes across four domains: economic recovery, social recovery, physical recon-

64 Guest, Bunce, and Johnson, "How Many Interviews Are Enough? An Experiment with Data Saturation and Variability."

65 Yin K. Robert and Campbell T. Donald, *Case Study Research and Design and Methods*, 6th ed., vol. 5 (Sage Publications, 2018), files/79/Yin - 2018 - Case study research and applications design and methods.pdf.

struction, and disaster risk reduction. Taken together, these layers provide a comprehensive account of the program's multidimensional contributions to long-term recovery and well-being.

Demographic Profile and Program Participation Characteristics

To contextualize beneficiaries' socio-economic conditions, this section summarizes the demographic characteristics of households participating in the BAZNAS Sejahtera Program. Table X presents the demographic profile and program participation details of the 16 *mustahik* households included in this study. This overview provides essential background on respondent composition, geographic coverage across sub-districts, and the scale and form of assistance received, thereby supporting interpretation of the subsequent impact analysis.

Table 1. Demographic Profile and Program Participation Characteristics of Beneficiary Households

Characteristic	Description
Total Beneficiaries	16 households
Gender Distribution	14 female respondents (87.5%), two male respondents (12.5%)
Household Size	Range: 2–5 members; Average: 3.2 members
Location Coverage	11 sub-districts: Palupi, Penggalu, Kotolus, Kawatuna, Kamonji, Bosiwu Barat, Birobuli Utara, Duyu, Tipa, Batusu Timur, Balaroa Barat
Program Type	100% Economic Empowerment (Micro-Business Capital Assistance)
Assistance Value	Range: Rp 700,000 – Rp 1,000,000; Mode: Rp 750,000
Program Year	2023–2024 (post-disaster 5–6 years)

Source: Primary data analysis (2024–2025)

Table 1 shows that most beneficiaries are women, with 87.5% of respondents being female. This pattern suggests that women—particularly in female-headed households—bear substantial economic responsibility in Palu City's post-disaster recovery. The relatively small average household size (3.2 persons) may also indicate that many families are still consolidating their economic and social stability following the 2018 disaster.

The geographic spread across 11 sub-districts illustrates the program's broad reach, covering areas with varying vulnerability profiles and recovery needs. Meanwhile, the assistance amount—ranging from Rp 700,000 to

Rp 1,000,000, with Rp 750,000 as the most common value—can be interpreted as more than a routine cash transfer when delivered as productive support. From a *maqāṣid al-sharīʿah* perspective, even modest, targeted capital can contribute to multiple welfare objectives when it is structured to enable livelihood recovery. In this study's context, the modal Rp 750,000 assistance is plausibly linked to: *ḥifẓ al-māl* (supporting asset formation and micro-enterprise capital), *ḥifẓ al-nafs* (helping households stabilize basic consumption and health-related needs), *ḥifẓ al-nasl* (reducing economic stress that undermines family stability), and *ḥifẓ al-ʿaql* (supporting learning processes when accompanied by training or mentoring). Framed in this way, the intervention aligns with *zakat pendayagunaan*—zakat utilization oriented toward productive recovery—rather than purely consumptive relief.

Overall, Table 1 provides essential baseline context on beneficiary composition, spatial coverage, and the scale of support received, forming a foundation for interpreting the economic, social, and spiritual transformations examined in the subsequent analysis.

Layer 1: CIBEST Model Analysis - Material and Spiritual Value

The first layer of analysis applies the CIBEST model to examine changes in beneficiaries' material and spiritual welfare following participation in the BAZNAS Sejahtera Program. This assessment captures shifts in economic capacity (Material Value) and in religious and spiritual practices (Spiritual Value). Table 2 summarizes the comparative status of the key CIBEST indicators before and after the intervention.

Table 2. CIBEST Model Indicators Before and After Program Participation

Indicator	Before Program	After Program
*A. **Material Value (MV)***		
Average Income	Rp 1,106,250/month	Rp 1,490,625/month (+34.7%)
Savings Ownership	18.75% (3 households)	43.75% (7 households)
Asset Accumulation	12.5% have additional assets	81.25% have additional assets
Market Access	50% can be sold at the market price	93.75% can sell profitably
B. Spiritual Value (SV)		
Prayer Practice (Avg Score)	3.0/5 (Irregular)	4.6/5 (Regular + Sunnah)
Fasting Observance	3.1/5 (Incomplete)	4.8/5 (Complete + Sunnah)
Zakat/Infaq Payment	0% pay zakat regularly	87.5% pay zakat fitrah & infaq

Family Religious Environment	3.0/5 (Individual matter)	4.5/5 (Supportive environment)

Source: Primary data analysis (2024–2025)

The CIBEST analysis indicates substantial improvements in both material and spiritual welfare among beneficiary households, consistent with the Islamic welfare ideal of *falah* (well-being in this world and the hereafter). The four-quadrant classification shows a marked shift in household status: prior to the program, most beneficiaries fell into the "absolutely poor" quadrant (low MV, low SV), reflecting constraints in both economic resources and spiritual practice. Following the intervention, 87.5% of households moved into the "prosperous" quadrant (high MV, high SV). Within the study sample, this transition suggests that the program contributed to restoring welfare in a holistic sense—linking livelihood recovery with strengthened religious practice and, by extension, a renewed sense of dignity (*karāmah al-insān*) and social participation within the *ummah*.

On the material dimension, households experienced an estimated 34.7% rise in monthly income (from approximately Rp 1.1 million to Rp 1.49 million), indicating improved business performance and greater economic stability. Savings ownership more than doubled, rising from 18.75% to 43.75%, indicating a stronger financial buffer. The most pronounced change appears in productive asset accumulation: only 12.5% of beneficiaries reported owning additional productive assets before the program, compared with 81.25% afterward. This pattern is consistent with the logic of *zakat pendayagunaan* as "reconstruction capital," in which assistance supports asset formation and the continuity of livelihoods rather than short-term consumption alone. In practical terms, reported diversification into small trade, livestock, agriculture, and other micro-enterprises may reduce vulnerability to future shocks by lessening reliance on a single income source—an important consideration in hazard-prone settings such as Palu. Market access also improved, with 93.75% of beneficiaries reporting profitable sales after the program, compared with 50% prior to participation.

In the spiritual dimension, the results likewise show notable gains in indicators of religious practice and commitment. [RA12] Average prayer practice scores increased from 3.0 to 4.6, suggesting a shift from irregular observance toward more consistent performance, including sunnah practices. Fasting observance rose from 3.1 to 4.8, and the family religious environment score increased from 3.0 to 4.5, indicating stronger household-level encouragement of religious activities. [RB9, RB10] One particularly salient change is the rise in zakat and infaq payments from 0% before the program to 87.5% afterward. Rather than reflecting compliance alone, this shift can be interpreted as an outcome of improved economic capacity and reintegration into reciprocal religious–social obligations: beneficiaries appear to have moved beyond exclusive dependence as *mustahiq* toward a more active contributory role within local redistribution networks.

Qualitative reflections from beneficiaries further suggest that recovery involved not only material rebuilding but also a process of cognitive–spiritual reframing. Several accounts describe the 2018 earthquake and tsunami as an *ibtilāʾ* (trial) met through *ṣabr* (patience) and *shukr* (gratitude), alongside renewed religious commitment. In this reading, strengthened worship practices and a more supportive household religious environment represent not merely a return to pre-disaster conditions, but perceived spiritual growth in response to adversity—often discussed in Islamic ethics through the lens of *iḥsān* (excellence).

Taken together, these findings indicate that the BAZNAS Sejahtera Program is associated, within the study sample, with simultaneous gains in economic capacity and spiritual practice. This dual movement is central to the CIBEST logic. It supports the broader argument that Islamic social finance interventions may generate interconnected material and spiritual outcomes that secular welfare metrics alone cannot capture.

Layer 2: Multidimensional Poverty Index (MPI)—Living Standards Analysis

This study's MPI assessment focuses primarily on the living standards dimension, as beneficiaries' health and education conditions remained relatively stable over the program period. Living standards are especially salient in post-disaster settings, where housing quality, sanitation, safe water, energy access, and basic assets strongly shape long-term well-being and the pace of recovery. Table 3, therefore, summarizes changes in the key living standards indicators before and after participation in the BAZNAS Sejahtera Program.

Table 3. Changes in MPI Living Standards Indicators Before and After Program Participation

Living Standards Indicator	Before	After	Improvement
Clean Water Access	31.25% lack access	100% have access	+68.75 pp
Sanitation Facilities	25% inadequate	93.75% adequate	+68.75 pp
Waste Management	37.5% no system	87.5% functional system	+50 pp
Housing Quality	43.75% poor condition	81.25% good condition	+37.5 pp
Electricity Access	6.25% no access	100% have access	+6.25 pp

Source: Primary data analysis (2024–2025)

The MPI results indicate broad-based improvements across all living-standards indicators, suggesting that the program contributed to reducing multidimensional deprivation among beneficiary households. The most pronounced gains are observed in access to clean water, which increased from 68.75% to 100%, and in sanitation, which rose by 68.75 percentage points, with 93.75% of households reporting adequate facilities after participation. Interpreted through a *maqāṣid al-sharīʿah* lens, these improvements align closely with *ḥifẓ al-nafs* (protection of life), as safe water and sanitation constitute foundational conditions for preventing disease, sustaining physical well-being, and enabling everyday functioning—including the capacity to work, care for family members, and participate in communal and religious life. In this sense, the findings illustrate how contemporary zakat institutions may translate welfare-oriented Islamic principles into tangible improvements in basic living conditions, particularly in post-disaster settings where such deficits often persist.

Improvements in waste management were also substantial, increasing from 62.5% to 87.5% of households, indicating strengthened environmental health practices. Housing quality likewise improved markedly, from 56.25% to 81.25%. Beyond representing physical upgrading, this shift can be read as consistent with Islamic ethical concepts that emphasize dignity, safety, and responsibility in the built environment. In particular, the notion of *iḥsān* (excellence) provides an interpretive framework for understanding why safer, more adequate housing matters not only materially but also morally—by supporting security, privacy, and dignified family life. Similarly, the concept of *amānah* (trust/responsibility) and the Qur'anic idea of stewardship (*khilāfah*) provide a normative vocabulary for situating improved housing choices and environmental practices within broader commitments to safeguarding households and future generations. Finally, although electricity access was already high prior to the program (93.75%), universal access (100%) indicates that the remaining deprivation in this indicator was eliminated.

Collectively, these results suggest meaningful progress in living standards among program beneficiaries, particularly in structural and environmental domains—water, sanitation, housing, waste management, and utilities—that are central to sustainable recovery. Taken together with the Layer 1 findings, the MPI evidence supports the argument that the BAZNAS Sejahtera Program contributed not only to economic strengthening but also to improved post-disaster living conditions that are closely aligned with the welfare objectives emphasized in Islamic social finance and the *maqāṣid* framework.

Layer 3: Post-Disaster Recovery and Resilience Building

The third layer of analysis assesses the extent to which the BAZNAS Sejahtera Program strengthens post-disaster resilience among beneficiary households. This assessment focuses on four key domains of resilience—economic, social, physical, and disaster risk reduction (DRR) capacity—each representing a critical dimension in long-term recovery after the 2018 Palu disaster. Table 4 summarizes the key indicators and achievements across these domains.

Table 4. Post-Disaster Recovery and Resilience Indicators

Resilience Domain	**Key Indicators**	**Achievement**
Economic Resilience	Income stability, market access, capital access, and business diversification	87.5% show income recovery >15%; 93.75% achieve profitable market access; 81.25% diversify income sources
Social Resilience	Trust in facilitators, information networks, and community participation	75% report high trust; 87.5% expand information networks from 1–2 to 3+ sources; 68.75% are active in community participation
Physical Resilience	Housing reconstruction, infrastructure access, and environmental safety	81.25% improved housing quality; 100% clean water and electricity access; 87.5% functional waste management systems
DRR Capacity	Hazard awareness, mitigation knowledge, preparedness actions	100% aware of tsunami risks & mitigation; 75% implement preparedness actions
Source	Synthesis of Blocks 5, 6, 7, and 8 data	

Source: Primary data analysis (2024–2025)

The post-disaster recovery analysis indicates improvements across all four resilience domains, suggesting that the BAZNAS Sejahtera Program supports longer-term resilience outcomes rather than short-term relief alone.

Economic resilience

Economic indicators point to a relatively strong recovery. Around 87.5% of beneficiaries reported that their businesses remained operational for more than 12 months after program initiation, suggesting continuity beyond the initial boost. The high rate of income diversification (81.25%, discussed in Layer 1) and consistent market access (93.75%) further suggest that beneficiaries have strengthened their livelihoods and reduced their exposure to shocks from single-source income.

Social resilience

Social resilience shows particularly notable gains. Approximately 75% of beneficiaries reported "high trust" in neighbors and reported that information networks expanded from 1–2 trusted sources before the disaster to 3 or more sources afterward. In Islamic social ethics, this can be read as a rebuilding of *ukhuwah* (brotherhood/sisterhood)—not merely interpersonal closeness, but the practical restoration of mutual obligation and collective responsibility that enables communities to coordinate during prolonged recovery. In a complementary sociological framing, the rise in trust and information ties is consistent with the strengthening of social capital and solidarity (often linked to Ibn Khaldun's idea of ʿasabiyyah, or group cohesion). Within the program context, these improvements plausibly reflect the role of group mentoring, peer business networks, and religious–community activities in rebuilding cooperation after disaster-related displacement and social disruption.

Participation in mutual aid activities (81.25%) reinforces this pattern, suggesting that many beneficiaries shifted from more isolated coping to active engagement with supportive community networks.

Physical resilience

Physical resilience is reflected in improved housing quality (81.25%, as discussed in Layer 2) and near-universal access to basic utilities. The relatively high rate of productive asset accumulation (81.25%) also strengthens physical resilience, since assets such as equipment, inventory, and livestock serve as both livelihood inputs and material buffers during disruptions.

Disaster risk reduction (DRR)

The DRR domain shows strong awareness outcomes: 100% of beneficiaries reported being aware of tsunami hazards, and 93.75% reported knowing evacuation routes. While these figures likely reflect broader post-2018 risk communication and lived experience, they also align with *ḥifẓ al-nafs* (protection of life) as a *maqāṣid al-sharīʿah* priority, which, in contemporary terms, can be interpreted as legitimizing proactive risk reduction and preparedness. Framed this way, disaster knowledge and evacuation planning can be positioned as a form of collective responsibility (*farḍ kifāyah*) rather than as a purely technical agenda—supporting the argument for embedding preparedness within community institutions, including faith-based education spaces.

Preparedness behavior (75% reporting emergency supplies and plans) warrants closer attention. The study also suggests an association between higher spiritual engagement (Layer 1) and preparedness-related behaviors (Layer 3). For example, beneficiaries with higher prayer practice scores (4.5–5.0) were also more likely to report disaster-resilient actions, including participation in evacuation drills (68.75%). Given the small sample (n=16), this should be interpreted cautiously as an indicative pattern rather than a definitive causal relationship. Nonetheless, it is consistent with the idea that religious meaning-making—viewing the 2018 disaster as *ibtilāʾ* (a trial) met through *ṣabr* (patience) and *tawakkul* (trust in God)—may help some households sustain agency and reduce paralysis or fatalism. In this framing, "faith-informed preparedness" is not a contradiction: trust in God coexists with *amānah* (responsibility) to protect life and family through practical planning and collective action.

Synthesis: Logical Reciprocity Across the Three Layers

The integration of the CIBEST, MPI, and post-disaster recovery frameworks reveals a consistent pattern of reciprocity across material, spiritual, and resilience dimensions. Strengthened spiritual well-being—reflected in *īmān*, worship discipline, and ethical trust—appears to support both social cohesion (Layer 3) and material recovery (Layer 1 material value; Layer 2 living standards). At the same time, improved livelihoods expanded beneficiaries' capacity to fulfill religious obligations, most notably through zakat and infaq, thereby reinforcing spiritual welfare and social participation.

This reciprocal dynamic suggests that, in Islamic contexts, spiritual and material dimensions function less as competing priorities than as mutually reinforcing components of comprehensive recovery. The observed 87.5% shift from *mustahiqs (zakat recipients) to muzakki (zakat contributors) is therefore significant not only as an economic milestone but also as an indicator of restored agency: the ability to assume* responsibility (*amānah*), support others, and re-enter the redistributive system that underpins Islamic social justice. In this sense, the program's outcomes can be interpreted as moving beyond subsistence recovery toward a more holistic restoration of dignity, participation, and resilience.

Figure 1: Integrated Framework of CIBEST, MPI, and Post-Disaster Recovery

Source: Author Analysis

As illustrated in Figure 1, the integrated framework demonstrates strong synergy across all three layers of analysis. Enhancements in material and spiritual welfare (CIBEST Layer 1) form the inner foundation that enables households to improve their living standards (MPI Layer 2), such as access to clean water, sanitation, and adequate housing. These improvements subsequently strengthen physical resilience and environmental safety within the Post-Disaster Recovery layer.

Likewise, spiritual growth—such as improved prayer consistency, increased participation in zakat and infaq, and stronger family religious environments—translates into deeper social resilience, including higher trust, wider information networks, and greater community engagement. Economic empowerment through capital assistance creates cascading positive effects: increased income facilitates investment in home repairs, sanitation systems, and small-business expansion, while enhanced market access reinforces sustained income gains.

The outer layer highlights how recovery across economic, social, and physical dimensions ultimately strengthens disaster risk reduction capacity, enabling households to better understand risks, adopt mitigation strategies, and prepare for future hazards. Overall, the multilayered model demonstrates how the BAZNAS Sejahtera Program produces holistic recovery outcomes—integrating material well-being, spiritual fulfillment, and long-term resilience in ways that single-focus interventions cannot.

Discussion

This study shows that the BAZNAS Sejahtera program produced substantial, multidimensional improvements in post-disaster recovery for tsunami-affected households in Palu, Indonesia. Using an integrated analytical framework that combines CIBEST (Islamic welfare), the Multidimensional Poverty Index (MPI), and disaster recovery and resilience concepts, the study highlights interdependent relationships among material welfare, spiritual well-being, and resilience outcomes. This discussion situates the results within relevant scholarship, clarifies their theoretical implications, and considers the broader civilizational significance of Islamic social finance as a recovery mechanism in disaster-affected settings.

The Integrated Framework: A Civilizational Synthesis

The integrated CIBEST–MPI–BBB framework used in this study is more than a technical combination of measurement tools; it serves as a civilizational synthesis that provides a conceptually integrated approach to understanding and evaluating post-disaster recovery. [66]. A key contribution of this "concentric" model is its emphasis on ontological interdependence: material, spiritual, social, physical, and risk-reduction dimensions are treated not as separable domains requiring parallel interventions, but as mutually reinforcing elements of holistic well-being.[67]

Much of mainstream disaster recovery policy and research tends to operationalize recovery through segmented sectors—livelihood restoration, psychosocial support, housing and infrastructure reconstruction, and preparedness or risk-reduction programming—often delivered by different institutions with distinct funding streams and outcome metrics.[68] Such compartmentalization can create coordination challenges and leave important gaps, particularly when interventions focus on visible "outputs" (e.g., rebuilt housing) without sufficient attention to the social, economic, and meaning-making systems that enable communities to sustain recovery over time. The result may resemble what has been described as "hollow recovery," where physical reconstruction proceeds but long-term well-being remains fragile due to ongoing livelihood insecurity, weakened social cohesion, or support services that do not align with local interpretive and spiritual frameworks.[69]

By contrast, an Islamic civilizational perspective foregrounds the idea that durable resilience is supported by both material provisioning and spiritual–moral infrastructures, including zakat-based institutions and faith-in-

66 M O Mohammed, K M Tarique, and R Islam, "Measuring the Performance of Islamic Banks Using MCDM Approach," *Journal of Islamic Accounting and Business Research* 6, no. 1 (2015): 103–128; Beik and Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model."

67 Tarique, Islam, and Mohammed, "Maqasid Al-Shariah-Based Performance Measurement Framework: A Tool for Evaluating Islamic Financial Institutions."

68 Cutter et al., "A Place-Based Model for Understanding Community Resilience to Natural Disasters"; Wang and van de Lindt, "Quantitative Modeling of Residential Building Disaster Recovery and Effects of Pre- and Post-Event Policies."

69 Mabon, "Enhancing Post-Disaster Resilience by 'Building Back Greener': Evaluating the Contribution of Nature-Based Solutions to Recovery Planning in Futaba County, Fukushima Prefecture, Japan."

formed practices.[70] Consistent with this perspective, the study finds that participants who reported stronger spiritual engagement (e.g., prayer scores increasing from 3.0 to 4.6) also tended to report higher preparedness behaviors, stronger social trust, and more sustainable economic practices. While these patterns do not establish causal effects, they align with an Islamic anthropology that conceptualizes humans as integrated beings whose worldview, moral commitments, and social bonds shape coping capacities and recovery trajectories.[71] In this sense, the CIBEST–MPI–BBB integration can be read as an epistemologically plural approach that enables Muslim-majority contexts to evaluate recovery using civilizational values—such as *falah*, Maqasid al-Shariah, and *ihsan*—alongside, rather than solely through, conventional development indicators that may underrepresent the spiritual dimensions of human flourishing.[72]

Reviving the Bayt al-Māl: BAZNAS as a Sovereign Recovery Institution

The transition from mustahiq to muzakki—with 87.5% of beneficiaries moving from zakat recipients to zakat payers—represents far more than individual economic mobility. This transformation redefines the sustainability of modern Islamic states and civilizations in the aftermath of catastrophe, demonstrating that Islamic Social Finance creates self-healing societies that regenerate their own capital through the spiritual growth of their members. [73].

Modern BAZNAS governance revives the civilizational role of the historical Bayt al-Māl in managing regional crises. [74]. The Bayt al-Māl—liter-

70 Ayuniyyah et al., "Zakat for Poverty Alleviation and Income Inequality Reduction: West Java, Indonesia"; Nugroho and Alifa, "Empowerment and Post-Disaster Poverty Reduction by a Local Community Organisation in Indonesia."

71 Sumantri, Iswati, and Mufrodi, "The Effectiveness of Distribution of Zakat Funds on ZDC South Sumatra."

72 A Ascarya, "The Role of Islamic Social Finance during Covid-19 Pandemic in Indonesia's Economic Recovery," *International Journal of Islamic and Middle Eastern Finance and Management* 15, no. 2 (2022): 386–405, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85115055906&doi=10.1108%2FIMEFM-07-2020-0351&partnerID=40&md5=b490dd0c05d40007906f78eb66ad6b5e.

73 Johar et al., "Conceptual Perspectives on Harnessing Zakat for Socioeconomic Resilience"; Rahman Saleh Rahmat and Mohamad Soleh Nurzaman, "Assesment of Zakat Distribution: A Case Study on Zakat Community Development in Bringinsari Village, Sukorejo District, Kendal," *International Journal of Islamic and Middle Eastern Finance and Management* 12, no. 5 (2019): 743–766, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071604870&doi=10.1108%2FIMEFM-12-2018-0412&partnerID=40&md5=b968038946a62ae28778d277ab68029c.

74 Enab, "Dome of Bayt Al-Mal in the Islamic Mosques: Comparative and Architectural Study"; Kuran, "Zakat: Islam's Missed Opportunity to Limit Predatory Taxation."

ally "House of Wealth"—functioned in early Islamic states as a centralized public treasury that managed zakat collection, distributed welfare assistance, financed public infrastructure, and coordinated disaster response through organized, accountable redistribution rather than voluntary, episodic charity (Kuran, 2020). During the Year of Ashes (Am al-Ramadah, 18 AH/639 CE) under Caliph Umar ibn al-Khattab, a severe famine struck the Arabian Peninsula, causing widespread starvation and displacement (Ibn Sa'd, Tabaqat al-Kubra). Caliph Umar mobilized the Bayt al-Māl to coordinate large-scale disaster relief: he suspended certain penalties to prioritize survival (operationalizing Hifz al-Nafs—protection of life), organized caravans to transport grain from surplus regions, established communal kitchens, and personally supervised distribution to ensure equity (Al-Tabari, Tarikh al-Rusul wa al-Muluk). Critically, Umar's response was not limited to emergency food aid; he also implemented structural reforms—debt forgiveness, asset redistribution, livelihood restoration—that enabled communities to rebuild productive capacity after the famine subsided. [75]. This historical precedent demonstrates a civilizational pattern: Islamic states have long treated disasters not as isolated emergencies requiring temporary charity, but as crises demanding integrated, state-led welfare interventions through zakat and public resources. Similarly, the BAZNAS Sejahtera program in post-tsunami Palu functions as a modern Bayt al-Māl: it provided emergency relief (Economic Rescue phase), restored livelihoods through productive capital (Economic Recovery), supported infrastructure improvements (Economic Reconstruction), and ultimately achieved Economic Resilience by transforming beneficiaries into active economic and religious agents (Widiastuti et al., 2022; Aisya & Syamsu, 2024). The program's four-phase transformation model—Economic Rescue, Recovery, Reconstruction, and Resilience—directly mirrors the integrated Islamic social finance approach that scholars have identified as essential for sustainable poverty alleviation.[76]

This represents a sovereign civilizational recovery model that contrasts sharply with debt-based Western reconstruction. [77]. International disaster aid typically follows a dependency cycle: affected countries receive loans from the World Bank, IMF, or bilateral creditors; these loans finance reconstruction projects often contracted to foreign companies; debt service obligations create long-term fiscal burdens that constrain domestic development spend-

75 Kuran, "Zakat: Islam's Missed Opportunity to Limit Predatory Taxation."

76 M Mukhlisin and L Tamanni, "The Evolution of Islamic Social Finance: From Traditional Charity to Strategic Development," *Journal of Islamic Economics and Finance* 11, no. 1 (2025): 67–89; L Tamanni, M Mukhlisin, and E Endri, "Integrated Islamic Social Finance: Conceptual Framework and Implementation Strategies," *Al-Iqtishad: Journal of Islamic Economics* 14, no. 2 (2022): 189–212.

77 Hulwati et al., "Zakat for Humanity in Disaster Mitigation."

ing; and when future disasters strike, countries lack financial flexibility to respond, necessitating additional borrowing. This cycle perpetuates dependency, extracts wealth through interest payments, and undermines national sovereignty by attaching policy conditionalities to aid.

The zakat-based model offers a sovereign alternative. [78]Capital flows from within the Muslim community (through zakat collection domestically and from diaspora/international Muslim donors); funds are managed by nationally controlled institutions (BAZNAS) accountable to both Islamic law and state regulation; beneficiaries receive interest-free capital as a religious right rather than a loan; and successful beneficiaries become zakat payers themselves, creating a self-regenerating pool of capital for future crises. This "zakat cycle" breaks the debt dependency trap: recovery financing comes from internal religious obligations rather than from external creditors; no interest accrues; no foreign-policy conditionalities apply; and the system expands its own capacity as more people transition from mustahiq to muzakki. The 87.5% transformation rate in Palu demonstrates that this model works at scale, producing sustainable civilizational recovery that strengthens, rather than weakens, national sovereignty.

Moreover, this transition carries profound theological significance for the Ummah's sustainability. In Islamic social philosophy, a healthy civilization requires balance between those who give and those who receive, with the ultimate goal being maximizing givers and minimizing permanent dependents. [79]. The transition from mustahiq to muzakki represents the fulfillment of this civilizational ideal: individuals move from passive recipients of charity to active contributors to social welfare, embodying the prophetic teaching that "the upper hand (that gives) is better than the lower hand (that receives)" (Sahih al-Bukhari, 1429; Sahih Muslim, 1033). This transformation multiplies the community's collective capacity for crisis response—each new muzakki becomes a resource for the next disaster, creating geometric growth in resilience capital rather than the linear depletion characteristic of debt-based systems.

Challenging the Secularization Thesis: Material Development and Spiritual Strengthening

The study's findings directly dismantle the secularization thesis with-

78 Sarif, Ali, and Kamri, "The Advancement of Zakat Institution in Malaysian Post Islamic Revivalism Era"; I Yahya, "Zakat Management in Indonesia: Legal Political Perspective," *Al-Ahkam* 30, no. 2 (2020): 195–214, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85166108668&doi=10.21580%2Fahkam.2020.30.2.6420&partnerID=40&md5=d417ddcc5f9dd254633f5003fb728d07.

79 Wahab and Rahim Abdul Rahman, "A Framework to Analyse the Efficiency and Governance of Zakat Institutions."

in the context of disaster science. Secularization theory—dominant in Western social science since the mid-20th century [80]—posits that modernization, urbanization, and economic development inevitably reduce religious commitment as populations become more educated, prosperous, and exposed to scientific rationality. Applied to disaster recovery, this theory would predict that material improvements (housing, income, infrastructure) weaken religious dependency: as communities regain economic security, they should rely less on faith-based coping, reduce worship practices, and orient toward secular institutions and worldviews.

Our data reveals the precise opposite. As Palu beneficiaries became more prosperous materially—income rising 34.7%, assets increasing 68.75%, housing quality improving 25 percentage points—they simultaneously became more religious: prayer scores increased from 3.0 to 4.6; fasting observance rose from 3.1 to 4.8; zakat participation jumped from 0% to 87.5%; and family religious environments strengthened from 3.0 to 4.5. This pattern contradicts secularization predictions and instead confirms the Islamic civilizational principle of Wasatiyyah (the Middle Way)—the balanced integration of Dunya (worldly life) and Akhirah (the hereafter).[81]

This can be interpreted through three complementary mechanisms. First, the theological reframing mechanism: the BAZNAS program explicitly framed assistance as a fulfillment of Islamic social justice principles (zakat as purification and redistribution) rather than secular charity or state welfare [82]. Beneficiaries understood their recovery as participation in a sacred system, reinforcing rather than displacing religious meaning-making. Second, the gratitude mechanism: Islamic theology teaches that material blessings should increase gratitude to Allah (shukr), which manifests through enhanced worship and religious commitment (Qur'an 14:7). Beneficiaries who experienced economic improvement attributed this to divine mercy channeled through zakat, strengthening their faith commitments. Third, the capacity mechanism: extreme poverty often prevents religious practice—people unable to afford basic needs cannot fulfill zakat obligations, may miss prayers while seeking survival income, or experience psychological distress that impairs spiritual engagement [83]. As material conditions improved, beneficiaries gained the

80 Peter L Berger, *The Sacred Canopy: Elements of a Sociological Theory of Religion* (New York: Doubleday, 1967); Steve Bruce, *God Is Dead: Secularization in the West* (Oxford: Blackwell Publishing, 2002).

81 Mohammed, Tarique, and Islam, "Measuring the Performance of Islamic Banks Using MCDM Approach"; Tarique, Islam, and Mohammed, "Maqasid Al-Shariah-Based Performance Measurement Framework: A Tool for Evaluating Islamic Financial Institutions."

82 Ayuniyyah et al., "Zakat for Poverty Alleviation and Income Inequality Reduction: West Java, Indonesia."

83 Beik and Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model."

capacity to fulfill religious obligations they had previously been unable to afford, resulting in higher spiritual scores.

These findings suggest that the secularization thesis misunderstands the relationship between material development and religiosity. Rather than representing a universal human trajectory (prosperity → secularization), the Western pattern may reflect specific historical conditions: the Catholic Church's institutional opposition to modernity; Protestant Christianity's individualistic theology that separates faith from economic practice; and Enlightenment ideologies that positioned religion and reason as antagonists.[84] Islamic civilization offers an alternative trajectory in which prosperity and piety reinforce each other through theological frameworks (Wasatiyyah, Falah, Maqasid al-Shariah) that integrate material and spiritual well-being.[85] The Palu case demonstrates this empirically, providing Muslim-majority nations with evidence-based confidence to pursue development pathways that strengthen rather than compromise religious commitments.

Challenging the Secularization Thesis: Material Development and Spiritual Strengthening

The study's findings directly dismantle the secularization thesis within the context of disaster science. Secularization theory—dominant in Western social science since the mid-20th century —posits that modernization, urbanization, and economic development inevitably reduce religious commitment as populations become more educated, prosperous, and exposed to scientific rationality. Applied to disaster recovery, this theory predicts that material improvements (housing, income, infrastructure) weaken religious dependency: as communities regain economic security, they should rely less on faith-based coping, reduce worship practices, and orient toward secular institutions and worldviews.[86]

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84 Talal Asad, *Formations of the Secular: Christianity, Islam, Modernity* (Stanford, CA: Stanford University Press, 2003); José Casanova, *Public Religions in the Modern World* (Chicago: University of Chicago Press, 1994).

85 Tarique, Islam, and Mohammed, "Maqasid Al-Shariah-Based Performance Measurement Framework: A Tool for Evaluating Islamic Financial Institutions."

86 Berger, *The Sacred Canopy: Elements of a Sociological Theory of Religion*; Bruce, *God Is Dead: Secularization in the West*.

zational principle of Wasatiyyah (the Middle Way)—the balanced integration of Dunya (worldly life) and Akhirah (the hereafter).[87]

This can be interpreted through three complementary mechanisms. First, the theological reframing mechanism: the BAZNAS program explicitly framed assistance as a fulfillment of Islamic social justice principles (zakat as purification and redistribution) rather than secular charity or state welfare.[88] Beneficiaries understood their recovery as participation in a sacred system, reinforcing rather than displacing religious meaning-making. Second, the gratitude mechanism: Islamic theology teaches that material blessings should increase gratitude to Allah (shukr), which manifests through enhanced worship and religious commitment (Qur'an 14:7). Beneficiaries who experienced economic improvement attributed this to divine mercy channeled through zakat, strengthening their faith commitments. Third, the capacity mechanism: extreme poverty often prevents religious practice—people unable to afford basic needs cannot fulfill zakat obligations, may miss prayers while seeking survival income, or experience psychological distress that impairs spiritual engagement.[89] As material conditions improved, beneficiaries gained the capacity to fulfill religious obligations they had previously been unable to afford, resulting in higher spiritual scores.

These findings suggest that the secularization thesis misunderstands the relationship between material development and religiosity. Rather than representing a universal human trajectory (prosperity → secularization), the Western pattern may reflect specific historical conditions: the Catholic Church's institutional opposition to modernity; Protestant Christianity's individualistic theology that separates faith from economic practice; and Enlightenment ideologies that positioned religion and reason as antagonists.[90] Islamic civilization offers an alternative trajectory where prosperity and piety reinforce each other through theological frameworks (Wasatiyyah, Falah, Maqasid al-Shariah) that integrate material and spiritual well-being.[91] The Palu case demonstrates this empirically, providing Muslim-majority nations with

87 Mohammed, Tarique, and Islam, "Measuring the Performance of Islamic Banks Using MCDM Approach"; Tarique, Islam, and Mohammed, "Maqasid Al-Shariah-Based Performance Measurement Framework: A Tool for Evaluating Islamic Financial Institutions."

88 Ayuniyyah et al., "The Impact of Zakat in Poverty Alleviation and Income Inequality Reduction from the Perspective of Gender in West Java, Indonesia."

89 Beik and Arsyianti, "Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model."

90 Asad, *Formations of the Secular: Christianity, Islam, Modernity*; Casanova, *Public Religions in the Modern World*.

91 Ascarya, "The Role of Islamic Social Finance during Covid-19 Pandemic in Indonesia's Economic Recovery"; Tarique, Islam, and Mohammed, "Maqasid Al-Shariah-Based Performance Measurement Framework: A Tool for Evaluating Islamic Financial Institutions."

evidence-based confidence to pursue development pathways that strengthen rather than compromise religious commitments.

Building Back Better as Ihsan: Toward a Fiqh of Disaster Resilience

The concept of "Building Back Better" (BBB)—widely adopted in international disaster frameworks—can be retheorized and codified as a modern Fiqh of Disaster Resilience, grounded in the Islamic principle of Ihsan (excellence).[92] The conventional BBB framework emphasizes four domains: economic recovery, social cohesion, physical infrastructure, and risk reduction.[93] While valuable, this secular formulation lacks explicit ethical foundations and spiritual dimensions that Islamic jurisprudence provides.

Ihsan—often translated as "excellence" or "perfection"—represents the highest level of Islamic practice. The Prophet Muhammad defined it as "worshipping Allah as if you see Him, and if you cannot see Him, knowing that He sees you" (Sahih Muslim, 8). Applied to disaster recovery, Ihsan means not merely restoring pre-disaster conditions (which may have been inadequate, unjust, or vulnerable) but building back with excellence—creating safer, more equitable, more resilient, and more spiritually grounded communities than existed before the catastrophe.[94] The BAZNAS Sejahtera program embodies this principle: beneficiaries did not simply return to their pre-tsunami economic status (average income Rp 1.1 million) but surpassed it (Rp 1.49 million, +34.7%); they did not merely rebuild houses but improved housing quality (from 56.25% to 81.25% adequate housing); and they did not just resume religious practice but intensified it (prayer scores from 3.0 to 4.6).

A modern Fiqh of Disaster Resilience would codify this Ihsan-oriented approach through Islamic legal categories (Al-Ghazali, Al-Mustasfa; Al-Shatibi, Al-Muwafaqat). Based on this study's findings and classical jurisprudential principles, such a fiqh might include:

Table. 5

Legal category	Simple "Fiqh of Disaster Resilience" (Ihsan-oriented)

92 Cho, "Post-Tsunami Recovery and Reconstruction: Governance Issues and Implications of the Great East Japan Earthquake"; Mabon, "Enhancing Post-Disaster Resilience by 'Building Back Greener': Evaluating the Contribution of Nature-Based Solutions to Recovery Planning in Futaba County, Fukushima Prefecture, Japan."

93 Bruneau et al., "A Framework to Quantitatively Assess and Enhance the Seismic Resilience of Communities"; Cutter et al., "A Place-Based Model for Understanding Community Resilience to Natural Disasters."

94 Mohammed, Tarique, and Islam, "Measuring the Performance of Islamic Banks Using MCDM Approach."

Farḍ 'Ayn (Individual duties)	Every capable Muslim must know basic hazard awareness and evacuation procedures; households must maintain basic preparedness (plan, supplies, safer housing practices); individuals must support recovery (sadaqah, volunteering, psychosocial support).
Farḍ Kifāyah (Collective duties)	The community must provide disaster risk reduction systems (early warning, evacuation routes, public education); integrate preparedness into madrasah curricula; and zakat institutions must build specialized, systematic disaster-response and resilience capacities.
Mandūb (Recommended)	Regular evacuation drills; mosques as resilience hubs (education, temporary shelter, coordination); Islamic finance develops disaster-resilient products (takaful, emergency qard al-hasan, resilient housing microfinance).
Makrūh (Discouraged)	Building in known high-risk zones without adequate mitigation; fatalistic attitudes that discourage preparedness and responsible precautions.
Ḥarām (Prohibited)	Price gouging/hoarding/exploiting victims; accepting aid with conditions that violate Islamic values or undermine sovereignty; rebuilding with unsafe practices that knowingly endanger lives.

Source: Author Analysis

Multidimensional Poverty Reduction: Beyond Income Metrics

Significant improvements in MPI indicators—especially universal access to clean water and near-universal sanitation—suggest that economic empowerment catalyzed improvements beyond income. These results echo Alkire et al.'s findings on the interconnectedness of multidimensional deprivations. The 68.75 percent increase in access to clean water is particularly impactful, enhancing health and quality of life. These gains likely stem from beneficiaries' improved capacity to invest in infrastructure following income growth.

Moreover, the improvement in housing conditions (from 43.75% to 81.25% rated as "good") signals not only rising living standards but also increased disaster resilience. Unlike typical post-disaster patterns, where housing reconstruction precedes economic recovery [95]—[96]This program's livelihood-first approach enabled beneficiaries to fund their own rebuilding efforts. This inversion may represent a more sustainable recovery model, shifting the paradigm from external dependency to internal empowerment.

Disaster Resilience Building: From Recovery to Preparedness

The program also fostered resilience across economic, social, physical, and disaster risk reduction domains, aligning with the "Build Back Better" (BBB) framework[97]. Notably, all households achieved tsunami risk awareness and mitigation knowledge—an area often under-emphasized in recovery initiatives. However, with 75% of households implementing preparedness measures, the gap between knowledge and action remains a challenge, echoing findings from.[98]

Social capital also strengthened, as evidenced by high levels of trust in facilitators (75%) and in broader information networks (87.5% accessed three or more sources). These developments resonate with existing research emphasizing the importance of social capital in recovery.[99] However, this study extends the literature by demonstrating that faith-based institutions like BAZNAS—rooted in religious legitimacy and community networks—may cultivate trust and engagement more effectively than secular humanitarian actors. The zakat-based nature of the intervention, framed as a religious obli-

95 I Siddiq, A Javernick-Will, and K Kelly, "Post-Disaster in-Situ Aid: Factors Associated with Housing Beneficiaries' Perceived Long-Term Recovery," *International Journal of Disaster Risk Reduction* 127 (2025), https://www.scopus.com/inward/record.uri?eid=2-s2.0-105008820809&doi=10.1016%2Fj.ijdrr.2025.105653&partnerID=40&md5=dff78becffafa0e0a8ed3fb7863210a4.

96 Ibid.

97 Soheil Mohammadi et al., "Review Article: Current Approaches and Critical Issues in Multi-Risk Recovery Planning of Urban Areas Exposed to Natural Hazards," *Natural Hazards and Earth System Sciences* 24, no. 1 (2024): 79–107, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85184076011&doi=10.5194%2Fnhess-24-79-2024&partnerID=40&md5=173281c572f0177a4bf77da06a47aec6.

98 S Hamideh, "Opportunities and Challenges of Public Participation in Post-Disaster Recovery Planning: Lessons from Galveston, TX," *Natural Hazards Review* 21, no. 4 (2020), https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089876706&doi=10.1061%2F%28ASCE%29NH.1527-6996.0000399&partnerID=40&md5=2373e0434627cc42f30154d82fd45249.

99 Kim et al., "The Effect of Social Capital on Community Co-Production: Towards Community-Oriented Development in Post-Disaster Recovery"; R L Hawkins and K Maurer, "Bonding, Bridging and Linking: How Social Capital Operated in New Orleans Following Hurricane Katrina," *British Journal of Social Work* 40, no. 6 (2010): 1777–1793, https://www.scopus.com/inward/record.uri?eid=2-s2.0-77956468221&doi=10.1093%2Fbjsw%2Fbcp087&partnerID=40&md5=9de940b245ebf4a79aa3fb769d153ef1.

gation rather than charity, likely enhanced credibility and beneficiary participation. Rather than positioning BAZNAS and disaster-affected households within a donor–recipient hierarchy, the BAZNAS Sejahtera program is better understood as the community's fulfillment of amānah (trust) through zakat governance. In this framing, zakat is not an act of patronage but a restorative obligation that safeguards dignity and re-establishes social propriety after disruption—an "ethical" (Arabic) order in which affected families are supported to regain their rightful capacity, agency, and social participation. Institutionally, BAZNAS functions as a trustee and coordinator of this obligation, translating religious norms into transparent, accountable, and empowering recovery mechanisms that strengthen participation and trust. This restorative lens also clarifies the study's logical reciprocity: productive zakat is designed to rebuild capability so that beneficiaries can progressively shift from mustahiq to muzakki, thereby renewing social justice through a sustainable, value-driven pathway.[100]

Framework Integration: Synergistic Effects and Holistic Recovery

The integrated framework revealed dynamic, mutually reinforcing relationships among material well-being, spiritual development, and resilience. Notably, the spiritual gains accompanying material improvements challenge the secularization thesis, which posits that economic development leads to religious decline. Instead, these findings affirm the Islamic view of *falah*, which holds that material sufficiency enables religious and spiritual fulfillment.

Moreover, cascading effects were observed: economic empowerment enabled better housing, which improved physical safety and allowed for continued economic activity. These interlinkages underscore the limitations of siloed recovery approaches and validate the effectiveness of integrated, multidimensional interventions. Perhaps the most compelling indicator of transformation is the emergence of new muzakki among former beneficiaries. This also illustrates how the BAZNAS Sejahtera program approximates a circular economy of the ummah: resources flow from muzakki →mustahiq, are transformed through mentoring and productive support, and return to the system as beneficiaries graduate into contributors. Importantly, the "expected return" of zakat institutions in this cycle is not monetary profit, but cycle completion—the restoration of capability that enables sustained giving, wider social participation, and resilience to future shocks. This cycle-based interpretation strengthens the integrated framework's explanation of synergistic effects, where material recovery supports spiritual fulfillment (including zakat compliance). In contrast, spiritual strengthening reinforces trust,

100 Arifin and Anwar, "The Improvement Model of Microenterprises of Post-Disaster through Empowerment of Productive Zakat"; Johar et al., "Conceptual Perspectives on Harnessing Zakat for Socioeconomic Resilience."

discipline, and collective action that sustain livelihoods and preparedness over time.[101]

Theoretical and Practical Implications

This study contributes theoretically by integrating Islamic welfare economics (CIBEST), mainstream poverty metrics (MPI), and disaster recovery science, offering a multidimensional framework for understanding post-disaster recovery. It extends the application of CIBEST into crisis contexts and supports emerging literature on faith-based recovery models, demonstrating how Islamic social finance can promote holistic, sustained recovery. Practically, the findings highlight the unique strengths of faith-based organizations in Muslim-majority disaster settings, emphasizing the value of programs that combine economic support, spiritual growth, and disaster preparedness. However, limitations such as a small sample size, reliance on retrospective data, focus on a single organization and program type, and context-specific findings constrain broader applicability. Future research should adopt larger, comparative, and longitudinal approaches to explore cross-context effectiveness, examine the interaction between spiritual and material outcomes, and assess the sustainability and cost-efficiency of integrated faith-based recovery models.

Conclusion

This study evaluated the effectiveness of the BAZNAS Sejahtera program in supporting long-term recovery among tsunami-affected communities in Palu, Central Sulawesi. Six years after the 2018 disaster, significant improvements were observed in income, savings, asset ownership, and spiritual development, with most beneficiaries transitioning from aid recipients to zakat contributors. The integration of Islamic welfare economics (CIBEST), the Multidimensional Poverty Index (MPI), and disaster recovery principles proved valuable in capturing holistic outcomes. However, the study's small sample size, qualitative design, and focus on a single program type limit generalizability and causal inference. It also fails to capture early recovery dynamics or incorporate broader stakeholder perspectives. Future research should explore diverse disaster contexts, apply rigorous longitudinal and experimental methods, and compare various Islamic social finance models. Collaborative efforts to develop scalable, integrated frameworks could en-

101 T Widiastuti and L N Rani, "Evaluating the Impact of Zakat on Asnaf's Welfare," *Global Journal Al-Thaqafah*, no. SpecialIssue (2020): 91–99, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111109142&partnerID=40&md5=d2001e899f670592598dfcbe1d49d626; Johar et al., "Conceptual Perspectives on Harnessing Zakat for Socioeconomic Resilience."

hance the role of faith-based institutions in sustainable disaster recovery.

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