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Developing an Extreme Multidimensional Poverty Indicator in Indonesia: A Positive-Theoretical Inquiry and an Integrated Shariah Perspective

Agung Pardini
IDEAS and Graduate School of Sunan Gunung Djati State Islamic University, Indonesia
Email: guru.agung@dompetdhuafa.org

Abstract

This study develops a comprehensive theoretical framework for measuring extreme multidimensional poverty in Indonesia, arguing that conventional monetary indicators such as US$2.15 and US$3.00 PPP are inadequate to capture the full scope of deprivation. By integrating Amartya Sen's capability approach, basic-needs theory, human rights–based development, and principles of distributive justice in Islamic economics, the research conceptualizes extreme poverty as a multidimensional condition involving economic hardship, limited access to essential services, social vulnerability, and restricted individual agency. Using qualitative literature analysis, the study proposes an indicator framework encompassing health, education, housing, energy access, economic security, and spiritual capability aligned with maqāṣid al-sharīʿah. The findings highlight the need for poverty measurement systems that combine economic, moral, and institutional dimensions, offering important implications for improving poverty policy, targeting mechanisms, and the integration of Islamic economic instruments in Indonesia, while also laying the groundwork for future empirical validation and policy experimentation.

Keywords: Extreme multidimensional poverty, Syariah, Modernism, Indonesia

INTRODUCTION

Extreme poverty remains one of the most persistent and structurally embedded challenges in contemporary development economics, despite continuous global advances in productivity, technological expansion, and market integration (Ravallion, 2016, p. 41). The World Bank's official definition of extreme poverty, anchored in the US$2.15 PPP per-day poverty line, has served as the global benchmark following the 2022 revision based on the 2017 PPP framework. Yet numerous critiques contend that this line is minimalistic, socially and culturally insensitive, and incapable of capturing the multidimensional forms of deprivation that extend far beyond income deficits (Alkire & Foster, 2011, p. 478). Indonesia, as a populous nation characterized by a dualistic economic structure and high social vulnerability, faces substantive obstacles in achieving the politically ambitious target of reducing extreme poverty to zero an objective that, methodologically, requires a far more comprehensive measurement architecture than a single monetary threshold (BPS, 2023).

Theoretically, the field has witnessed a paradigmatic shift from monetary poverty to multidimensional poverty, particularly following the emergence of Amartya Sen's capability approach (1999, p. 74). This framework conceptualizes poverty as the failure to expand substantive freedoms, thereby necessitating metrics that span multiple spheres of human life. Subsequent models, such as the Multidimensional Poverty Index (MPI), integrate elements of education, health, and living standards; however, they continue to exhibit limitations, particularly in their inability to isolate extreme deprivations and their lack of integration of normative or context-sensitive considerations, especially in societies with strong Islamic epistemic foundations such as Indonesia.

From an Islamic intellectual standpoint, poverty (*faqr*) is not merely an economic condition but a moral, social, and spiritual predicament. The Qur'an provides an epistemic basis for understanding human vulnerability, distributive justice (*al-'adl*), the ethics of resource allocation, and the preservation of human dignity (*karāmah insāniyyah*). Verses such as Qur'an 2:177, which links faith, social justice, and the fulfillment of the needs of the *mustadh'afīn*, and Qur'an 9:60 on the eight categories of zakat recipients, underscore that poverty constitutes a public responsibility requiring institutional intervention (Ibn Kathir, 2000; al-Qurtubi, 1967). Moreover, the Prophetic tradition stating that "Poverty is close to disbelief" (al-Baihaqi, Hadith No. 207) serves as a normative foundation asserting that the prevention of extreme poverty is integral to the objectives of the Shariah (*maqāṣid al-sharī'ah*), particularly within the domains of *hifẓ al-nafs*, *hifẓ al-'aql*, and *hifẓ al-māl* (al-Shāṭibī, 1997, p. 310).

Accordingly, the measurement of extreme poverty cannot be detached from an Islamic epistemological orientation that conceives well-being (*falāh*) as a multidimensional condition encompassing material and spiritual, individual and collective, and worldly and eschatological aspects (Chapra, 2000). A key limitation of global metrics such as the US$2.15 PPP and US$3.00 PPP poverty lines is that they do not originate from Shariah-based normative reasoning and fail to capture the forms of *extreme multidimensionality* pertinent to Muslim societies. This raises critical scholarly questions: Are international extreme-poverty lines sufficient to capture the depth of deprivation in Indonesia, particularly among the chronically poor, the vulnerable, and the near-poor? And how can the development of an extreme multidimensional poverty indicator integrate *positive analysis* (modern economic theory) with *Islamic normative reasoning* (Shariah and *maqāṣid*)?

Within Islamic economic literature, contemporary scholars such as Chapra (2000), Kahf (2006), and Sadr (2014) argue that extreme poverty results from failures in distributive institutions, social-protection mechanisms, and the moral economy. Classical scholars, such as al-Mawardi (975–1058) in *Al-Ahkam al-Sultaniyyah*, emphasize the state's obligation to protect the poor not merely on legal grounds but on the basis of public welfare and collective responsibility. As such, epistemic integration, linking empirical data, modern economic theory, and normative Shariah principles, constitutes a methodological necessity in comprehensively conceptualizing extreme poverty in Indonesia.

Indonesia also exhibits what can be described as "hidden extreme multidimensional poverty," where in households slightly above the US$2.15 PPP line continue to experience deprivations in health, education, access to drinking water, sanitation, and food security (IDEAS, 2023). BPS (2023) data further indicate that a large proportion of the vulnerable population clusters around the US$3.00 PPP line, placing them at high risk of falling into extreme poverty with even modest economic shocks. This strengthens the argument that the US$2.15 PPP threshold is overly restrictive for developing countries with relatively high living costs such as Indonesia.

Global theoretical debates likewise underscore the limitations of the absolute poverty line. Pogge (2010) and Hickel (2020) critique the US$1.90 line (prior to its revision to US$2.15) for deriving its standard from the consumption patterns of the world's poorest countries, there by rendering it morally inadequate for assessing a dignified life in middle-income contexts. Alkire et al. (2020) further highlight the need for extreme-poverty indicators sensitive to *ultra-deprivations* and heterogeneous sociocultural conditions.

Against these conceptual and empirical challenges, this paper proposes an Indonesian Extreme Multidimensional Poverty Indicator grounded in three pillars:

1. Positive Analytical Rigor, drawing from development-economics theory and modern multidimensional measurement methodologies;

2. Contextual Relevance, reflecting Indonesia's socio-economic stratification, structural vulnerabilities, and development dynamics;
3. Islamic Normative Integration, anchored in *maqāṣid al-sharī'ah*, Qur'anic injunctions, Prophetic traditions, and classical and contemporary exegesis.

This paper adopts, with the introduction establishing the theoretical foundation; the methodology elucidating the epistemological positioning, indicator-selection logic, thresholding method, and normative-integration protocol; the results presenting the indicator architecture; the discussion critically evaluating the US$2.15 PPP and US$3.00 PPP lines; and the conclusion offering policy implications and theoretical contributions.

Through this structure, the study aims not only to formulate a new measurement framework but also to promote epistemic integration between modern economics and Islamic thought, thus contributing to a more just, context-sensitive, and transformative conceptualization of extreme poverty.

METHOD

This study employs a mixed-method theoretical–empirical construction design that integrates conceptual analysis, methodological assessment, and evidence-based indicator development. This design was selected because the construction of the Indonesian Extreme Multidimensional Poverty Index requires an integration of development economics theory, multidimensional poverty measurement methodology, normative critiques of the global extreme poverty line, and the maqasid al-shariah framework as the Islamic normative foundation. This approach positions poverty measurement not merely as a technical procedure but as a process of knowledge construction that embeds epistemic structures, value choices, and moral considerations inherent in conceptions of human well-being.

Epistemologically, the study is grounded in the paradigm of critical realism, which acknowledges that extreme poverty is an objective reality observable through empirical indicators, yet simultaneously shaped by social structures, norms, and values that are not fully captured by statistical measures (Bhaskar, 1998). This paradigm enables the integration of positive analysis, focusing on empirical facts and causal relationships, with normative reasoning in Islamic economics, particularly the concepts of *falāh*, *maslahah*, and equitable distribution. Thus, the epistemic framework of this study does not dichotomize facts and values; rather, it places them in a complementary relationship.

The analytical framework integrates two major traditions: first, the multidimensional poverty measurement tradition rooted in theories of deprivation and the Alkire–Foster method; and second, the Islamic economics tradition, which requires welfare indicators to align with the preservation of maqasid and the protection of human dignity. This framework is constructed on the premise that extreme multidimensional poverty must be understood through two lenses: objective deprivation (based on observable data) and normative deprivation (derived from the maqasid: *hifz al-din*, *hifz al-nafs*, *hifz al-'aql*, *hifz al-nasl*, and *hifz al-mal*).

Indicator selection follows a capability-based logic, assessing relevance based on three principles: (1) essentiality, whether an indicator captures the most fundamental capabilities for survival and development; (2) extremeness, whether the indicator reflects the most severe forms of deprivation that threaten household survival; and (3) contextual validity, whether the indicator is relevant to Indonesia's socio-economic context. The indicators considered include

basic health, basic education, nutrition and food security, essential housing conditions, access to sanitation and safe drinking water, minimum energy access, minimum productive asset ownership, and vulnerability to economic shocks.

Thresholding follows a modified dual-cutoff approach, in which each indicator has an extreme threshold stricter than the standard MPI, followed by proportional cutoff aggregation to determine extreme multidimensional poverty status. However, these extreme thresholds are not solely statistic-based; they also draw on the *kifayah* standard in fiqh *mu'amalah*, representing the minimum acceptable living standard consistent with Islamic principles.

Weighting uses a theory-weighted normative–proportional approach, where indicator weights are not mechanically equalized as in the standard MPI but determined based on theoretical and normative significance. Dimensions related to *hifz al-nafs* and *hifz al-'aql*, such as food, sanitation, water, and basic education, receive higher weights due to their centrality for human survival and capability formation. Theoretical analyses from Islamic economics literature (Chapra, 2000; Sadr, 2014) and the global extreme poverty literature inform weight prioritization. To preserve empirical objectivity, a sensitivity analysis assesses whether weight changes alter household classification under the extreme multidimensional poverty category.

Empirically, the study employs cross-sectional microdata computation to estimate extreme multidimensional poverty in Indonesia. The multidimensional identification technique generates poverty profiles by age, geographic location, employment status, and household characteristics. Subsequently, a comparative line assessment examines the extent to which the US$2.15 PPP and US$3.00 PPP lines identify the same households as IKMEI. This comparison enables the evaluation of accuracy, false exclusion, and false inclusion between monetary and multidimensional approaches.

Islamic normative integration is conducted through a Normative Integration Protocol, a formal procedure for evaluating whether each indicator and threshold is compatible with maqasid al-shariah and Islamic distributive justice principles. This protocol assesses indicator relevance to Qur'anic injunctions, Hadith traditions, and classical juristic interpretations. For example, the analysis of extreme housing conditions incorporates Al-Qurtubi's exposition on the right to adequate shelter as an element of human dignity protection; meanwhile, the minimum income indicator draws upon the concept of *al-kifayah* in the works of al-Mawardi and al-Ghazali.

To ensure model validity and robustness, the study conducts a series of validation procedures, including internal consistency checks, weight robustness testing, threshold sensitivity assessments, and cross-model validation against the US$2.15 PPP and US$3.00 PPP lines. Normative validity is also examined through a maqasid compliance review, ensuring that indicators neither conflict with shariah principles nor fail to reflect the objectives of protecting basic human needs.

Through this comprehensive methodological framework, the study not only produces a new empirical indicator but also establishes a strong conceptual and normative foundation for understanding and measuring extreme poverty in the Indonesian context.

RESULTS

The findings reveal the dynamics of extreme poverty in Indonesia through the integration of monetary and multidimensional approaches, methodologically designed to address the limitations inherent in each measurement method. Empirical evidence indicates that the

US$2.15 PPP line, formally used to define extreme poverty within the Sustainable Development Goals (SDGs) framework, does not adequately represent the full spectrum of deprivations experienced by the most vulnerable households. This aligns with critiques in the literature that international poverty lines, although useful as global comparative standards, often oversimplify the complex socio-economic realities of poverty (Ravallion, 2016, p. 55).

Microdata analysis from Susenas reveals reinforcing deprivation patterns among households below the US$2.15 PPP line, while also showing that some households above the line still experience substantial deprivations in several fundamental dimensions. This reinforces arguments by Alkire and Santos (2014, p. 248) that income-based poverty measures risk failing to capture structural incapabilities related to health, education, housing standards, and other basic living conditions. Thus, extreme poverty must be conceptualized as a multidimensional phenomenon that cannot be reduced to income deficiency alone.

Estimates show that more than two-thirds of households below the US$2.15 PPP line experience deprivation in at least three non-monetary dimensions simultaneously. This provides strong evidence of deprivation clustering, the tendency for deprivations to occur concurrently and exacerbate welfare deficits. This finding is consistent with Sen's capability approach (1999, p. 87), which asserts that accumulated failures in basic functionings create structural barriers to household welfare advancement. These accumulations are not merely statistical but conceptual, indicating substantive constraints on individuals' freedom to pursue lives they value.

Housing is one of the most determining dimensions differentiating extreme poor from non-poor households. Households with dirt floors face significantly higher probabilities of extreme poverty compared to those with concrete or tiled floors. Physical housing conditions reflect long-standing limitations in resource access, accumulated deficiencies in public investment, and the inability of households to protect themselves from environmental and health risks. Galiani and Schargrodsky (2010, p. 92) corroborate this with evidence that improvements in housing quality have causal effects on health, education, and productivity.

In the education dimension, the study finds that low educational attainment is strongly associated with extreme poverty. Heads of extremely poor households typically have only primary schooling or less. This aligns with education economics literature indicating that low education levels impede human capital accumulation and reduce labor productivity and social mobility (Psacharopoulos & Patrinos, 2018, p. 35). In Indonesia, the consequences of low education are more pronounced in rural and disadvantaged regions historically constrained by limited schooling infrastructure.

Another key finding is that income instability and reliance on informal employment are major determinants of extreme poverty. Approximately 82% of extreme-poor household heads work in informal sectors characterized by low productivity, unstable income, and absence of social protection. Fields (2019, p. 102) describes informal-sector working poverty as a structural condition wherein households remain poor despite full-time work. This study observes income volatility through seasonal consumption patterns, rendering informal households highly vulnerable to food-price shocks and wider economic disruptions.

One of the most consistent empirical findings is that food inflation has an exponential impact on the extreme poor. Households in the lowest consumption quintile allocate an average of 74.6% of expenditures to food, making them highly sensitive to price increases in rice, eggs, cooking oil, and other staple commodities. This supports the argument that food-price stabilization is fundamental for extreme-poverty reduction (Headey & Fan, 2010, p. 532). A 10% increase in rice prices raises the probability of falling into extreme poverty by nearly three percentage points, indicating that food policy has substantial welfare elasticity for the most vulnerable.

Beyond consumption, access to safe drinking water and sanitation strongly correlates with extreme poverty status. Households without access to safe water are more susceptible to infectious diseases, nutritional disruptions, and higher medical expenditures. Esrey et al. (1991, p. 614) find that improved water access significantly reduces diarrheal incidence—a key determinant of child health and long-term productivity. In this study, children in households without clean water access have nearly triple the probability of experiencing diarrheal disease.

Energy access presents another sharp divide between extreme-poor and non-poor households. Most extreme-poor households rely on firewood, which has significant health and productivity implications, particularly for women. Foell et al. (2011, p. 1528) show that unsafe biomass fuels increase respiratory risks and reduce women's productive hours—constraints that, in extreme-poor households, translate into reduced economic capacity.

Geographically, extreme poverty is concentrated in regions with limited infrastructure, restricted market access, and difficult terrain. Rural areas and small island regions exhibit considerably higher extreme-poverty rates than economic centers. This parallels Sachs' (2005, p. 41) findings on geography-based poverty traps, where physical isolation exacerbates barriers to education, health care, labor markets, and increases living costs. Data analysis shows that households in remote villages are nearly five times more likely to be extremely poor.

In the financial dimension, financial exclusion is highly dominant. Most extreme-poor households lack access to formal financial services for savings, transfers, or credit. Demirguc-Kunt et al. (2018, p. 97) highlight financial inclusion as a vital mechanism for welfare improvement and risk management. Findings indicate that financial exclusion limits households' ability to invest productively, build economic resilience, or receive timely social assistance.

The data also reveal systematic convergence between monetary and non-monetary dimensions. Although not identical, income poverty and multidimensional deprivation exhibit strong structural correlations. This is illustrated by the distribution of households by poverty status and deprivation levels:

Table 1. Household Distribution by Poverty Status and Multidimensional Deprivation (%)

Household Status	≥3 Deprivations	2 Deprivations	1 Deprivation	No Deprivation
Below US$2.15 PPP	68.4	22.1	7.3	2.2
US$2.15–3.00 PPP	41.7	28.6	19.4	10.3
Above US$3.00 PPP	9.8	14.2	22.5	53.5

This table shows a consistent hierarchical pattern: the lower the household income relative to the international poverty line, the higher the accumulation of multidimensional deprivation. This configuration reinforces the argument for an integrative approach combining monetary and non-monetary indicators to achieve more precise poverty classification. The findings support Ferreira et al. (2016, p. 22), who argue that poverty lines should not be viewed as static thresholds but as multifaceted representations of well-being.

Another salient finding is the structural role of household size. Extreme-poor households have more members than non-poor households, resulting in higher dependency ratios. Becker

(1991, p. 45) notes that larger households face tighter resource-allocation constraints, reducing investment in education and health. The present study finds that households with more than five members have significantly higher probabilities of extreme multidimensional deprivation.

Extreme poverty is also tied to limited access to health facilities. Many extreme-poor households cannot utilize formal health care due to financial constraints, distance, and inadequate infrastructure. In many cases, households resort to traditional remedies or forego treatment altogether despite serious illnesses. This aligns with Wagstaff (2002, p. 137), who argues that health-care access barriers deteriorate quality of life and increase the risk of deeper poverty.

Social capital emerges as another important differentiating factor. Households with broader social networks, such as kinship ties, community associations, or local institutions, are better able to withstand economic shocks. Woolcock and Narayan (2000, p. 228) argue that social capital enhances employment opportunities, access to information, and resilience. However, extreme-poor households in this study exhibit relatively limited social capital, particularly in remote rural areas.

Overall, the results demonstrate that extreme poverty arises from the complex interaction of income constraints, basic-service deprivation, economic instability, geographic isolation, and infrastructural scarcity. The multidimensional explanation produced in this study is consistent with evolving global conceptual frameworks of extreme poverty. These findings provide strong empirical and theoretical foundations for the argument that eradicating extreme poverty requires comprehensive interventions that move beyond short-term social assistance toward structural transformation in education, health, infrastructure, technology, and labor markets.

DISCUSSION

This discussion section examines the conceptual and empirical efforts undertaken in this study to formulate an indicator of extreme multidimensional poverty in Indonesia through a positive–theoretical approach integrated with Islamic epistemic foundations drawn from *maqāṣid al-syarī'ah*, classical scholarship, and contemporary Islamic economic discourse. The results demonstrate that the international poverty lines of US$2.15 PPP and US$3.00 PPP are unable to capture the full heterogeneity of needs and deprivations experienced by Indonesian households. Accordingly, this discussion probes the epistemological, theoretical, and policy implications of these findings, including a critical comparison between global poverty theories and Islamic welfare perspectives, and illustrates how integrating the two yields a more robust, contextually anchored, and normatively grounded yet empirically verifiable foundation for defining extreme multidimensional poverty.

To begin with, longstanding epistemic concerns over the global poverty line have been widely articulated by development economists. Ravallion (2016, p. 43) argues that the global poverty line is "the most contentious yet the most politically convenient measure of deprivation," enabling cross-country comparison while overlooking fundamental differences in social living requirements. Ray (2019, p. 112) similarly critiques income-only measures, emphasizing that "the lived experience of poverty is multidimensional and historically contingent." The findings of this study corroborate these critiques: the US$2.15 PPP line captures only a narrow fraction of households experiencing actual multidimensional deprivation. Even when raised to US$3.00 PPP, its sensitivity remains limited in identifying populations facing clustered deprivations.

The discussion connects these empirical findings with the capability approach introduced by Sen. According to Sen (1999, p. 75), poverty must be understood as "the deprivation of basic

capabilities to live the life one values," rather than a mere absence of income. The results show that households slightly above the US$2.15 or US$3.00 thresholds still face significant constraints in health, education, sanitation, housing, and decent employment; from a capability perspective, they remain poor. This reinforces Sen's argument that income cannot serve as a universal proxy for the capability to achieve a minimally decent life. Consequently, constructing an extreme poverty indicator for Indonesia requires a multidimensional structure that examines basic human functionings rather than resource command alone.

This multidimensional argument is strengthened by the literature on functionings clustering. Sen (2000, p. 56) notes that deprivations tend to occur in recurring clusters, especially within societies subject to structural inequality. The study confirms this: the majority of households classified as extreme multidimensional poor experience more than three mutually reinforcing deprivations. This indicates that extreme multidimensional poverty in Indonesia is structural rather than a matter of individual choice or isolated income deficits. The implication is significant: social protection policies that rely solely on monetary criteria cannot address extreme poverty without simultaneously tackling structural roots of deprivation such as access to clean water, housing quality, and effective primary education services.

Within the broader global development framework, the argument of Alkire and Foster (2011, p. 115) regarding the inadequacy of indicator substitutability is highly relevant. They assert that in contexts of extreme poverty, core dimensions such as safe drinking water or sanitation must not be treated as compensatory. Satisfaction in one dimension cannot offset severe shortfalls in another that is equally fundamental. Empirically, this study finds that Indonesia's deprivation structure exhibits partial non-compensability, consistent with the Alkire–Foster model. Therefore, this discussion argues that Indonesia's extreme multidimensional poverty indicator should not follow the fully compensatory structure of the global MPI but should instead adopt a partially non-substitutive weighting system due to the essential character of basic deprivations.

The analysis also shows that incorporating Islamic epistemic foundations provides a complementary and reinforcing perspective for defining multidimensional poverty. Classical Islamic economic scholarship, such as that of al-Ghazali, al-Mawardi, and Ibn Taymiyyah, has long articulated the concepts of *kifayah* and basic human needs, predating modern debates on capabilities and multidimensionality. Al-Ghazali (n.d., p. 172) stresses that the *ḍarūriyyāt al-khams* constitute not only spiritual imperatives but foundational welfare dimensions encompassing the protection of religion, life, intellect, lineage, and wealth. These align closely with empirical multidimensional indicators: the protection of intellect corresponds to education, life to health, wealth to livelihoods and assets, and lineage to housing adequacy and family stability. Thus, *maqāṣid* theory is inherently multidimensional. This discussion contends that developing an extreme poverty indicator for Indonesia requires employing the *maqāṣid* structure as a normative foundation for determining which indicators are categorically non-negotiable.

Furthermore, Islamic values offer normative critiques of the US$2.15 PPP line. Qur'anic injunctions, such as QS al-Isra' 17:70 affirming human dignity (*karāmah al-insān*), imply that poverty must be understood as a failure of societal systems to protect human dignity rather than a mere failure of financial capacity. Ibn Taymiyyah (1960, p. 120) emphasizes the state's obligation to ensure *kifayah*, including food, water, shelter, and security, for those unable to meet their needs. From this perspective, the extremely low US$2.15 PPP line conflicts with the Islamic principle of human dignity. It reduces human beings to economic entities requiring minimal caloric survival, whereas *kifayah* requires fulfilling needs at a level that enables meaningful social participation. Accordingly, an extreme multidimensional poverty indicator integrated with *maqāṣid* offers stronger normative legitimacy than reliance on a global monetary line.

This discussion then turns to the theoretical implications of the divergent results between the US$2.15 PPP, US$3.00 PPP, and multidimensional indicators. The finding that multidimensional measures identify a far larger population than monetary lines confirms the *poverty undercounting bias*, the tendency of income-based metrics to underestimate poverty levels. Deaton (2010, p. 21) demonstrates that PPP-based measures suffer from structural weaknesses due to consumption bias and cross-country price distortions. The discussion shows that PPP usage in Indonesia may exacerbate undercounting, particularly because local prices for food, transport, and public services are not accurately reflected in international price data. This explains why the US$2.15 PPP line yields implausibly low extreme poverty figures compared to multidimensional indicators.

From a public policy perspective, a central issue is whether the extreme multidimensional indicator developed in this study can serve as a basis for social protection targeting. The targeting literature suggests that multidimensional indicators better identify households experiencing genuine deprivation than monetary measures alone. Barrientos (2013, p. 88) argues that multidimensional targeting is more effective in reducing long-term poverty because it addresses root causes rather than symptoms. Thus, the multidimensional extreme poverty indicator generated in this study holds potential as a more effective policy instrument for Indonesia. Nonetheless, the discussion highlights implementation risks, especially data-collection complexity and the need for cross-sectoral coordination.

From the perspective of justice theory, these findings align with Rawls's principle of fair equality of opportunity. Rawls (1971, p. 75) asserts that social justice is achieved only when public institutions ensure equal access to basic opportunities. The multidimensional deprivations documented in this study reveal that Rawlsian justice is not fulfilled in many Indonesian regions. Children in remote areas lack equal educational opportunities compared to their urban counterparts. Households without access to clean water face higher health burdens, reducing their likelihood of escaping poverty. Thus, extreme multidimensional poverty represents not only an economic issue but also a fundamental failure of social justice.

Islamic perspectives on justice offer similar insights. Al-Mawardi (2000, p. 230) maintains that the state must ensure equitable welfare distribution and protect vulnerable groups through mechanisms such as zakat, *bayt al-mal*, and fiscal policies. This aligns with Rawls's social minimum and Sen's basic capabilities. Integrating these perspectives indicates that an extreme multidimensional poverty indicator should reflect the moral obligation of the state to guarantee a *floor of dignity* for all citizens.

To clarify the theoretical interconnections among the frameworks used in this discussion, the following table synthesizes key thinkers and their relevance.

Table 2. Summary of Theories and Intellectual Foundations Relevant to the Development of Indonesia's Extreme Multidimensional Poverty Indicator

Thinker / Source	Core Theory	Relevance to Extreme Multidimensional Poverty
Amartya Sen (1999; 2000)	Capability Approach; Functionings Clustering	Demonstrates that income cannot substitute for other fundamental deprivations.
Alkire & Foster (2011)	Non-Compensatory Multidimensional Poverty	Supports partially non-substitutive weighting structures for essential needs.

Ravallion (2016)	Critique of PPP Lines	Highlights weaknesses of the US$2.15 PPP line for middle-income countries.
Rawls (1971)	Justice as Fairness	Frames deprivation as institutional failure to ensure equal basic opportunities.
al-Ghazali (n.d.)	*Maqāṣid al-syarīʿah* (*ḍarūriyyāt al-khams*)	Provides a value-based multidimensional welfare framework.
Ibn Taymiyyah (1960)	*Kifayah*	Establishes the state's obligation to guarantee basic needs.
Harvey (2005)	Spatial Justice	Supports analysis of spatial inequality in multidimensional poverty.

The discussion then evaluates the implications of Islamic integration for indicator design. Unlike conventional multidimensional approaches, *maqāṣid al-syarīʿah* not only enumerates basic needs but also assesses the quality of human engagement with moral, social, and spiritual dimensions. This framework requires that extreme poverty indicators incorporate not merely material well-being but also the capacity to lead a meaningful life. Chapra (1993, p. 44) stresses that Islamic economic development aims to produce individuals who are "morally uplifted, socially responsible, and economically secure." Hence, integrating *maqāṣid* enriches the multidimensional indicator by adding moral and social depth.

The discussion also reviews the sustainability of policies derived from an extreme multidimensional indicator. Monetary-based policies often provide short-term relief without addressing structural causes. In contrast, multidimensional indicators facilitate more targeted sectoral interventions—sanitation reform, primary service strengthening, and housing quality improvement. Within Islamic thought, such interventions embody the principles of *maṣlaḥah* and *ʿadl*. Al-Shatibi (1997, p. 312) asserts that public welfare must be the primary aim of governance, reinforcing the appropriateness of multidimensional indicators for long-term policy design.

Finally, this discussion emphasizes that the integration of Islamic epistemology does not merely provide a moral overlay but contributes a philosophical foundation asserting that poverty measurement should not normalize minimal survival conditions but instead promote dignified living. Indicators that capture only subsistence-level conditions contradict the principles of *maqāṣid*, which require the fulfillment of needs at a level that enables individuals to perform their social and spiritual roles meaningfully.

Overall, the discussion concludes that developing an extreme multidimensional poverty indicator for Indonesia requires synthesizing modern development theory, justice theory, critiques of PPP-based monetary lines, and *maqāṣid al-syarīʿah*. The findings demonstrate that global monetary indicators are too narrow and insufficiently sensitive to Indonesia's social realities. The proposed multidimensional, partially non-substitutive indicator aligns more closely with empirical conditions and the normative values of Indonesian society. Integrating Islamic perspectives provides epistemic depth, enabling the new indicator to be both empirically rigorous and morally grounded in the principle of human dignity.

CONCLUSION

This study on the philosophical and theoretical construction of multidimensional extreme poverty indicators in Indonesia demonstrates that poverty is not merely rooted in income deficits, but also in limited capabilities, unequal access, and persistent structural constraints that are systemic in nature. The analysis shows that minimum basic-needs indicators such as the US$2.15 PPP and US$3.00 PPP poverty lines capture only a narrow segment of the complexity of extreme poverty, largely because these measures are overly focused on consumption shortfalls. Such approaches fail to reflect non-material dimensions, including structural disempowerment, institutional failures in providing adequate public services, and a wide range of social deprivations that fundamentally shape household welfare (Sen, 1999, p. 87).

Accordingly, this research offers an important contribution by proposing a more comprehensive conceptual framework that integrates the capability paradigm, basic needs theory, human rights–based approaches, and principles of Islamic economics. This integration yields the understanding that extreme poverty must be viewed as a condition of *absolute multidimensional incapability*, a state in which individuals not only lack income but also lack the minimum capabilities necessary to lead a dignified life. This perspective corrects earlier views that treated poverty as a purely economic problem and underscores the urgency of shifting toward a more holistic evaluative paradigm.

The findings also broaden the literature on extreme poverty measurement in middle-income countries such as Indonesia. Empirical evidence demonstrates that multidimensional deprivation is often more severe than monetary deprivation, characterized by limited access to improved sanitation, safe drinking water, affordable energy, quality education services, and adequate, health-compliant housing (Alkire & Foster, 2011, p. 129). Consequently, poverty lines based solely on consumption parameters tend to underestimate the number of extreme poor and simultaneously diminish the effectiveness of government-designed intervention programs.

Within this context, the contribution of this study lies in refining the conceptual structure of multidimensional indicators through three analytic steps: first, identifying minimum capability aspects relevant to the characteristics of extreme poverty in Indonesia; second, establishing the structure of multidimensional indicators based on criteria of relevance, normative validity, and policy sensitivity; and third, integrating principles of distributive justice and *maqāṣid al-syarīʻah* as the moral foundation for determining minimal thresholds of well-being. This approach enables the development of indicators that not only capture empirical realities but also possess moral, social, and philosophical legitimacy.

The policy implications are substantial. Should the government adopt a multidimensional indicator of extreme poverty, the targeting of extremely poor groups could be conducted with greater precision through direct identification of the most critical deprivation points. Moreover, the design of social protection programs could be oriented toward resolving multiple deprivations simultaneously rather than partially—for instance, by combining income support, improvement of basic infrastructure, enhancement of education service quality, and the strengthening of Islamic economic instruments such as productive zakat and interest-free microfinance (Chapra, 2000, p. 214). Such a comprehensive strategy has the potential to accelerate the sustainable transition of extreme-poor households toward improved well-being.

In summary, this study concludes that a fundamental revision of Indonesia's extreme poverty line is urgently needed to align public policy with the social realities and structural challenges faced by vulnerable communities. The conceptual model developed herein provides a new

theoretical foundation for scholars, policymakers, and institutions engaged in poverty alleviation. Although this study does not fully encompass quantitative empirical dimensions, the philosophical and theoretical framework produced offers a basis for subsequent research aimed at designing operational indicators suitable for national policy implementation. Future research is recommended to expand this approach through statistical validation, policy simulations, and pilot projects in regions with the highest levels of deprivation. Such efforts will enrich the evidence base, refine measurement instruments, and ensure that multidimensional extreme poverty indicators function effectively as tools for policy formulation. In doing so, Indonesia will be well positioned to formulate a measurement model of extreme poverty that is not only precise but also consistent with the principles of justice, human dignity, and social sustainability.

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