REVIEW RESEARCH ON MULTIDIMENSIONAL POVERTY INDEX IN INDIA

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Abstract

The research on the Multidimensional Poverty Index (MPI) in India has evolved into a dynamic field, extending poverty assessment beyond income-based metrics to encompass health, education, and living standards. This study evaluates MPI's application at the national and state levels, revealing regional disparities and providing nuanced insights into the complexities of poverty. Temporal analyses track changes over time, offering policymakers evidence to refine strategies that address multidimensional poverty effectively.

The MPI serves as a vital tool for assessing vulnerabilities across demographic groups, including rural and urban populations, guiding targeted interventions. Its precision enables researchers to identify specific dimensions of deprivation, aiding efficient resource allocation. By integrating comparative analyses, both within India and internationally, the MPI enhances the understanding of poverty through holistic perspectives, fostering discussions on optimal poverty measurement frameworks.

Despite advancements, challenges in data quality and collection persist, necessitating ongoing efforts to improve MPI reliability and accuracy. This paper underscores MPI's role in shaping evidence-based policies that cater to India's diverse socio-economic landscape, contributing to more effective poverty alleviation strategies.

Keywords: Multidimensional Poverty Index, Regional Disparities, Temporal Analysis, Poverty Alleviation, Vulnerability, and Targeted Interventions.

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1. Introduction

The examination of multidimensional poverty through the lens of the Multidimensional Poverty Index (MPI) represents a critical and evolving area of research. As nations strive towards achieving sustainable development goals, there is an increasing recognition that poverty extends beyond mere economic indicators. The MPI, with its multifaceted approach encompassing health, education, and living standards, has merged as a pivotal tool for capturing the complex realities of deprivation faced by diverse populations in India.

The review seeks to provide a comprehensive overview of the research landscape surrounding the MPI in India, aiming to delve into the various dimensions and nuances of poverty assessment. The adoption of the MPI at the national level signifies a paradigm shift from conventional income-based measures, offering a more holistic understanding of the challenges faced by individuals and communities.

In this research, we will explore the key themes that emerged from the study on the MPI in India. From state-level analyses that uncover regional disparities to temporal assessments tracking the efficacy of poverty reduction policies, the research landscape is dynamic and responsive to the evolving nature of multidimensional poverty.

Furthermore, this review will highlight the MPI's role as a valuable instrument for studying vulnerability and resilience among diverse demographic groups. By delving into the specific needs of populations, including rural and urban distinctions, researchers can guide the formulation of targeted interventions that address the root causes of poverty.

Additionally, the reviews touch upon the importance of comparative analyses within the Indian context. Comparing the MPI with other poverty measures contributed to ongoing discussions about the most effective methodologies for comprehensive poverty assessment, thereby informing policy decisions.

While recognizing the advancements made in understanding MPI in India, these reviews will also address persistent challenges related to data quality and collection. Ongoing efforts to improve these aspects are crucial for enhancing the accuracy and reliability of MPI assessments and ensuring that policies are grounded in sound evidence and tailored to the specific needs of the population.

In essence, this review aims to offer a thorough exploration of the MPI landscape in India through the lens of the MPI, shedding light on the current state of research, key findings, and the implications for future policy and intervention strategies.

2. Review research on MPI in India

The MPI has been an essential tool for assessing poverty in a more nuanced way than traditional income-based measures. The MPI takes into account various dimensions of poverty, including health, education, and standard of living. Here is a general overview of how the MPI has been applied and researched in the context of India:

➢ **National MPI:** India introduced its official MPI at the national level, aligning with the global MPI methodology developed by the Oxford Poverty and Human Development Initiative (OPHI) and the United National Development Programme (UNDP). The National MPI provides a comprehensive picture of poverty by considering different indicators such as nutrition, child mortality, years of schooling, school attendance, cooking fuel, sanitation, and asset ownership.

➢ **State-level analysis:** Research on MPI often delves into state-level variations to identify disparities within the country. States in India can have significantly different poverty profiles, and the MPI allows for a more nuanced understanding of these differences. States with higher MPI values typically face more significant challenges in terms of multidimensional poverty.

➢ **Trends over time:** Researchers use MPI to analyse trends in multidimensional poverty over time. This involves tracking changes in various indicators and assessing how different policies and interventions have impacted poverty reduction efforts.

➢ **Vulnerability and resilience:** The MPI is also employed to study populations' vulnerability and resilience to multidimensional poverty. This includes understanding how different groups, such as rural or urban populations, are affected by and respond to changes in their multidimensional poverty status.

➢ **Policy implications:** Research on MPI in India often explores the policy implications of multidimensional poverty measures. Policymakers use this information to design targeted interventions that address specific dimensions of poverty in different regions.

➢ **Comparative analysis:** Studies may compare the MPI with other poverty measures, such as income-based measures, to assess the strengths and limitations of each approach. This comparative analysis contributed to the ongoing dialogue on how best to measure and address poverty comprehensively.

➤ **Data challenges:** Some research may focus on challenges related to data availability and accuracy in the context of multidimensional poverty measurement. Improving data quality and collection methods is crucial for enhancing the reliability of MPI assessments.

➤ **International collaboration:** Given that MPI is global framework, research in India often involves collaboration with international organisations and researchers. This allows for cross-country comparisons and the adoption of best practices in measuring and addressing multidimensional poverty.

Title: Examining multidimensional poverty reduction in India 2005/6-2015/16: Insights and oversights of the headcount ratio
Authors: Sabina Alkire, Usha Kanaratnam
Journal: World Development; 142(2021) – 105454

This study discusses the measurement of poverty and inequality, particularly in the context of the SDGs. It points out that while the headcount ratio is the primary statistic for measuring poverty in the SDGs, it has limitations in capturing essential aspects, like whether anyone is being left behind and how deprivations are interconnected. The author suggests using the adjusted headcount ratio or MPI as the primary poverty measure for policy assessment. The study analyzed data from India between 2005/6, involving over three million individuals and multiple states and subgroups. The results showed a significant reduction in multidimensional poverty, with the poorest of the poor experiencing the most substantial improvements, mainly due to falling intensity, a factor not well reflected in the headcount ratio alone. The paragraph also acknowledges the ongoing importance of examining the headcount ratio and number of poor. The study's robustness is confirmed by constructing 19 additional MPIs, which consistently show that over 270 million people have left poverty.

Title: Multidimensional poverty and disability: A case-control study in India
Authors: Cameroon et al.,
Journal: Population Health 11 (2020) – 100591

This research study aims to assess the relationship between disability and multidimensional poverty in three different regions: Guatemala, one district in Cameroon, and one district in India. The study uses an extended Washington Group Questionnaire and clinical screening to identify people with disabilities and match them with controls without disabilities. The Alkire-Foster method is employed to calculate and compare levels of multidimensional poverty between the two groups. The results reveal that individuals with disabilities in all three settings

experience significantly higher levels of poverty, with the intensity of poverty being particularly pronounced. Interestingly, the differences in deprivation between people with and without disabilities were more minor in Cameroon compared to India and Guatemala, possibly indicating that more developed countries may be neglecting people with disabilities in their poverty reduction efforts. Additionally, health-related indicators were found to be a significant contributor to multidimensional poverty among people with disabilities. This research highlights the association between disability and multidimensional poverty and emphasizes the need to include individual deprivation indicators in poverty analysis for this group.

Title: Multidimensional Poverty in India: An analysis based on NSSO unit level data
Authors: Pinaki Das, Bibek Paria
Journal: Vidyasagar University Journal of Economics, XXIII (2018-19)

This paper focuses on estimating and analyzing multidimensional poverty in India for the years 2004-05 and 2022-12, using data from the NSSO. The study employs the Alkire and Foster methodology, considering three dimensions: education, food, nutrition, and living conditions. The findings indicate that households face the most deprivation in the food and nutrition dimension. In 2004-05, multidimensional poverty was at 53%, which decreased to 34% by 2011-12. Rural households and those from disadvantaged sections of society experience higher levels of multidimensional poverty, with many lacking education, food security, and basic amenities. Self and regularly employed households show lower levels of multidimensional poverty. Additionally, the public distribution system has been found to have a positive impact on reducing the degree of multidimensional poverty in India.

Title: Regional estimates of multidimensional poverty in India
Authors: Bidyadhar and Sanjay et al.,
Journal: Economics, (2015), 9

This paper focuses on estimating and analyzing multidimensional poverty in 82 natural regions in India, using data from the Indian Human Development Survey from 2011-12. Multidimensional poverty is assessed through dimensions such as health, education, living standards, and household environment, utilizing eight indicators and the Alkire-foster methodology. Notably, this study includes a direct economic variable (consumption, expenditure, work, and employment) to measure the dimensions of living standards. The paper also decomposes the MPI across dimensions and indicators and provides estimates at the sub-national level. The results reveal that 43% of India's population experience MP, with significant

regional variations. The average intensity of poverty is 45.5%, with an MPI value of 19.3. Six states in India, viz., Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, and West Bengal, which collectively represent 45% of the population, account for 58% of the multidimensional poor. Across regions, more than 70% of the population in areas like southern Chhattisgarh and the Ranchi Plateau are multidimensionally poor, while less than 10% experience such poverty in regions like Manipur, Mizoram, and Chandigarh.

The study also finds that the economic dimension has a weaker association with health and household environment dimensions. The decomposition of MPI indicates that the economic dimension contributes to 22% of the deprivation, health to 36%, education to 11%, and the household environment to 31%. Based on the findings, the authors suggest targeted interventions in the regions with high poverty levels to address poverty and inequality in India.

Title: A demographic study of the multidimensional poverty of women in India
Authors: Ramya Rachel
Journal: European Journal of Marketing and Economics, (2021), 4 (2)

The primary goal of the SDGs is to eradicate poverty in all its forms by 2030. Multidimensional poverty is a significant challenge in developing countries like India, especially among women. This study utilizes data from India's NFHS, a nationwide survey of women aged 15-49, to assess the nature and extent of deprivations they face. The dimensions of education, health, and standard of living are measured using the global MPI developed by UNDP and OPHI. The findings indicate that one-fifth of women in India experience multidimensional poverty. Subgroup analysis reveals that higher levels of deprivations are observed among women living alone, those with more children, widowed or divorced women, women whose husbands have multiple wives, those in various unions, and women married before the legal age of marriage. The study suggests that the government should focus on addressing the needs of the most deprived groups of women and implement measures tailored to alleviate their poverty and destitution.

Title: Education and poverty level: A gender analysis of Kohima and Longleng districts of Nagaland, India
Authors: Chubakumzuk
Journal: International Journal of Economics, Business and Politics (2020), 4(1); 221-236

This paper focuses on female poverty and education levels in rural areas of Kohima and Longleng districts. It uses the headcount ratio to examine the prevalence of female poverty, revealing a

high ratio in both districts, primarily attributed to the lack of basic education. The study establishes a negative relationship between education and poverty, suggesting that higher levels of schooling can effectively reduce poverty. Notably, higher educational attainment in certain areas, such as Jakhama, Tsiese Bawe, Yachem, and Bura Namsang, are associated with lower levels of female poverty. To further analyze the impact of education, the paper employs a linear regression model to explore its effects on employment, poverty, and income. The proposed policies advocate for skill enhancement and expertise improvement as a means to alleviate female poverty in these districts.

Title: Multidimensional poverty and the factors influencing the multidimensional poverty status of Bodo's: A case of Udalguri district
Authors: Maity and Buysse
Journal: Intl.J. Education & Development (2017), 8(4): 266-285

This paper's objective is to assess multidimensional poverty and identify influencing factors among the Bodo community in Udalguri district, Bodoland. The study utilizes multiple correspondence analysis (MCA) based on primary data from 333 Bodo households to construct a household-level MPI. Data collection involved multistage stratified random sampling methods covering 22 villages in 11 blocks. The findings from the MPI suggest that the study area experiences significant poverty, with the most critical influencing factors being health, literacy, employment opportunities, and the monthly consumption expenditure of the families.

Title: Contextualizing spatiality of multidimensional poverty in rural and urban India: A geographical perspective
Authors: Mondal & Kumar et al.,
Journal: Belgeo (2023)

This study aimed to assess the spatial distribution of multidimensional poverty, its incidence, extent, and severity in both rural and urban areas of India in 2021, using data from the NITI Aayog report based on the NFHS-4 dataset. The findings underscore persistent interstate disparities in the nature and intensity of multidimensional poverty in both rural and urban India. The research also delved into interstate variations in different indicators of the MPI for rural-urban areas, highlighting pronounced deprivation in states such as Bihar, Jharkhand, Uttar Pradesh, and Madhya Pradesh. Additionally, the study employed decomposition analysis to identify the key contributors to multidimensional poverty. It reveals that, in both rural and urban contexts, health emerges as the most significant dimension, with nutrition being the foremost contributor to the overall

multidimensional poverty score. The study underscored the importance of targeted policies for poverty eradication programs. Its insights can prove valuable for development planners and policymakers seeking a nuanced understanding of the patterns of multidimensional poverty and deprivation across Indian states.

Title: Multidimensional poverty as an instrument of pragmatic intervention
Authors: Kundu & Mohanan
Journal: Economic and Political Weekly (2023), 58(33), 18-20

This article delved into the conceptual and operational challenges associated with developing multidimensional poverty indices in India and explored their potential application for strategic interventions. The argument presented emphasizes the need for a consultative approach in addressing questions related to indicator selection, data sources, weights, threshold limits, and similar factors. Importantly, it suggests that these considerations should transcend short-term political interests and be guided by a broader and collaborative decision-making process.

Title: Multidimensional poverty and child survival in India
Authors: Mohanty
Journal: PLoS ONE (2011), 6(4): 1-14

This paragraph discusses the limited applications of multidimensional poverty measurement despite its recognition in various disciplines. The study's objective is to measure multifaceted poverty using data from India's NFHS-3 and examine its link to child survival. Poverty is assessed in terms of knowledge, health, and wealth dimensions, while child survival is evaluated through infant and under-five mortality rates. The results show significant inter-state differences in multidimensional poverty. Infant and under-five mortality rates are higher among the abject poor compared to the non-poor, with no notable variations among educationally, economically, and health-poor groups at the national level. State-level patterns in child survival among these groups are mixed. The paper emphasizes the importance of using multidimensional poverty measures to identify and address the abject poor who struggle to escape poverty traps. Child survival is notably lower among the abject poor, highlighting the need to incorporate the concept of multiple deprivations in research and programmes to reduce poverty and inequality in the population.

Title: Uneven Burden of multidimensional poverty in India: A caste-based analysis
Authors: Itishree Pradhan & Binayak Kadapan etal.,
Journal: PLoS ONE (2022); 18(7): e0271806

This paragraph discusses the multifaceted nature of poverty, with a focus on India, where social groups such as scheduled tribes (STs), scheduled castes (SCs), other backward classes (OBCs), and others experience varying degrees of deprivation. The study aims to assess multidimensional poverty among these groups using data from the NFHS 2015-16. The Alkire-Foster technique is applied to analyze the MPI across three dimensions: health, education, and standard of living, consisting of 12 indicators. The significant findings of the study are as follows: (a) STs are the most disadvantaged group, with high values of headcount and intensity, followed by SCs and OBCs. The "others" category is the most privileged; (b) STs and SCs contribute significantly more to poverty metrics than their population share; and (c) states in the central and eastern regions of India have higher poverty levels for all social groups. This suggests the need for a detailed assessment of poverty at specific levels to understand the poverty situation in society better and improve evidence-based planning and policymaking.

Title: Measurement of multidimensional poverty in India: A state-level analysis
Authors: Tripathi, Sabyasachi et al.,
Journal: MPRA paper no: 96952 (2019)

This paper calculates the MPI in India using NSS data for 2004-05 and 2011-12. It employs the methodology developed by Alkire-Foster, focusing on three leading indicators: standard of living, education, and income at both the household and individual levels. The results indicate a reduction in the multidimensional poverty headcount from 62.2% in 2004-05 to 38.4% in 2011-12. Notably, rural areas experienced a more significant decrease in poverty compared to urban areas. The main contributors to poverty are the lack of education among household members, followed by income and standard of living. The paper also provides a state-level analysis, revealing that states like Jharkhand, Uttar Pradesh, Rajasthan, Odisha, Bihar, Chhattisgarh, and Arunachal Pradesh have higher poverty headcount ratios. In contrast, Kerala, Mizoram, Nagaland, Punjab, Himachal Pradesh, and Haryana have lower poverty rates. To alleviate poverty in India, the paper suggests promoting local resource and tourism-based industries through urbanization, improving access to higher and job-oriented education, and encouraging long-term savings and funding mechanisms.

Title: Multidimensional poverty and identification of poor households: A case from Kerala, India
Authors: Thomas, Muradian, et al.,
Journal: Journal of Human Development and Capabilities (2009), 10(2)

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This paper examines the differing perspectives on poverty held by laypeople, academics, and policymakers, with a specific focus on a village in Kerala, India. It employs a "participatory numbers" approach to create a "local method" for identifying poor households based on the criteria used by villagers themselves. This local method is then compared with the official methods by national and state governments to measure poverty. The results highlight the importance of considering local dimensions of poverty alongside objective and universal criteria when designing poverty reduction programmes. The findings also emphasize the need for effective risk-mitigation strategies to help poor households manage shocks and stresses while also preventing vulnerable non-poor individuals from slipping into poverty.

Title: Multidimensional poverty index and need to revise methodology for counting poor.

Authors: Masood Ahmed

Journal: Indian Journal of Sustainable Development (2018), 4(2), 16-28

The paragraph highlights the paradox in Jharkhand, India, which has a significant share of the country's mineral wealth (33% of reserves) but still faces high poverty rates. Approximately 37% of the state's population lives below the poverty line, and the state's poverty reduction progress is slow. The focus of the paper is on critical areas like education, health, and living standards, utilizing the Alkire-Foster methodology. The study covers 24 districts in Jharkhand, with a particular emphasis on the rural-urban divide. It categorizes the population into five wealth groups (poorest, poorer, middle, rich, and most decadent).

Title: Multidimensional poverty in India: An inter-state analysis

Authors: Chandrasekar & Moahanasundaram

Journal: International Journal of Scientific Research (2020), 9(12)

This paragraph discusses the challenge of distinguishing between affluence and poverty concerning various aspects of living conditions and lifestyle. It emphasizes that multidimensional poverty recognizes that impoverished individuals face multiple forms of deprivation, including health, education, living standards, income, social exclusion, disempowerment, work quality, and protection from exploitation and violence. The MPI is highlighted as a tool capable of providing information on the deprivations people experience. This study's results indicated that the dimensions of the standard of living and education significantly determine human development. However, the study also pointed out that the benefits of development have not been evenly distributed among society, as even states

with higher HDI did not show substantial advantages over states with high poverty levels, as indicated by their MPI. This underscores the importance of expanding economic activities and educational opportunities, along with ensuing equitable distribution, to address these disparities.

Title: Multidimensional poverty reduction in India2005/6-2015/16: Still a long way to go, but the poorest are catching up.
Authors: Alkire, Oldiges and Usha
Journal: Research paper 54a (2017), Oxford Poverty and Human Development Initiative

This paper examines changes in multidimensional poverty in India from 2005/6 to 2015/16 using data from NFHS-3 and NFHS-4 surveys. The analysis breaks down changes by age, cohort, state, and socio-economic groups while considering sampling errors. Multidimensional poverty is defined using the global MPI 2018. The study reveals a substantial reduction in MPI during this decade, with significant pro-poor patterns of poverty reduction at the subnational level, in contrast to the previous period. Interestingly, the reductions in MPI are not strongly correlated with state-level-GDP growth, providing opportunities for further research. District-level analyses in 2015/16 show extensive intra-interstate variations in poverty. Overall, the findings indicate that by the end of the study period, at least 271 million fewer individuals were living in multidimensional poverty, a scale of change comparable to the reduction in monetary poverty in China.

Title: Measuring multidimensional poverty in India: A new proposal
Authors: Alkire & Seth
Journal: OPHI working paper – 15, (2008)

This paper examines the methodology used in India's 2002 below-poverty-line census data to identify and count people experiencing poverty. It applies the BPL 2002 method to NFHS data to determine which rural families would have been categorized as BPL if NFHS data were used instead. The study also compares these findings with those of low-income families identified using the Alkire Foster multidimensional poverty methodology. The results show that as many as 12% of the poor sample population and 33% of the extremely poor could be misclassified as non-poor by the pseudo-BPL method. Additionally, the paper introduces a Deprivation Index designed to address criticisms of BPL data. It compares these results with income poverty and the pseudo-BPL status of the sample respondents, breaking down the index by state and dimension.

Title: Conceptualising a New Multidimensional Poverty Index for India
Authors: Renita D'Souza

Journal: ORF working paper (2020), 1-28

This paragraph highlights that poverty remains a significant challenge in India despite the substantial progress made in lifting millions of people out of poverty over the years. It underscores the importance of measuring the extent of poverty as a crucial step toward addressing the issue. While there is recognition of the multidimensional nature of poverty and the limitations of one-dimensional measures, there is no consensus on a single poverty index, either at the national or global level. To address this gap, the working paper proposes an MPI based on Amartya Sen's Capability Approach. It seeks to align with Sen's approach while pointing out the shortcomings of existing multidimensional approaches to poverty measurement.

Title: Prevalence and correlates of multidimensional child poverty in India during 2015-2021: A multilevel analysis
Authors: Jalandhar Pradhan et al.,
Journal: PLoS ONE (2022)17(12): e0279241

This study emphasizes the persistence of child poverty as a significant global and Indian concern despite ongoing research and poverty eradication programs. The study aims to assess variations in child poverty prevalence and associated factors in India from 2015 to 2021. The research uses data from two consecutive rounds of the NFHS 4 &5.

Multilevel analysis indicates that various factors, including the child's age and sex, mother's age and years of schooling, children ever born, religion, caste, wealth quintile, and regional location are significantly associated with child poverty over time. Furthermore, the study finds that approximately 12% of the variation in child poverty prevalence can be attributed to differences at the community level. The prevalence of child poverty decreased over time, but the community-level variation increased. The findings suggest the need to focus on improving the nutritional status and standard of living in the most deprived households with a child-centric and dimension-specific approach, along with a greater focus on PSU-level interventions to reduce child poverty in India.

Title: Multidimensional poverty in India: A study on regional disparities
Authors: Inaki Das, Sudeshna Ghosh, et al.,
Journal: GeoJournal (2022), 87:3987-4006

The main objective of this study is to investigate regional disparities in multidimensional poverty in India. It's notable as the first study to examine MPI disparities at a regional level. India is divided into six regions: Northern, Eastern, North Eastern, central, western and southern. The study explores MPI across population sub-groups within each region, using data from the NFHS for the years

2005-2006 and 2015-2016 to assess how regional-level multidimensional poverty changed over a decade. The findings indicate that the eastern rural region had the highest MPI in both 2005-06 and 2015-16, with the northern region having the lowest MPI in both periods. The northern region also had the lowest MPI across all social sub-groups. The study also highlights a concentration of MPI in the central and eastern areas. An alarming trend is the significant increase in regional variation in MPI, particularly in the eastern and northern regions, in 2015-2016 compared to the earlier period. Despite a substantial reduction in multidimensional poverty over the decade, the decline is regressive. The regressivity is attributed to the nature of the decline in different deprivation indicators. The study suggests that India needs to focus on achieving balanced regional development to address these disparities.

Title: Multidimensional poverty in slums: An empirical study from urban India
Authors: Kaibarta, Mandal & etal.,
Journal: GeoJournal (2022), 87(4): S527-S549

The paragraph discusses the importance of poverty as a metric for assessing well-being in a given area. It mentions the use of the MPI to analyse urban poverty in slum communities. This study aims to create an MPI for impoverished households in Purulia's designated slums and assess poverty based on location, social groupings, and length of stay. Researchers also seek to identify factors contributing to multidimensional poverty. Data collection methods include structured questionnaires, oral history interviews, and focus group discussions. The study reveals variations in poverty across locations and social groups, with a focus on marginalized populations. The approach combines quantitative and qualitative methods, offering insights for policymakers in developing regional poverty-reduction strategies.

Title: Association of multidimensional poverty and tuberculosis in India
Authors: Dimpal Pathak, Guru Vasishtha & Mohanty
Journal: BMC Public Health (2021), 21; 1-12

The study highlights the global priority of reducing multidimensional poverty and addressing tuberculosis. It mentions that the SDGs aim to eradicate poverty and end tuberculosis by 2030. While poverty is being measured across various dimensions, the association between multidimensional poverty and tuberculosis in India has not been explored. The study uses data from NFHS-4 to analyze this relationship. It reveals that about 29.3% of India's population is

multidimensionally poor, with a higher prevalence of tuberculosis among the multidimensional poor compared to the non-poor. Various socio-demographic factors, such as age, gender, living conditions, and others, also contribute to the risk of tuberculosis. In conclusion, the study finds a significant link between multidimensional poverty and tuberculosis in India.

Title: Multidimensional poverty, household environment, and short-term morbidity in India

Authors: Dehury and Mohanty

Journal: Genus (2017), 73(1):3

This paragraph discusses a study using data from the Indian Human Development Survey (IHDS-II) to examine the association between multidimensional poverty, household environmental deprivation, and short-term health issues (fever, cough, and diarrhea) in India. The study considers multifaceted poverty, which includes education, health, and income dimensions, as well as household environmental deprivation, involving access to improved sanitation, drinking water, and cooking fuel. The results show that individuals from multidimensional poor households living in poor household environments have a higher prevalence of short-term morbidities compared to those from non-poor households in better environments. Controlling for socio-economic factors, the odds of short-term morbidity are elevated in poor household environments. These findings underscore the significance of household environmental conditions alongside poverty in influencing short-term health issues in India, highlighting the potential benefits of public investment in sanitation, drinking water, and cooking fuel for improving population health.

Title: Small area variations in four measures of poverty among Indian households: Econometric analysis of National Family Health Survey 2019-2021

Authors: Anoop Jain, Sunil Rajpal, et al.,

Journal: Humanities and Social Science Communications (2023), 10:18

The paragraph discusses the reduction of poverty in India, acknowledging that progress has been uneven across the country. The paper utilizes data from the 2019-2021 NFHS to analyze variations in household poverty at a granular level. The study finds that most of the variations in poverty measures are at the cluster and state levels. It also highlights persistent inequality within districts, especially when examining the bottom 10th wealth percentile, bottom 20th wealth percentile, and multidimensional poverty. The results identify specific districts where cluster inequality in poverty is most pronounced, providing valuable

information for policymakers to target poverty reduction policies effectively.

Title: Dynamics of multidimensional poverty and its determinants among the middle-aged and older adults in China
Authors: Qun Wang, Lu Shu & Xiaojun Lu
Journal: Humanities & Social Science Communications (2023), 10 (116)

The study aimed to examine the dynamics of multidimensional poverty and its determinants among middle-aged and older adults in China. Using data from 2011-2018 from the China Health and Retirement Longitudinal Study, the researchers employed various statistical methods and analyses. They found that the incidence of multidimensional poverty decreased over this period, but the average poverty intensity remained stable. Most individuals experienced transient, multifaceted poverty. The longer someone stayed in poverty, the harder it was to exit poverty, and the longer someone remained non-poor after escaping poverty, the less likely they were to return to poverty. Individual characteristics, family structure, living arrangements, social capital, and living areas had significant effects on the risk of exiting or reentering multidimensional poverty. The study suggests that the government should implement targeted interventions to assist frail older adults with these identified characteristics in avoiding persistent multidimensional poverty or returning to poverty.

Title: Multidimensional poverty in India – A state-wise analysis
Authors: Jagadehswaran, Ashok & etal.,
Journal: Asian Journal of Agricultural Extension, Economics & Sociology (2022), 40(10): 869-877

This study focuses on estimating the MPI for Indian states and districts in Tamil Nadu. Data from 2005, 2015, and 2019 NFHSs were used. The Alkire-Foster methodology was employed, considering ten indicators in health, education, and standard of living dimensions, each of which was given equal weight. The results reveal that India ranks 62nd out of 107 countries with an MPI of 0.12, showing variations across states. Andhra Pradesh, Kerala, and Tamil Nadu have significantly reduced poverty levels, while Bihar, Assam, and Odisha have poverty levels. Nutritional deprivation is a major contributor to India's overall poverty index. In Tamil Nadu, the overall index is 0.03, but specific districts face challenges, with some needing to improve nutrition and others addressing issues like obesity. The study suggests identifying region-specific factors contributing to deprivation and providing consistent support for food and education to reduce indices in Tamil Nadu.

Title: Children and multidimensional poverty: Four measurement strategies

Authors: Jakob Dirksen & Sabina Alkire
Journal: Sustainability (2021), 13, 94018

This study discusses the importance of using official multidimensional poverty measures to identify child-focused anti-poverty policies. It emphasizes the need for practical and consistent measures that can be easily interpreted and used by policymakers. The paper introduces four strategies to produce official national statistics on child multidimensional poverty: (a) include children's deprivations as indicators in national multidimensional poverty measures; (b) disaggregate poverty indices to compare children and adults; (c) analyze individual child deprivations, exploring gender and intra-household inequalities; and (d) create an individual measure of child multidimensional poverty linked to the official national measure but including additional indicators relevant to children's life experiences. The paper provides examples and discusses the strengths and challenges of these methods, emphasizing their utility in achieving the SDGs, both descriptively and prescriptively.

Title: Bibliometric literature analysis of a multidimensional sustainable development issue: Energy poverty
Authors: Recep Ulucake, Ramazan Sari & et al.,
Journal: Sustainability (2021),13, 9780

The paragraph underscores the significance of energy in achieving economic, social, and environmental sustainability and its connection to the United Nations SDGs. Energy poverty, a multidimensional issue, is seen as a prominent concern. The study conducts a comprehensive bibliometric analysis of the literature on energy poverty using data from the Web of Science. The analysis tracks the evolution of attention to energy poverty and identifies leading authors, outstanding contributions, key research areas, and potential research gaps. It also maps the network connections among researchers, publications, journals, keywords, organizations, and more. The findings confirm the increasing academic interest and awareness of energy poverty as an essential subject over time.

Title: Scientometrics of poverty research sustainability development: Trend analysis of the 1964-2022 data through Scopus
Authors: Worapomg Chansanam and Chunqiu Li
Journal: Sustainability (2022),14, 5339

The paragraph discusses the importance of poverty research for global sustainable development and governance, especially in lower-income regions. It notes that although there have been numerous studies on poverty, there's limited research examining the citations of these studies using scientometric analysis.

To address this gap, the research analyzed 319 published papers using scientometric analysis. The analysis revealed that poverty research has seen an annual growth rate of 10.18% since 2006. It also identified influential aspects of the research, such as frequently mentioned subjects, papers, authors, and keywords; it suggested that future studies should focus on the poverty line, social policies, and living standards. The research aims to provide a reference for understanding poverty research through bibliometric analysis and promote advancements in both theory and practice.

Title: Estimation of aspect-based multidimensional poverty in Rural Haryana
Authors: Nitin Tanwar, Hooda
Journal: Advances in Research (2017), 10(5): 1-8

The paragraph discusses the historical context of poverty estimation in India, with a shift from unidimensional to multidimensional approaches. The study estimates poverty in rural Haryana, focusing on drinking water, sanitation, and housing facilities. Data from the 69th round of the NSSO survey are used. The MPI is applied to assess multidimensional poverty, considering simultaneous deprivations. The results indicate that some districts have higher MPI values, suggesting higher levels of poverty, while others fare better. The study recommends awareness programs to inform villagers about government schemes and benefits to help alleviate poverty in these areas.

Title: Estimates of multidimensional poverty for India using NSSO 71 & 75
Authors: Mothkoor & Badaiyam
Journal: WIDER Working Paper 2021/1

The paragraph discusses the measurement of multidimensional poverty in India using data from the NSSO covering 2014-15 to 2017-18. The MPI considers income, health, education, and standard of living. During this period, the MPI headcount decreased significantly from 26.9% to 13.75%, lifting 144 million people out of poverty in India. Various health dimensions, such as insurance, institutional coverage, antenatal care, and chronic conditions, were included. Income is the most influential factor contributing to the MPI, followed by insurance. Cooking, sanitation, and education also play substantial roles. The reduction in deprivation was more pronounced in rural areas compared to urban areas. State-level estimates indicate that 20 states now report less than 10% headcount poverty, up from six states. However, the paragraph notes that the COVID-19 pandemic could reverse these improvements, potentially pushing poverty levels back to their pre2014-15 levels, with rural areas experiencing a more significant increase in poverty.

3. Research gaps available in the review

Identifying research gaps in the above-listed review on MPI in India requires a comprehensive understanding of the existing literature and the current state of research in this field.

Geographical variations: Various studies assessed the regional and state-level multidimensional variations in India. The literature may be lacking regarding the specific challenges and dynamics of poverty in different regions.

Temporal changes: Investigated how multidimensional poverty in India has evolved. There are gaps in understanding the trends, causes, and consequences of changes in MPI over different periods.

Intersectional and vulnerable groups: Explored the intersectionality of various dimensions of poverty, such as gender, caste, and ethnicity. To investigate how different social groups experience multidimensional poverty differently and to address the unique challenges faced by vulnerable populations.

Methodological issues: Evaluated the methodologies used in calculating the MPI for India. Gaps or limitations are available in the existing methods and suggest improvement or alternative approaches that could provide a more accurate representation of poverty.

Policy implications: Assessed the effectiveness of existing policies in addressing multidimensional poverty in India. Gaps in the literature regarding the impact and implementation of specific policies and propose areas for future research.

Data quality and availability: Examined the quality and availability of data used in MPI calculations. Gaps are available in data collection, especially for specific dimensions of poverty that may be underrepresented or not adequately captured.

Urban-rural disparities: Gaps in understanding the unique challenges faced by each setting and propose research directions to address these disparities.

Climate change and environmental dimensions: Gaps in addressing how environmental degradation may contribute to poverty and interconnected issues

Health and education dimensions: Gaps in research related to healthcare access, quality of education, and their impact on multidimensional poverty

Community participation and empowerment: Gaps in the literature regarding successful community-based interventions and their effects on MPI

4. Conclusion

Indeed, based on the information provided earlier, here's a conclusion on the research related to the MPI in India:

The research on the MPI in India reflects a robust and evolving landscape in

the understanding of poverty. The adoption of the MPI at the national level has enabled a comprehensive assessment of poverty that goes beyond traditional income-based measures. This multidimensional approach, encompassing health, education, and standard of living indicators, provides a nuanced understanding of the complexities of poverty in the Indian context. The state-level analyses have been instrumental in identifying disparities within the country, acknowledging that different regions face unique challenges. By tracking trends over time, researchers contribute valuable insights into the effectiveness of policies and interventions aimed at poverty reduction. This temporal analysis helps policymakers make informed decisions based on the evolving nature of multidimensional poverty.

The MPI has proven to be a valuable tool for studying vulnerability and resilience among diverse populations in India. It allows researchers to delve into the specific needs of different groups, such as rural and urban populations, guiding the formulation of targeted interventions. The policy implications derived from MPI research contribute to evidence-based policymaking, ensuring that resources are allocated efficiently to address specific dimensions of poverty. The comparative analyses, both within India and internationally, underscore the strengths of the MPI in providing a holistic view of poverty. By comparing MPI with other poverty measures, researchers contribute to ongoing discussions about the most effective ways to measure and combat poverty comprehensively.

Despite these advancements, challenges related to data quality and collection persist. Ongoing efforts to improve these aspects are crucial for enhancing the accuracy and reliability of MPI assessments in India. In conclusion, research on MPI in India reflects a dynamic field that is instrumental in shaping policies and interventions to address the diverse dimensions of poverty. The multidimensional approach has strengthened the understanding of poverty beyond income, contributing to a more inclusive and targeted approach to poverty reduction in the country.

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