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## | RESEARCH ARTICLE

# **Poverty Accounting and Measurement: A Systematic Literature Review**

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### ABSTRACT

The paper is intended to be a systematic literature review (SLR) of the developing area of poverty accounting and measurement. It finds out how the old and the new methods think about and measure poverty, determines where ethical, philosophical, and accounting concepts fit in, and charts what all this means in terms of policy, institutional responsibility, and further inquiry. The paper is a synthesis of 118 scholarly and organizational publications released in 2020-2025. It recognizes the replacement of unidimensional income-dependent poverty measures with multidimensional concepts that take account of health, education, well-being and social inclusion. The results indicate an increased focus on moral reasoning, participatory paradigms, data justice, and the obligation of accountability in measures of poverty. It also reveals theoretical shortcomings in how reflexivity, normative ethics and institutional reporting can be incorporated into measurement frameworks. Thematic synthesis grouped results in twelve main areas, such as multidimensional poverty indices (MPIs), data shortcomings, governance systems, and useful implementations in open and corporate reporting. The review offers substantive recommendations to policymakers, development practitioners, educators, and institutions through proposing the hybrid ethically based metrics that would combine the objectivity with contextual validity and participatory validity. It places the arrival of poverty accounting in national budgets, ESG reporting and social impact assessment. In addition, the review facilitates moral and ethical literacy in the education programs to shape the future practitioners. The paper fits in the literature because it provides the interdisciplinary framework able to integrate accounting principles and ethical and philosophical aspects of measuring poverty. It is among the few SLRs that have included various SLRs- development economics; moral education; institutional reporting; and artificial intelligence in conceptualizing the operational and ethical aspects of poverty.

## **KEYWORDS**

Poverty measurement, Poverty accounting, Multidimensional poverty, Accountability, Institutional reporting, Systematic Literature Review

## ARTICLE INFORMATION

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### 1. Introduction

The problem of poverty has become one of the most burning issues faced by contemporary societies and it is closely associated with the questions of social justice, economic policy, and sustainable development. Poverty cannot be dealt with effectively unless it is properly identified, measured, and accounted besides having a clear understanding on the cause and effects of poverty. Also, it requires the formulation of policy interventions that are focused and effective. The conventional tools used to measure poverty, which are usually based on income lines or consumption totals, have grown atrocious as a result of the criticisms of their narrow focus and their incapability to reflect the reality of a multidimensional understanding of human deprivation. Attempting to address these inadequacies, there has been an increase in literature and policy debate that has demanded a much more subtle set of approaches that would include the philosophical, ethical, economic and accounting implications that may provide a much more comprehensive picture of poverty.

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The current paper aims to critically discuss the evolution of poverty accounting and measurement, its major concerns, and future prospects. It analyses the intersection of conceptual schemes, technical instruments, institutional structures and ethical values that come together to influence the definition, measurement and reporting of poverty in national policy and corporate arenas. The research itself highlights the necessity of the combination of the already existing accounting standards, multidimensional measurement methods, and new technologies in order to develop more stable and context-aware systems of poverty measurement.

The systematic literature review (SLR) is needed and it is high time in this sphere. A review of this kind makes a systematic and in-depth evaluation of available knowledge, as well as reveals the shortcomings of existing conceptualizations and emerging patterns in approaching methods of poverty accounting. Amid the growing interest in multidimensional poverty indices (MPls), corporate responsibility, evidence-based policymaking, and the Sustainable Development Goals (SDGs), the study is a useful critical resource that scholars, professionals, and policymakers can use to transform poverty measurement at the global and local scales. The paper is structured in such a manner that a set of thematic sections creates a unified picture of the field. It starts by discussing the theoretical basis of measuring poverty and follows both classical and modern theories and their implication on the subject of how poverty needs to be measured. This is then followed by a criticism of the traditional accounting of poverty where the weaknesses of the income and consumption-based accounting models are highlighted. The paper then discusses how multidimensional poverty indices have emerged and this concept of poverty has been expanded to comprise education, health, and standards of living.

The second part of the study examines the applicability of fundamental accounting values, including transparency, consistency and accountability, in poverty measurement activities. This part will be complemented with the discussion of emerging data sources and technologies, such as big data analytics, mobile-based surveys, and satellite imagery that are likely to enhance the quality and richness of poverty data. Institutional and governance structures required to achieve successful implementation and control in accounting of poverty are also discussed and regulatory and organizational structures are observed. The paper proceeds to examine how national governments as well as corporate organizations are integrating poverty indicators into the development agendas and environmental, social, and governance (ESG) reporting. It introduces new directions and measurement devices that are more profound to lived experiences of poverty and advances the methods of developing more encompassing measures. In the acknowledgment that poverty varies in different regions and cultures, the section on regional and contextual dimensions posits that the framework used in accounting poverty should be customized to mirror locally relevant socioeconomic realities.

In addition, the paper elaborates on the policy and practicing implications of the improved tools of measuring poverty especially in social protection, budgetary planning, and developmental strategy. A great consideration is paid to ethical and philosophical aspects that challenge the value judgment in the very question of what is measured and how. The last sections describe the approach utilized in the undertaking of the systematic literature review, provide a thorough elaboration of the findings, and make the necessary conclusions and recommendations that could be applied to further the academic investigation and the practical implementation in the field of poverty accounting.

#### 2. Literature Review

### 2.1 Theoretical Foundations of Poverty Measurement

Contemporary critiques of standard poverty lines note serious drawbacks to using only absolute income cuts-offs or relative criteria. Ravallion (2020) questions these traditional ways and offers a welfare-theoretic approach that re-conceptualizes poverty lines to interpret basic human capabilities to move out of poverty, in addition to capturing social expectations. He asserts that purely relative and purely absolute standards overlook vital portions of individual well-being. This view expands the measure of the poor to include other multidimensional human development indices besides income poverty.

To substantiate this reconceptualization, accounting systems of poverty offer means of conceiving how poverty changes over time. The technique proposed by Bluhm, de Crombrugghe, and Szirmai (2018) based on panel data consisting of 124 countries (19812010) allows decomposing the impact of economic growth and redistributive policies on poverty reduction. They discover that the dynamic of poverty belongs to initial conditions of inequality, which establishes the relative impact of redistribution and growth. These analyses provide greater clarity to policymakers, demonstrating how poverty can be influenced using such instruments as taxation and social transfers. Besides these quantitative revelations, the newer theories highlight the psychological and behavioral dimensions of the poverty life. The scarcity theory states that living in chronic scarcity sets associated cognitive limitations that weaken the decision-making abilities, which may further cycle of poverty (de Bruijn & Antonides, 2022). Their interdisciplinary review of economic and psychological findings makes the case that measures of poverty should also achieve a cognitive load and behavioural constraints.

Moreover, the broadening of poverty concepts to multidimensional and spatial aspects provides the poverty analysis with richness. New complex methodologies have been developed whereby variables like income, education, health as well as housing

conditions are now included in compound indices. Particularly, a study conducted by Jean et al. (2016) demonstrates the ability of machine learning and satellite images to estimate poverty at fine geographical scales based on the characteristics of nightlight emissions and daytime images. Such technology-oriented solution is supported by Chi et al. (2022), who show how artificial intelligence may provide timely and precise data on poverty to be used in specific local policies.

Lastly, the philosophical justification of measuring poverty gets a boost by theoretical debate on the topic of fairness and justice. Kluegel et al. (1995) emphasize that measures of poverty should be pursued in line with the social ideas of justice and fair share of resources. They espouse models that links individual suffering to social moral duties. Likewise, Ahlstrom et al. (2021) propose an expanded role of the accounting profession in defining and solving systemic weaknesses by means of transparent, public-interest-focused reporting systems.

## 2.2 Limitations of Traditional Poverty Accounting

Traditional measures of poverty have put a lot of focus on monetary measures especially income lines as the main measure of determining and measuring poverty. Yet this approach is getting more criticism on not taking into account more structural and environmental limitations. As an example, Hickel (2021) refers to the ecological inconsistencies in economics growth approaches led to poverty reduction. He states that growth-based poverty alleviation is inconsistent with a sustainable environment and introduces a degrowth paradigm that would establish an equilibrium between environmental preservation and human livelihoods. This criticism reveals one of the main flaws of the traditional accounting of poverty the lack of ecological sustainability and environmental limitations. Moreover, the mainstream accounting systems tend to overlook the interaction of poverty and the environment or agriculture. According to Ditzler and Wuepper (2023), existing measures of poverty in agricultural settings are reductionist since they often consider only income but not climate shocks exposure and environmental risk coupled with the farm diversification degree. They find that the livelihoods in rural areas are exposed to multidimensional vulnerability, which cannot be represented by income-based measures alone, and therefore forcing the need to promote more integrated, ecology-aware measures of poverty.

The third glaring weakness is poor consideration of spatial and geographic variance of poverty estimates. A study conducted by Engelhard et al. (2021) shows how national income averages may hide the different social and ecological pressures that occur in rural areas. They suggest the need to embrace participatory and localized approaches that show the diversity of the poverty experiences in various regions. In line with this argument, Silvasti and Rönkko (2020) stress the significance of the cultural and relational context when considering rural poverty, noting the requirement of place-sensitive measures that would recognize geographic heterogeneity. Energy poverty is also another area that has commonly been overlooked in the traditional poverty indicators. According to Sovacool et al. (2020), access to energy, affordability, and energy security are central features of poverty that are omitted in income-based conceptions. Similarly, Sosnovtsev et al. (2022) demonstrate that most energy policies focusing on the economically poor are ineffective because they do not pay much attention to the factors such as energy literacy and infrastructural differences, which once again highlights the weakness of the impoverishment-centered concepts of poverty.

Traditional metrics used at a household level also do not indicate internal inequalities, especially those that exist along gender and generational relationships. Sweeney and Raley (2020) note that aggregate household statistics may conceal the extreme vulnerability of specific population categories, including single mothers and children. They propose gender-responsive measures which include intra-household inequality in resource access and exposure to poverty. Along with that, Rashid and Hassan (2022) present the notion of Islamic accounting, incorporating the spiritual and ethical aspect, providing a more human-centered and culturally oriented alternative to the predominant Western models. New patterns of poverty that are produced by globalization of the world economy and demographic transition also remain unnoticed in the conventional poverty measures. Nathan (2021) denounces how fixed poverty lines fail to capture emerging vulnerabilities due to land reforms, globalization, and market liberalization of economies, particularly to marginalized groups. He also cites the omission of the political and institutional blocks that affect distribution of resources. Similarly, Subramanian (2020) states that the existing frameworks of accounting enforce systemic inequity and do not appropriately capture the experiences of marginalized populations, suggesting the need to develop inclusive frameworks that give voice to the oppressed and bring attention to structural, systematic disadvantages.

Lastly, one of the greatest weaknesses of traditional poverty accounting is the fact that it has limited linkage to policymaking. As noted by Aryeetey (2020), the available data is usually not detailed and relevant to institutions to make wise decisions to use in public policy. In order to fill in this gap he puts forward a new framework of accounting that is public interest-oriented and gives emphasis on transparency, social justice and integration with systems of governance, thus making poverty data more useful in decision making processes.

## 2.3 Evolution of Multidimensional Poverty Indices (MPIs)

In the last few decades, an approach to multidimensional measurement of poverty has become increasingly recognized as a useful addition to the long-standing income-based measures, taking much of its inspiration and foundation in the capabilities

approach. This view extends the concept of poverty by acknowledging that people can be deprived in many other aspects including health, education and standards of living, and not only income. A major contribution in this direction has been the Alkire-Foster (AF) approach by Sabina Alkire and James Foster. Their framework has now formed a foundation to building Multidimensional Poverty Indices (MPIs) and has been used extensively both at national and global levels, by countries as diverse as Mexico, Colombia and Bhutan, and by the United Nations Development Programme Global MPI (Alkire & Foster, 2011).

The main characteristic of the AF method is a two-cutoff mechanism that allows identifying people with overlapping deprivations. It is a method that promotes focused actions and allows governments and institutions to track progress toward the Sustainable Development Goals (SDGs) achievement, especially SDG 1, which is to eliminate poverty in all its forms. The MPI is a powerful measure to reveal the most underprivileged groups, as well as to allocate resources and evaluate the progress in a multidimensional context, as emphasized by Alkire and her colleagues (2020) (Alkire & Jahan, 2018). MPIs at the country level are displayed, which proves their relevance in practice. Indicatively, Colombia and Mexico have been using national MPIs in social policy formulation and fiscal planning (Alkire, Roche & Vaz, 2017). In India, multidimensional poverty data has been used to point out to regional and demographic inequalities that cannot be seen using income-only measures (OPHI, 2020). The academia has also examined the intersections between MPIs and inequality, with some observing that the indices can be used to indicate inequalities, thus helping to develop a more refined perspective on social justice. Recent studies emphasize the need to incorporate intersectionality in the measurement of poverty, especially in the identification of intersections of disadvantages facing women, children, and indigenous populations (Suppa, 2022).

The modularity of MPI systems has also been particularly helpful in times of a crisis. As another example, in the context of the COVID-19 crisis, Alkire and her team (2021) relied on multidimensional measurements to assess how poverty deepens in various dimensions, including health, education, and employment, highlighting the ability of MPI to contribute to policy in a prompt and flexible manner. The need of methodological transparency in MPI development is also emphasized in academic circles. These choices of indicators, weights, and thresholds are value-laden and researchers such as Decancq and Lugo (2013) have proposed participatory methods to make sure these choices; are made in line with community values and priorities. Irrespective of the advantages, MPI framework is not devoid of limitations. Critics suggest that it is highly context sensitive and therefore could interfere with international comparability. Others issue shots over the danger of political encroachment in the development of MPI elements to suit certain policy discourses. However, an increasing consensus among scholars and policy makers is that multidimensional tools provide a more holistic and humanistic view of poverty that provide decision makers with more data and more usable information.

To recap it all, the multidimensional poverty measurement is an important development in the way the world measures and thinks about poverty. As more and more countries anchor MPI frameworks in their development policies, it becomes more feasible to respond to poverty in all its complexity - delivering inclusive, equitable and sustainable development outcomes.

### 2.4 Integration of Accounting Principles in Poverty Measurement

The current scholarly debate starts seeing the applicability of accounting concepts in solving the issues of poverty. Accounting practices have long been oriented toward financial performance; now they are slowly starting to expand to include wider social, environmental, and governance (ESG) issues, and poverty reduction is starting to become an important goal. Such a shift is manifested in the uptake of integrated reporting (IR), sustainability accounting, and economic valuation of ecosystem services. De Villiers and Sharma (2020) are of the opinion that integrated reporting frameworks, which include financial, social, environmental, and intellectual capital, are an attempt to enhance transparency of corporations about their issues in society. Their study however reveals a consistent disconnect between promise and practice where disclosures made are usually inconsistent or symbolic in nature and driven more by image issues than a meaningful attempt to deal with stakeholders.

Continuing on the topic, Hörisch, Schaltegger, and Freeman (2020) promote the idea of combining the stakeholder theory and sustainability accounting to make the reporting systems more comprehensive. They say that the accounting mechanisms must go beyond shareholder interests to encompass the underserved and vulnerable populations. These frameworks can become relevant towards compensating poverty by regulating business operations to benefit the long-term interests of the society. However, they also warn that little has been implemented in practice especially in situations where institutions to ensure regulation and accountability are not well established. Accounting is also being used at the policy interface in order to evaluate the linkage between poverty and environmental degradation. Edens et al. (2022) present the System of Environmental-Economic Accounting - Ecosystem Accounting (SEEA-EA) as an instrument to measure ecosystem contributions in economic values. It allows policymakers to assess the relevance of natural resources depreciation in exacerbating poverty and focus on investing in ecosystem restoration to support poor people. In a similar vein, Keith et al. (2021) describe the role of thorough carbon accounting in assessing nature-based solutions, writing that the poverty-related effects of such intervention are usually omitted

because of the absence of standardized reporting schemes, thereby hindering the understanding of overall social value of environmental action.

The success of these accounting systems is strongly dependent on the strong assurance and governance frameworks. A study conducted by Caglio, Melloni, and Perego (2020) demonstrates that the quality and reliability of integrated reports are substantially increased when the external assurance is used to address the sustainability-related information. In the absence of an independent verification, any claims concerning poverty reduction will be mostly unverifiable and may be treated as mere surface level. To argue along this line, Cooray, Gunarathne, and Senaratne (2020) discover that high-quality corporate governance, actively represented by audit committees or radiating board engagement, is linked to higher quality and more informative sustainability reporting. Where governance mechanisms are weak, the chances of accounting to play any social progress are highly reduced.

The emergence of the Sustainable Development Goals (SDGs) has gone further to compel organizations to streamline their reporting practices in line with global development priorities. The report of Erin, Bamigboye, and Oyewo (2022) focusing on reporting of SDG-related actions by firms reveals that mentions of SDG 1 (No Poverty) have indeed increased, but they are mostly non-substantial. The companies prefer engaging in philanthropic activities as opposed to integrating indicators of poverty within their accounting systems. Lashitew (2021) criticizes this trend as SDG-washing, by which companies seem to endorse global goals but have not integrated them into any internal measurement, monitoring, or accountability practices. He stresses that unless such contributions are structurally evaluated and made transparent, they are not substantiated as contributions of corporations to poverty alleviation.

Taken together, the discussed literature indicates that sustainability-focused accounting practices, such as integrated reporting or ecosystem valuation, have a potential to contribute to the process of managing and mitigating poverty. Its tools allow the consideration of social and environmental impacts by the public and privately owned institutions to enhance the process of decision- making, which influences the lives of the marginalized groups. The inclusion of the consideration of the needs of the stakeholders and ecological concerns in accounting practice is something that relates well with the aims of sustainable development. Furthermore, properly assured and governed by structures such systems can enhance trust and give rise to more effective poverty interventions.

Nevertheless, significant challenges remain. The major hole in this front is lack of agreed upon measures to track outputs related to poverty across organization and across jurisdictions. Secondly, there are limited empirical studies, which demonstrate the direct impact of sustainability or integrated accounting on poverty reduction at the grass-root level. Much of the literature available is theoretical or anecdotal with no firm impact analysis. Reports about poverty often, as well, do not capture the multidimensional concept of deprivation, such as inequality, social exclusion, and even access to basic services. The future research effort must be aimed at incorporating more discreet poverty indicators within accounting systems and audit programs. There is also a need to examine how the public and non-profit segments can help coordinate national financial management systems with the SDG agenda, especially in low-resource settings. A longitudinal research and comparative research may provide significant information on successful approaches and institutional impediments in the mainstreaming of poverty-sensitive accounting practices.

### 2.5 Data Sources and Technological Innovations

The current literature is growingly emphasizing the revolutionary nature of technological innovation toward dealing with poverty. Findings by Zameer et al. (2020) indicate that the triple threat of financial development, globalization, and innovation can simultaneously decrease the poverty rates in developing economies by substantial margins. Similarly, Oyeyipo et al. (2024) provide empirical case studies of Nigeria, explaining how localized technological solutions have uplifted the poor populations by creating new economic provocations and improving livelihoods. Continuing this line of thought, Kakeu et al. (2024) research the wider question of how innovation can contribute to sustainable development in Africa, remarking that adequate policy coordination and equal access to digital opportunities are vital to gaining maximum benefit of technological application in neglected regions.

Poverty identification and targeting have also been revolutionized due to technological advancement because of new methods of data collections. A more thorough scoping review is offered by Stubbers and Holvoet (2020), who confirm the usefulness of satellite imagery, geospatial analytics, and mobile phone metadata to improve the measurement of multidimensional poverty, especially in inaccessible areas. Ziuli et al. (2022) also propose the inclusion of dynamic and disaggregated dataset in policy planning and monitoring systems, increasing the sensitivity of resource allocation and development tracking.

Digital innovation has also become a driver of financial inclusion in the context of increasing the outreach of financial services and decreasing vulnerability of households. Koomson et al. (2020) using the construction of a multidimensional index solve the relationship between improved financial inclusion and decreased poverty in Ghana. This relationship is supported by

complementary research by Erlando et al. (2020), which relies on data in Indonesia to demonstrate the correlation of inclusive finance with larger economic inclusion. Likewise, through the use of quantile regression models, Demir et al. (2022) show that, besides enhancing access to banking, fintech services reduce income inequality and foster economic empowerment. Innovation in environment is also becoming very fundamental in poverty reduction. Based on the analysis of data on a sample of countries, Zhao et al. (2022) establish that access to renewable energy positively affects human development and poverty reduction outcomes in diverse national contexts. In their publication, Usman and Hammar (2021) discuss the ability of clean energy technologies and green finance instruments to enable the sustainable development transition in low-income countries. In support of this, Raihan et al. (2023) report a positive relationship between inclusive growth and environmental innovation, whereas Wenlong et al. (2023) reckon that a combination of climate policies and innovation strategies can jointly deal with carbon emissions and poverty.

The new digital technologies connected with the Fourth Industrial Revolution, including artificial intelligence (AI), the Internet of Things (IoT), and blockchain, are transforming the ways to eradicate poverty. Mhlanga (2021) explains how these technologies have improved public service delivery in African contexts, as well as in education and efficiency in agricultural practices. Chen et al. (2021) address the question of how green innovation mediates the relationship between sustainable industrial development, whereas Ahmad et al. (2020) show how technological improvements can lead to a decreased ecological degradation in accordance with sustainable development goals. Technology in agriculture, which is of great significance to the rural and low-income citizens, has also become quite promising. Benami et al. (2021) combine remote sensing, crop modeling, and economic simulation data to study how precision agriculture would support food security and resilience of smallholder farmers. Their review indicates how, with specific technological interventions, there is the possibility of lowering the risk and aiding the process of poverty alleviation in the agricultural population.

On a conceptual scale, the framework offered by Si et al. (2021) establishes the connection between entrepreneurial innovation and poverty reduction and determines the significance of inclusive business ecosystems in catalyzing social rising and regional development. Similarly, Jasim and Raewf (2020) discuss the role of the accounting field in terms of applying information technology to achieve institutional transparency and accountability, especially in bodies handling development funds- hence making the anti-poverty actions more effective and monitored.

Collectively, the available literature confirms that technological enhancement and data capacity building are important elements in the long-term poverty reduction. Though the effects of innovations in each sector, in finance, energy, agriculture, and governance prove to be formally different, the coalescence of these innovations through the prism of integrated policy cohorts can be effectively influential in its results. These indications are that a strategic synergy of technological ingenuity, participatory policymaking, and practice equity is required to actualize purposeful and prolonged declines in poverty.

#### 2.6 Institutional and Governance Frameworks

The newest innovations in measuring poverty have shown a significant move towards a multidimensional understanding of the deprivation phenomenon and the institutional structures that are needed to deal with it. As Wagle (2023) says, this shift towards wider measures that encompass not only income but also social exclusion, capability deprivation, and relational poverty, is a response to the increasing need of having more diagnostic tools that are extensive in their approach. He emphasizes that definitions of poverty go beyond finding the poor; it entails an unfolding of the structural nature of the deprivation as well as the systems of governance that would sustain solutions. Such a change requires the reorientation of policy machines and accountability systems at different levels of institutions. Fiscal policies by the government are central in enhancing the poverty reduction initiatives particularly in infrastructure. Nguyen and Su (2022) show that an improved government spending on the energy system can have a significant negative impact on energy poverty in developing countries, especially in rural areas. Their results support the significance of direct state intervention and the existence of institutionalized tools that promote the equal provision of the public services.

Governance arrangements at the corporate and non-profit level are also coming under increased scrutiny with regard to their contribution to dealing with poverty. Erin, Bamigboye and Oyewo (2022) disclose that, whilst a significant proportion of businesses currently mention poverty reduction in their Sustainable Development Goal (SDG) reports, it has not yet been embedded in the mainstream governance and strategy making. They claim that the majority of initiatives are still on the outskirts of the corporate social responsibility, and not many companies can say that they have implemented poverty-related metrics in their risk management or company KPIs.

There are also opportunities and challenges in the involvement of multinational enterprises (MNEs) in local communities. The researchers state that MNEs can deliver a significant amount of capital and employment, but in case they do not adapt to local informal institutions, such as traditional land tenure systems, they may block development outcomes and even reinforce local vulnerabilities (Brandl et al., 2022). Good governance in this regard means being responsive to both formal rules as well as informal conventions in order to prevent unwanted social consequences.

Also crucial, in providing poverty-alleviation outcomes, are corporate governance and internal control structures in financial institutions. The authors conclude that well-governed institutions that have effective internal audit functions are in a better place to produce reliable financial information, which boosts the trust of the people in the institution and enhances the delivery of microfinance services to the underserved populations (Kaawaase et al., 2021). This relation highlights the fact that effective financial inclusion presupposes institutional credibility.

The broader governance conditions also influence the microfinance efficiency. Kamarudin et al. (2021) consider the institutions of four countries of Asia and determine that the environment of economic freedom and the strength of the regulatory frameworks are conducive to better performance of microfinance. This suggests that the build-up of enabling institutional ecosystems is probably as important as the provision of capital in the objective of alleviating poverty via financial services. Another important area is the role of state accountability systems in supporting the implementation of SDG. According to Abhayawansa and Adams (2021), efficient oversight bodies such as national audit offices and parliamentary review mechanisms are paramount in the SDG-related finances well-utilized. Such tools as performance audits and public reports contribute to transparency and assist in aligning the spending to the social results, especially those ones which are related to the poverty reduction.

Other forms of governance like Zakat in the Islamic finance provide further lessons. Sawmar and Mohammed (2021) create a theoretical framework that demonstrates how Zakat distribution procedures can be made more effective by including such factors as the transparency of procedures, the engagement of stakeholders, or institutional controls in the process of helping the poor. Their article shows how locally ingrained governance behavior can be used to achieve social wellbeing given that they are well designed.

Nonetheless, there are valid concerns on the surface level integration of the SDG rhetoric into corporate structures. Lashitew (2021) decries the currently high rate of so-called SDG-washing, in which companies apply the SDG branding to their overall benefit without making substantive shifts in internal governance. He claims that to meaningfully interact with SDG targets, they have to be integrated into core operational systems, including budgeting, planning, and monitoring, and not only external reporting. With the development of more sophisticated evaluations of poverty (that are considering capabilities, social relations, and institutional settings), a crucial urge to adjust governance systems emerges as well (Wagle, 2023). The systems should be able to support more data-rich collection and real-time responsiveness, going beyond simple income measures.

The infrastructure investments especially in sectors such as energy are best utilized in presence of transparent and accountable governance. According to Nguyen and Su (2022), unless there are robust institutions to oversee distribution and access, public investments may be unfair or inefficient, and hence they can do little to reduce poverty. CSR strategies have the potential to make significant contribution in alleviating poverty in the private sector provided they are integrated within the organizational governance arrangements. As demonstrated by Erin et al. (2022) and Kaawaase et al. (2021), companies should implement measurable performance and strong audit capabilities to make sure that CSR actions bring real social results. The external development actors (such as MNEs and microfinance institutions) should also maneuver through local governance systems in a delicate manner. Misalignment to community structures or norms might decrease effectiveness and trust (Brandl et al., 2022; Kamarudin et al., 2021). The interventions adapted to the local governance situations improve legitimacy and results.

In sectors, effective governance either by the state through public oversees bodies, internal financial controls within organizations, or religious organizations such as Zakat, is critical in the success and credibility of the poverty-alleviation programs (Abhayawansa & Adams, 2021; Sawmar & Mohammed, 2021). Stakeholder trust and accountability will transform the resources into equivalent and quantifiable development. SDGs adopted by public and private organizations should not remain at the level of superficial compatibility. Lashitew (2021) notes the importance of a more profound embedding of SDG indicators in planning, operations and assessment so that the poverty-related goals would not be just inspirational but attainable via well-organized governance. In spite of this progress there are still a number of research gaps. As an example, the translation of the multidimensional poverty indicators into budgetary allocation and policy choices by governments has inadequate empirical investigation. There is also a lack of comparative studies across systems of governance which means that it is hard to say which institutional designs work best when measuring against a similar regime. Evaluations on the impacts of audit and assurance mechanisms in the delivery of services in poverty-related sectors are also lacking.

Also, religion, and culturally-based systems of governance, like Zakat, are under researched, despite being vital in most settings. Lastly, the way towards substantive adoption of SDG goals after the symbolic one requires further investigation, and a particular focus should be made towards embedding these goals into governance practices that could lead towards real outcomes of poverty reduction.

#### 2.7 Poverty Accounting in National and Corporate Reporting

National reports on poverty measurement have undergone a transition between the use of absolute thresholds to more dynamic approaches which bring in a societal context. Jolliffe and Prydz (2021) proposed the so-called societal poverty line, a concept

that combines the aspects of absolute and relative poverty: they suggested that the baseline (e.g. 1/day) should move in tandem with the median income of a country. Their analysis of 699 poverty lines reveals that the world has experienced a reduction in the extreme poverty levels but poverty nevertheless exists in society particularly in the richer nations which have experienced a lower rate of change. This reiterates the relevance of context-sensitive measures in the development of effective measures related to poverty. Census Bureau data in the U.S. show that there are differences between the official way of measuring poverty (based on 1960s methodology) and the Supplemental Poverty Measure (SPM). According to Creamer et al. (2022, 2023), although the official measure of poverty reduced slightly in 2021-2022, the SPM better reflects the multidimensional causes of poverty, including medical and housing costs. It explains why the concepts of multidimensional poverty measurement are needed, which could reflect lived experiences and structural inequalities.

The business world has become interested in poverty-related topics, but mostly in a very superficial way. According to Erin, Bamigboye and Oyewo (2022), most companies mention the Sustainable Development Goals (SDGs) in their reports but few have made poverty-related measures part of their governance, performance monitoring and assurance frameworks. This has been supported by Kaawaase et al. (2021), who states that financially strong governance and internal controls of any financial institution increase the likelihood of these institutions to develop reliable financial disclosures- which is paramount when such institutions engage in poverty reduction by participating in microfinance.

The links between poverty accounting and the stability of the financial system were first noticed in 2007 2009 global financial crisis. According to Bischof, Laux and Leuz (2021) banks failure to recognize their losses as well as opaque risk reporting exacerbated systemic weakness. These weaknesses had a disproportionate negative impact on low-income communities because they precipitated losses of jobs, reduced access to credit, and weakened the social safety nets. Therefore, transparent and timely financial reporting can be of great importance in safeguarding the economically vulnerable groups.

Nonetheless, the incorporation of poverty measures in financial reporting is complexed because of differences in accounting rules and regulation amongst different countries. According to Isidro, Nanda, and Wysocki (2020), the quality of financial reporting is especially reliant on the quality of regulatory enforcement and institutional transparency. The report by Solomons (2021) expounds on how the quality reporting standards are fundamental in including non-financial indicators, including those based on poverty. In the near past, standard setters have started to consider non-financial risk disclosure frameworks. Abhayawansa and Adams (2021) propose to include pandemic and climate-related risks in corporate reporting, which can serve as the model to institutionalize poverty indicators in the mainstream accounting systems.

Inclusive financial systems have been largely attributed as a means of curbing poverty. Under the conditions of the empirical research, Churchill and Marisetty (2020) and Omar and Inaba (2020) conclude that financial inclusion, namely the provision of banking services and access to credit and digital finance, reduces poverty and inequality in both developed and emerging economies considerably. These results help make the argument that financial inclusion measures should be included in national poverty data and company reporting. Last but not the least, national poverty outcomes are influenced by the broader global trends like trade liberalization; environmental sustainability; and access to resources. Wade (2020) reviews the neoliberal models of the economy and argues that they increase inequality when there are no institutional checks. Equally, Wackernagel et al. (2021) recommend the use of ecological accounting to quantify resource security because, in their opinion, the sustainable decrease in poverty is possible only when the environmental aspects are taken into account in the poverty measurement systems.

To conclude, successful poverty accounting requires breaking with universal standards. It demands poverty lines which are specific to national income distributions and wider socio-economic situations. The example of such an approach is the societal poverty line introduced by Jolliffe and Prydz (2021) as a combination of absolute and relative deprivation. Creamer et al. (2022, 2023) further validate this point of view by demonstrating the advantage of supplemental poverty measures in the U.S. context in terms of the representation of material hardship. Although sustainability reporting is common, there is still inadequacy in terms of incorporating poverty indicators in corporate governance. As noted by Erin, Bamigboye, and Oyewo (2022), there is a tendency to refer to poverty without any serious follow-up. According to Kaawaase et al. (2021), internal systems of accountability, such as audits, good governance, and credible disclosures are needed, particularly in institutions that purport to work on behalf of the poor.

The importance of transparent reporting is evidenced by the financial crises such as the one in 2007 2009 which showed that the vulnerable populations could get severely affected by the absence of transparent reporting. Bischof, Laux, and Leuz (2021) claim that the slow realization of financial losses added to the snowball effects, which destabilized the economic security of low-income populations. The national variations in regulatory and institutional capacity also have to be reckoned with in the attempts to include poverty data in the financial reports. According to Isidro, Nanda, and Wysocki (2020), effective institutional environments are conducive to reporting, and Solomons (2021) claims that rigorous reporting systems are the basis of

expanding disclosures into the non-financial areas. Abhayawansa and Adams (2021) go further to suggest that the treatment of health and environmental risks can create a precedent in the treatment of poverty measures.

Financial inclusion is also a strategy as well as an indicator in reduction of poverty. The advantages of access to financial services are demonstrated through research by Churchill and Marisetty (2020) and Omar and Inaba (2020), among others, which makes a strong argument about its inclusion in national and corporate reporting. Last but not least structural global problems like trade policies and environmental sustainability should also be included in any poverty accounting system which is comprehensive. Wade (2020) issues a caution on unregulated globalization potentially contributing to further inequality, and Wackernagel et al. (2021) argue the need to integrate accounting to indicate environmental constraints. Collectively, these views indicate the necessity of a multidimensional framework that is able to grasp economic, institutional, and ecological factors of poverty.

## 2.8 Methodological Approaches for Developing New Metrics

The development of new measures to evaluate complicated socioeconomic problems has radically changed within the past years. Researchers are proposing more multi-dimensional, situationally conscious, and inclusive frameworks. Conventional one-dimensional metrics have often been accused of being ineffective in the inter-linked concept of poverty, sustainability, and financial inclusion. Ravallion (2020) has urged the critical importance of relying on the unchanging global poverty lines in favor of methods that capture the cross-national variations and dynamic standards of living. He contends that there should be a drift towards relative measures of poverty which looks at material deprivation together with the societal expectation. Following the multidimensional poverty index (MPI), Vollmer and Alkire (2022) present asset-dimension improvements, pointing to the fact that indicators should not lag behind dynamics in asset ownership patterns, specifically in low-income contexts. Their tactic includes indexing indicators to new patterns of consumption and utility determinations. Likewise, Singh and Chudasama (2020) evaluate the poverty reduction initiatives in India with the help of localized evaluation instruments based on the participatory approach and context-specific to communities.

Innovations in methods have also been paralleled in the energy poverty field where the inability to carry measurement devices in a particular location has led to the development of exhaustive ones. Sy and Mokaddem (2022) made an overall examination of how energy poverty is defined and measured in developing countries, proposing composite indicators as the ones to be used, which take into account affording, accessing, reliable, and environmental sustainability. Sareen et al. (2020) get into this debate by assessing European metrics of energy poverty and proposing to deploy scale-sensitive models, where regional, climatic, and social variables are considered. Collectively, their additions imply the unsuitability of single-metric models and requires more nuanced constructs. In Poland, Sokołowski and Lewandowski (2020) construct a multidimensional index to measure energy poverty, applying such statistical methods as indicator weighting and factor analysis to make it more representative of real household situations. Such an empirical approach is consistent with a theoretical framework provided by Robeyns (2021), who relies on capability approach to stress the importance of considering actual freedoms and opportunities of people, rather than focus only on their resource access. This viewpoint calls upon metric designers to surpass measuring resources and, instead, evaluate the conversions of such resources into well-being.

There is also an improvement in measurement of digital and financial inclusion. Using a behavioural-economics-based structured framework of digital financial literacy, Lyons and Kass-Hanna (2021) propose theories of financial planning as the basis of digital financial literacy. Their model is the synthesis of knowledge-based and experience that is put to test and refined during the process of empirical studies. In the same line of thought, Ediagbonya and Tioluwani (2023) mention the importance of fintech solutions in inclusion in emerging economies, proposing a set of indicators that could be used to assess the functionalities, ease of access, and the level of trust that people put in digital tools. Metric innovation has also been advanced through the sustainability and circular economy research. On the one hand, Gatto (2020) demands a more cohesive vision of measuring economic and corporate sustainability, relying on the ecological, ethical, and social aspects. He bemoans the lack of continuity within the current sustainability indicators and proposes integrated measures, which depict human and regional development agendas. Similarly, Padilla-Rivera et al. (2021) apply the fuzzy Delphi methodology to establish social indicators of the circular economy. It is a consensus method that becomes especially effective in resolving qualitative or ambiguous indicators and enhances the credibility and applicability of the derived metrics.

Taken together, this literature body of evidence indicates that the successful metric development should be characterized by the willingness to adopt an interdisciplinary approach, involve a variety of stakeholders, and be sensitive to the contextual realities. Be it in dealing with poverty, energy requirements or access to finance, one sees a definite shift towards hybrid designs that attempt to maintain the rigour of statistics, but also ensure that the qualitative dimension is not lost. These methodologies are also being considered as crucial in generating dependable, operational and pertinent indicators in this modern complicated world.

#### 2.9 Regional and Contextual Dimensions

A growing literature assists in emphasizing the significance of regional differences in governance and development performances. The paper of Wen, Hu, and Zhou (2024) provides a comprehensive evaluation of digital climate governance in China, using a multidimensional statistical model constituted by 11 principal and 36 secondary indicators. They provide analysis that displays significant regional inconsistencies: the eastern provinces are characterized by considerable improvements, whereas the western regions are underdeveloped. Being based on spatiotemporal models and using coupling coordination framework, their analysis shows that the outcomes of governance are more likely to be divergent than convergent, with local resource endowments and interactions between governmental and market mechanisms playing significant roles.

In a similar manner, Guo et al. (2025) also rely on longitudinal CHARLS data to examine the provincial trends in active aging in China. The research indicates regional disparities even though there have been national-level improvements in health, autonomy, and social engagement. provinces with less infrastructure and socio-economic support systems show slower improvement, which indicates how localized policy environments contribute to the deprivation related to aging.

Ulman and Ćwiek (2021) develop a multidimensional housing poverty index in the Polish context based on the Integrated Fuzzy and Relative (IFR) methodology in the European context. This method provides a subjective element of assessments and objective measures that generate a more sophisticated image of housing deprivation. They find that deprivation is highly localized in rural and high-population inner-city regions which strengthens the geographical disparity of housing conditions. Liu, Huamao, and Liu (2023) evaluate the role of green development strategies in regard to revitalization in rural China. They demonstrate, via regression analysis, that regions with more highly developed green infrastructure, and with more solid human capital investments perform better. Their findings emphasize the need to design policies of rural development according to local environmental and institutional capabilities.

Building on this, Yang et al. (2023) explore revitalization projects in western China and concentrate on the aspects of infrastructure investments, market access, and governance capacity. The fact that they apply spatial autoregressive modeling allows stating that local institutions play a significant role as mediators of development, and the results vastly differ depending on the efficacy of governance at the regional level. In Chinese cities, the quality of urban life is discussed by Wang, Li, and Wang (2023), who construct a city-level well-being index and compare it with subjective satisfaction indicators. In their research, they find a mismatch in certain areas, whereby the objective measure of development does not correspond with the self-reported satisfaction among residents, indicating the role of more intangible determinants of pollution, stress, and housing affordability.

Nevado Peña and Lopez Ruiz (2020) discuss the importance of human capital and innovation in the regional smart specialization strategies in the context of the EU. They determine that institutional coherence positively impacts the results of innovation, whereas less strong policy alignment in other regions means that development is hampered-innovation policies in the regions must be customized. In the question of poverty, Yan, ushing, and Gu (2024) examine the influence of regional aspects of trade policy stability, access to fintech, and resource-based economic growth on poverty rates in China. Their findings demonstrate that areas that have seamless fintech infrastructure and stable policy structures are better at alleviating poverty, which is indicative of the synergistic outcomes of technology and politics in meeting the sustainable development goals.

Jia, Yang, and Zhu (2025) and Wang and Du (2025) use digital transformation and human capital to examine their effect on time poverty among the Chinese labor force. By means of spatial econometric models, they prove that those eastern cities that have developed digital infrastructure and have higher-quality workforce training programs report lower time poverty levels. Conversely, rural and interior regions, which are handicapped by poor digital connectivity and shortage of skills, are at a bigger disadvantage. The study by Mao, Wang, and Ma (2023) focuses on exploring the trends of high-quality economic development in western China. Their spatial profiles of development indicators show the existence of longstanding disparities in resource distribution and institutional capability, necessitating the subregional strategies that are highly differentiated to promote even economic development.

Collectively, these articles demonstrate the great influence of local context on development indicators and performance. Using China and Poland as empirical examples, it can be clearly seen that indicators characteristic of digital governance, population aging, housing conditions, and rural revitalization vary greatly depending on the local administrative and socio-economic situation. Context-sensitive measures Subjective well-being does not always correlate with objective measures in urban environments. The European evidence o smart specialization emphasizes the role of institutional synergies in supporting regional innovation, whereas Chinese experiences with fintech and trade policy show that the coordination of policy and digital infrastructure is the key to successful poverty reduction. In spite of these effusions, there remains critical gaps. A great deal of research that has been carried out is significantly dependent on quantitative and econometric techniques and fails to appreciate qualitative aspects, which would help in revealing the social mechanisms at play. Also, cross-national comparative studies with harmonized indicators are rare and harm generalizability. Last, secondary regional impacts, e.g. spillovers or migration, are scarcely studied, which may provide insights into significant dynamics of policy and infrastructure diffusion. It will take

interdisciplinary approaches; cross regional harmonized frameworks; and dynamic models that can reflect the dynamics of regional development and poverty.

### 2.10 Policy Implications and Practical Applications

Recent research findings emphasize the usefulness of multidimensional measurement of poverty in informing policymakers making more effective decisions since it measures many facets of deprivation that are not reflected in monetary income. According to Putri, Shafiai, and Ismail (2024), the Multidimensional Poverty Index (MPI) approaches have been thoroughly reviewed, and such frameworks as the Alkire--Foster model and the Human Development Index (HDI) can help to provide a more elaborate picture of poverty. They indicate that MPI inclusion in the national development plans can boost the selective investments in vital areas, including health, education, and living standards, thus promoting socially inclusive growth (Putri et al., 2024). Hossain (2024) focuses on exploring the theme of environmental sustainability and economic growth regarding the Bangladesh industrial environment. His work advocates policy changes that can pursue both industrial growth and ecological management. The main suggestions are the implementation of green tax incentives, establishment of efficiency standards in water and energy consumption, and demand of a higher level of environmental regulations. A wide and effective implementation should be well coordinated between economic and environmental authorities.

The Iran and Ethiopia country-specific studies also show the usefulness of the multidimensional poverty data at the practical level. Barati, Zhoolideh, and Moradi (2022) unveil that asset-based livelihoods and educational policies are the ways to promote poverty alleviation in rural Iran, which should be accompanied by increased microfinance and agricultural extension services. In the meantime, the evidence provided by Bersisa and Heshmati (2021) in their study of Ethiopia speaks in favor of targeting cash transfers, universal health care, and education- orientation of spending as the means of fixing the hole in the capabilities and wellbeing distribution. Another aspect that has been developed is the use of financial instruments in the strategy to reduce poverty. Mohammed et al. (2024) investigate the case of Islamic finance in Saudi Arabia and establish that there is a positive correlation between its growth and alleviation of poverty. They recommend policy procedures that involve enhancing the legal frameworks, integrating Islamic banking into the national development strategies, and enhancing financial literacy so as to boost accessibility and inclusivity.

Fiscal strategies also have a leading role. The findings presented by Lustig and colleagues (2025; 2020) on Latin America support the notion of the potency of progressive taxation, as well as well-targeted conditional cash transfers and strategic public investments in inequality alleviation. They stress the institutionalization of the fiscal incidence analysis to track and evaluate the redistributive impacts of the government revenues and spending.

The experience of Indonesia, discussed in the article by Margiono, Mursitama, and Wulandari (2022), supports the need of unbiased and context-sensitive impact assessment. Their suggestions include the creation of independent social impact evaluation agencies, the integration of mixed-method techniques and citizen involvement to enhance accountability and the credibility of the policies. At the agricultural policy, Covarrubias et al. (2025) evaluate income benchmarks of cocoa farmers in Cameroon. Their conclusions enable them to suggest the adaptation of pricing systems and subsidies to localized living-income standards to guarantee the sustainability of farmer livelihoods and enhance transparency in agricultural value chains. Another urgent issue is the construction of food system resilience. Roosevelt, Raile, and Anderson (2023) propose the community-managed seed reserves, real-time market monitoring, decentralized grain storage, and continuous farmer education as the interventions that can lessen the effects of climatic variability and market shocks.

Akamobi, Anumudu, and Ugwuanyi (2022) suggest a children-focused version of the multidimensional poverty framework in Nigeria, including such indicators as health, nutrition, education, and clean water access. Their research suggests effective solutions like school lunch programs, better water systems, and healthcare programs in the countryside to help extinguish the poverty transmissions across generations. Febriyanti et al. (2024) also focus on the public sector effectiveness and state the necessity of modernizing the performance evaluation systems. They recommend the transition to digital dashboards, the inclusion of citizen feedback loops, and training of the staff to facilitate the shift to outcome-oriented governance and increase public accountability.

Finally, Wang and Yue (2023) dwell on rural poverty and income inequality in China. They stress that region-specific measures, including agricultural subsidies, professional training, and infrastructure building, are required to close the income disparities and assure long-term rural development.

## 2.11 Ethics and Philosophical Considerations

The very process of measuring social phenomenon is subject to ethical and value-based considerations and judgments, and thus is subject to continuous moral deliberation. Duque, Tal, and Barbic (2024) highlight that psychosocial tools cannot be considered as neutral knowledge tools; on the contrary, they embody and enshrine social and ethical values in both their development and application. They criticize the limited conception of ethics as harm avoidance and offer a normative process of five stages of

addressing ethics, which they call ethical iterations, to achieve the agreement between measurement practices, values of stakeholders, and social goals. The model provides useful advice to researchers and policymakers who want to develop ethically sound measurement instruments. This ethical aspect is further demonstrated by philosophical thinking on health measures. Lalumera (2025) discusses the conceptual challenge of attempting to measure well-being and health-related quality of life, as any measure of health represents a evaluative decision problem about what physical, psychological, or social aspects of life ought to take precedence. These lessons teach that the process of defining health indicators is not value-neutral and that ethical consideration should be incorporated in early measurement design.

The issue of ethics is also eminent in the Al-based educational system. Borchers et al. (2024) invoke embodiment of acknowledged ethical principles -accountability, fairness, and transparency- throughout Artificial Intelligence in Education (AIED) development and implementation. Their main point is that design choices are needed to ensure that the project is resistant to algorithm prejudice through data collection, deployment, and anywhere in between, and that it is also necessary to support a learner-centered perspective.

In slightly wider philosophical terms, Gurton and Tipping (2025) argue that underlying aims of education, i.e., establishing critical thinking, cultivating civic engagement, or Economic outcomes directly affect what and how is assessed. They contend that metrics used in education should be representative of these core goals, because ultimately metrics send an indication of what is prized in the system. Indicators of ethical development are also being employed outside the field of education and health into the field of governance. Shemeteva and Pjeluchaa (2023) present the outline of an artificial index of ethical development that encompasses moral virtues and social resilience alongside human flourishing. This framework is founded on moral philosophy and provides a greater understanding of the development since it focuses on the moral dimensions of development rather than regarding development through material indicators.

The aspect of ethics in measurement also plays an important role with regard to global crisis and cultural diversity. Chien (2022) speaks about the conflict between universal ethics and local value systems in the post-pandemic globalized world. He supports the idea of a hybrid ethical approach that considers the global standards along with morality frameworks rooted in the cultures, without which it is impossible to create inclusive and culture-sensitive metrics. Turning to moral education, Biesta (2021) offers criticism of the current focus on individual success in it and suggests the idea of community-based ethics, where relationships and the sense of shared responsibility are valued more. It is a view that urges educational assessments be based not just on standardized results but rather on the outcome of formation of moral and civil character.

Eynon (2022) discusses the fact that education should react to the process of datafication of society. He claims that students should have not only technical skills of working with data but also learn to critically reflect on the processes of data production and utilization. In a world where digital measurement is used to determine social action and policy, it is necessary to teach data ethics. Kaczkó (2021) emphasizes conflicting visions of financial literacy, stating whether it has to be consumer-behavior- or citizen-empowerment-focused. The author emphasizes that the definition and measurement of financial literacy carry ethical implications either enforcing the market norms or encouraging a democratic participation in the economic life. Skourdoumbis and Rawolle (2020) warn against reductionist teacher assessment measures, which do not appreciate the wider moral purposes of educators, including promoting social justice and belonging to the community. They demand performance assessments, which combine ethical and relational aspects with technical competence.

Finally, Letiche and Maas (2024) introduce a participatory paradigm of accountability and note that the measured individuals should play a role in developing the instruments and criteria with the help of which they will be assessed. Their idea of symmetrical accountability proposes shared governance and transparency which is a prerequisite of ethical measurement in institutional settings. To conclude, measuring in social systems is not a distant technical affair- it is highly moral. There are going to be value-laden judgments in the decisions of what to measure, how to measure it, and whose voices to include. Both Duque et al. (2024) and Lalumera (2025) demonstrate the importance of ethical considerations which should be at the forefront initially. Gurton and Tipping (2025) and Kaczkó (2021) also show that to define the purpose of a metric, be it in the field of education or finance, moral clarity is needed.

The legitimacy and fairness of the measurement practices are fostered by participatory and inclusivity measurement practices such as the one suggested by Letiche and Maas (2024). In high-tech spheres such as AIED, Borchers et al. (2024) and Eynon (2022) warn of the urgency of ethical regulation, whereas Shemeteva and Pěluchaa (2023) and Biesta (2021) urge the introduction of measures that would reflect the moral and relational aspects of human development. The consideration of cultural diversity, following the argument provided by Chien (2022), supports the necessity of pluralistic ethics when designing metrics. All in all, measurement needs to be aligned with ethical purpose and inclusive governance, so that metrics become instrument of larger project of equity, justice and human flourishing.

### 3. Methodology

The study followed a Systematic Literature Review (SLR) research approach to explore the vibrant area of poverty measurement and accounting. SLR method was selected due to its capacity to reproducibly amass, arrange, and summarize prior scholarly knowledge with a structured method. The approach allowed identifying significant theoretical approaches, methodological contributions, and empirical evidence of different fields of knowledge with a special emphasis on defining, measuring, and framing the notion of poverty in national and institutional contexts ethically. The methodology allowed getting a full picture of the scholarly discussion, policy advances, and upcoming innovations in designing measures of poverty.

The strategy of the literature search was carefully designed and consisted of the query of a number of high-quality academic databases, namely, SpringerLink, ScienceDirect, Taylor & Francis Online, Google Scholar, and some institutional ones, specifically, the Asia-Pacific Network for Moral Education (APNME). The search terms involved a mix of pertinent keywords, namely, poverty accounting, multidimensional poverty, poverty measurement, social indicators, well-being and quality of life, ethical aspects in measurement, financial inclusion, governance and poverty, datafication and poverty, and measurement frameworks. Precision and breadth of the search were achieved by using Boolean operators.

It was reviewed between 2020 and 2025, which was chosen to present the contemporary discussion due to the recent global events such as the COVID-19 pandemic, technological progress, and growing interest in measurement practices ethical considerations and governance. It has considered only the publications in English to ensure uniformity in analysis and interpretation. The relevance and the academic integrity of the chosen literature was guaranteed by the specific inclusion and exclusion criteria. The sources had to be peer-reviewed journal articles and scholarly book chapters as well as institutional publications and has to directly relate to the metric of poverty or methods of accounting or ethical approaches. No publications that were outside of the specified period, non-academic resources (e.g., blogs, news articles), as well as incomplete or unavailable texts were considered. The first search contributed 200 articles. An initial screening using titles and abstracts led to elimination of 50 items that failed to satisfy relevance or quality criterion. The other 150 articles underwent further close assessment by comparison with the set criteria. A total of 118 articles and organizational publications released in 2020-2025 were selected as appropriate for thorough review, a selective mixture of conceptual analysis, methodological development, and empirical research.

In a bid to examine the rigor and quality of these studies, the research team employed the use of various assessment tools. Qualitative research was evaluated using the Critical Appraisal Skills Programme (CASP) to make sure that the methodology was sound. In addition, they were reported according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to allow transparency and reproducibility. They also designed a customized evaluation rubric according to which each of the studies was graded based on four aspects methodological transparency, theoretical contribution, empirical depth, and policy significance. To extract data, a structured coding process was used to extract data of the selected studies. All the studies were coded on the basis of important themes to the research purposes. The thematic areas were: Theoretical Foundations of Poverty Metrics, Traditions in League with Accounting Concepts of Poverty Metrics, Developments in Multidimensional Poverty Indicators, Accounting Concepts Applied to Poverty Metrics, the role of technology and developing data, Governance and institutional Modes, Ethical and philosophical aspects, and Policy-Relevant Outcomes. The results were summarized narratively so as to aid comparison and to serve other sections of the study.

#### 4. Discussion of Results

The present systematic literature review analysis has considered 118 scholarly sources and organizational publications released in 2020-2025. The materials cover a variety of fields such as economics, ethics, education, data analytics, and governance to provide a holistic approach to analysis of contemporary trends and changes in the field of poverty measurement and accounting. The review includes publications between 2020 and 2025 and thus reflects critical emerging in 2025 as well as new innovations and methodological changes in this rapidly developing field. A thematic analysis revealed five conceptual themes. The first theme is a reassessment of the theoretical basis of measuring poverty with increasing awareness of the constraints of the traditional income-based approaches. Some researchers, including Lalumera (2025) and Duque et al. (2024), promote the use of a more comprehensive framework that also covers such aspects as health, agency, well-being, and access to social infrastructure. Such perception aligns with the increasing application of multidimensional structures such as the capability approach introduced by Sen and the Multidimensional Poverty Index (MPI) introduced by the UNDP, which present less-blunt perceptions of deprivation.

The second topic is the theme of ethical and philosophical aspects. Biesta (2021) and Chien (2022) are scholars who question the fact that human struggle is narrowed down to some statistical measures and make it clear that the cultural applicability and community feedback should be included in the analysis of poverty levels. Borchers et al. (2024) emphasize the ethics-related danger of data-driven methods, especially in terms of the disappearance of individual agency and dehumanization of a person currently presented as a datum point. This tension represents a consistent debate between the creation of actable measures of

policy and the maintenance of the complexity of lived experiences. The third major theme pertains to the role of institutional and governance arrangements on standards of measuring poverty. As an example, Letiche and Maas (2024) suggest fairer and more reflexive reporting without the peripheralization of the disadvantaged groups. Eynon (2022) investigates how educational institutions contribute to the reproduction or reduction of data disparities and implies that the systematic change is necessary to adjust the institutional responsibility and social justice values.

The fourth theme denotes the importance of technology and rising datafication of measures of poverty. Artificial intelligence, machine learning, and big data tools have simplified the process of collection and analysis of data but have also brought up the issue of bias in the programs and lack of ethics. Borchers et al. (2024) promote the concept of ethical design of Al-powered systems, whereas Eynon (2022) warns of the so-called data poverty, where the communities that are not digitally connected will not be part of official statistics and policy discussion. The fifth and last theme is on new developments in terms of methodological and practical aspect of determining poverty. There has been an increased agreement that poverty ought to be analyzed multidimensionally based on education, access to health care, environment, and empowerment; and not solely based on income levels. Other researchers, like Kaczkó (n.d.), Shemeteva and Pěluchaa (2023), advocate participatory approach and context-sensitive methodology that replicate local realities and consider qualitative aspects in addition to quantitative analysis. The synthesis of the analyzed literature can be contrastively read as the difference between the prevalent Western modes of thinking, which tend to value statistical accuracy and technological advancement, and the positions offered by the Global South and critical scholarship that tend to put human dignity and ethical aspects as well as community involvement to the fore. Nevertheless, there seems to be some common ground in the recognition of the significance of the multidimensional poverty assessment, even though there are some differences in the theoretical inclination varying between the capability frameworks to the ethical developmental and sustainability models.

The gap is also revealed in the review, both theoretically and practically. A significant weakness is that normative ethical theories have not been integrated with technical practices of measurement. Philosophers promote a new measurement system where human dignity is at the center whereas economists and statisticians usually emphasize standardization and comparability. Solution of this divide will entail more forceful interdisciplinary actions. Another limitation is data availability, particularly in spots where household surveys are either old-fashioned or non-representative. This data gap is especially troublesome in terms of informal economies, gender-based inequities, and indigenous experience. The results of this review highlight that measuring poverty is not a neutral or technical activity, but a highly moral and political activity. The choices made with regards to poverty measurement translate into practical impacts that are reflected in the distribution of resources, and formulation of policies. Accounting principles of transparency, responsibility and stewardship could be embedded into the poverty assessment to increase fairness and trust in these systems. The findings produced as a result of this review could be applied in practice in many fields. Financial literacy and ethics educational programs may use a better insight into poverty metrics. The system of governmental accountability can be developed with references to the participatory reporting practices, and corporate ESG (Environmental, Social, and Governance) can be extended to cover the indicators of poverty. These uses highlight the need to put to use the multidimensional frameworks in policy assessment, budgeting, and corporate reporting.

The future of the research needs to focus on developing integrated measures of poverty that bring together the statistical measure with the narrative based measure that can provide a more deprived picture of poverty. It is also necessary to understand the interaction of poverty with other social aspects including gender, disability and ethnicity. Further research on how ethical AI can be used towards inclusive metrics, as well as, the impact of financial inclusion policies over the long term will also be useful. Notably, deeper partnerships within the Global South will be crucial to the design of culturally sensitive and participatory instruments of poverty assessment, and will add to epistemic justice in the global development discourse.

#### 5. Conclusion and Recommendations

The present research was an extensive and systematic review of the changing landscape of poverty accounting and measurement, especially focusing on its philosophical, ethical, methodological and institutional foundations. The main task was to unite the modern viewpoint, identify the gaps in theory and evidence, and investigate whether it is possible to incorporate the fundamental accounting principles, which include transparency, accountability, and inclusiveness, in the established systems of measuring poverty. The result of a broad literature search of 32 academic sources, such as peer-reviewed journal articles, book chapters, and institutional publications, the research offers a comprehensive conceptualization of the multidimensional realities that currently characterize poverty conceptualization and measurement. With the findings, there is a fundamental change in the field in regards to the traditional reliance on income-based measures to multidimensional poverty indices. It has been influenced by ethical and philosophical criticisms of reductionist conceptions of economics, as well as a more general recognition of the fact that poverty is an experience that goes beyond material deprivation to encompass the denial of capabilities, social exclusion and the undermining of personal agency. Always in the literature, the newer methods include a more comprehensive understanding of the meaning of being poor, and urge the use of frameworks that are not just sensitive to the precision of statistics, but also to

human dignity and realities of life. Another outstanding trend is moving towards the involvement of accounting principles like fairness, traceability and participatory design to the measurement and reporting of poverty.

A significant merit of the review is its interdisciplinary approach that unites the perspectives of ethics, accounting, development studies and policy analysis. Such an embedded methodology puts the measurement of poverty as both an objective, technical exercise and as a moral action which disciplinary boundaries find difficult to applaud. Some of the under researched but important areas are pointed out by the review. These are ethical implications of using artificial intelligence in measuring poverty, the importance of self-reflection within reporting institutions, and the applicability of moral education in defining the values behind measuring poverty. Meanwhile, the review is not afraid to note the existence of continued gaps in the available body of work. These are the persistent use of discipline-based silos, lack of participatory methods in the development and use of poverty measures, and persistent data gaps which tend to make the marginalized groups invisible. Such inadequacies highlight the urgency of methodological developments which, besides requiring empirical reliability, must accept the qualitative richness which is required to mirror the varied human experiences.

In order to advance the field, a number of strategic directions would be advised. The further studies need to focus on creating hybrid models that would combine the traditional indicators of income, education, health with more subjective and culturally-based ones, like the perceived well-being and social belonging. The institutions that deal with the assessment of poverty need to incorporate ethical judgment and participatory action in the construction of measurement instruments, and they should leave the affected population to influence the definitions and standards by which their situations are judged. It is recommended that governments and corporations incorporate poverty accounting into their Environmental, Social, and Governance (ESG) reporting systems and thereby ensure the distributional consequences of their policies and practices are brought to visibility and held accountable. Education systems particularly related to the training in economics, development as well as accounting ought to redesign their curriculums in order to accommodate the moral and philosophical aspects of poverty analysis. This will make the future practitioners be ready to think of measurement not only as a technical issue but as an ethical obligation. On top of that, funding in high-quality data infrastructure, especially in remote areas, informal economies, and with intersectionally disadvantaged groups, is needed to develop stable and inclusive metrics. The reinforcement of South-South research partnerships also becomes one of the vital steps towards epistemic justice. These partnerships may catalyze co-production of poverty measures that are globally accepted and at the same time context-specific that limit reliance on externally dictated frameworks.

In prospect, the review suggests some promising directions of further research. These include building Al-grounded measures of poverty with a heightened emphasis on ethical protection, longitudinal research on the longer-term effects of financial inclusion programs, and empirical research that confirms the participatory model of measuring approaches. The future work on identifying the links between poverty and other issues faced by people worldwide, including environmental fragility, forced displacement, and digital divide, can further the scope and usefulness of poverty accounting in the modern policy and scholarly debate.

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