

Shifting Paradigms: Tracing The Evolution Of Poverty Measurement In India

Tampakmayum Alan Mustofa^{1*}, Mohd. Himat Ali Tampakmayum²

¹Ph.D. Scholar (ICSSR Fellow) in the Centre for North East Studies and Policy Research, Jamia Millia Islamia, New Delhi.

Email- alanmustofa99@gmail.com.

²Ph.D. Scholar in the Centre for North East Studies and Policy Research, Jamia Millia Islamia, New Delhi. Email-examhmt012@gmail.com.

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ARTICLE INFO	ABSTRACT
	This article explores the evolution of poverty measurement in India, tracing the transition from unidimensional to multidimensional approaches over time. It emphasises that it is a complex and dynamic concept, extending beyond mere income or consumption metrics to include a lack of capabilities to meet basic needs. It also provides an analysis of the trends of poverty levels estimated with various methodologies employed by expert groups and committees formed from time to time. Furthermore, it explores the concept of multidimensional poverty as a more comprehensive approach, going beyond monetary terms. In summary, the article offers a significant overview of poverty measurement in India and also emphasises adopting a holistic approach to poverty reduction.

Introduction

Across the world, poverty is a major challenge in global development efforts. It embodies diversity and dynamism in its concept. It is conventionally defined with subsistence level as a lack of income or consumption expenditure to fulfil the minimum necessities of life. However, “there is no universal definition of poverty and could vary across countries with different socio-economic backgrounds and change over time even in the same society” (Dartanto & Otsubo, 2015). Restricting only to the monetary well-being explanation narrows down its scope and nature. An individual’s or a household’s well-being cannot be understood only through the landscape of monetary poverty.

It was after Amartya Sen’s pioneering studies that poverty came to be viewed as “a multidimensional phenomenon, depending not only on income or consumption but also on several other dimensions such as health, education, empowerment and so on” (Sen, 1976, 1979, 1985). It is a complex phenomenon, that exhibits itself with overlapping economic, social and political dimensions of deprivations. They include low standard of living, poor health, limited education, discrimination, political powerlessness, insecurity etc. (Sen, 1979). Thus, it is defined as “the deprivation of resources or capabilities to meet individuals’ or households’ basic needs” (Wang et al., 2021).

In India too, poverty has been a major concern for decades despite the country's improvement in growth and development since its independence. The strategies for combating poverty were given due importance in the series of “Five-Year Plans”. For instance, “the Fifth Five-Year Plan” (1974-78), with the popular slogan, *Garibi Hatao*, gave prime importance to fighting poverty. Several committees were formed from time to time to measure the poverty levels, considering the changing inflation and other economic factors over time.

Objectives

Based on the background discussed above, this study seeks

1. to critically analyse the evolution of poverty measurement in India, considering the methodologies employed by different expert groups and committees over time; and
2. to explore the concept of multidimensional poverty and its relevance in understanding the complex realities of poverty in India, using insights from India's National Multidimensional Poverty Index (MPI).

Methodology

This article employs a descriptive and analytical methodology to trace the evolution of poverty measurement in India. It begins by providing context on traditional income-based metrics and then transitions into multidimensional approaches, focusing on key expert groups and committees. The methodology involves synthesising information from various secondary sources, including government reports, academic literature, and policy documents.

Poverty in India: Measures and Trends

Poverty measurement is a huge challenge in India due to its large and diverse population, and the inherent complex nature involved in the estimation. Yet, it remains crucial for several reasons. Firstly, it provides insight into the scope and depth of poverty within the population. Additionally, it facilitates the monitoring and analysis of poverty trends over time. Moreover, policymakers can design targeted interventions to prioritise and allocate resources efficiently in addressing poverty through poverty estimates (Ravallion, 1998).

Until the last decade, in India, poverty was measured officially with the monetary approach. “The poverty line estimation was based on consumption expenditure rather than income levels due to difficulties in assessing the incomes of self-employed people, daily wage labourers and others, large fluctuations in income due to seasonal factors, additional side incomes as well as data collection difficulties in the largely rural and informal economy of India” (Gaur & Rao, 2020).

The origin of poverty line estimation in India dates back to 1901 when Dada Bhai Naoroji made the earliest attempt during the pre-independence era. He estimated ₹16 to ₹35 per capita per year. Again in 1938, “the National Planning Committee” proposed a poverty line ranging from ₹15 to ₹20 per capita per month following minimum standard of living. Thereafter, “the Bombay Plan” estimated it at ₹75 per capita per year. After independence, numerous expert groups and committees were formed to estimate it, adapting it to the contemporary economic condition and periodically reassessing those living below it to reflect the evolving situation.

1. Working Expert Group (1962)

Following India’s independence, the government faced the monumental challenge of addressing poverty within its economy. In 1962, “Working Expert Group” was formed to determine a minimum subsistence level, considering both the minimum food and non-food requirements of individuals. The group set separate poverty lines at ₹20 (rural) and ₹25 (urban) per capita per month following 1960-61 prices, without considering regional disparities.

2. Dandekar and Rath (1971)

V.M. Dandekar and Nilakantha Rath played a crucial role in establishing the poverty line in India. In 1971, they set up the estimates based on the minimum daily calorie intake required for individuals. It was set at 2250 calories per capita per day for both rural and urban areas, following “the National Sample Survey” (NSS) data. Accordingly, it was determined at ₹15 and ₹22.5 per capita per month for both the areas, at 1960-61 prices.

3. Alagh Committee (1979)

A committee known as “the Task Force on Projections of Minimum Needs and Effective Consumption Demand”, headed by Y.K. Alagh, was formed in 1977 (Gaur & Rao, 2020). The committee presented the report in 1979. Accordingly, the poverty lines were fixed at ₹49.1 (rural) and ₹56.7 (urban) per capita per month, following the estimated minimum calorie requirement of 2400 calories (rural) and 2100 calories (urban) at 1973-74 prices.

4. Lakdawala Committee (1993)

To improve the estimation of poverty line, a committee was established by the Planning Commission of India in 1989, headed by D.T. Lakdawala. Its report in 1993 did not alter the line established by the Alagh Committee. Instead, it recommended to set for each state using “the Consumer Price Index of the Industrial Workers” (CPI-IW) for urban and “the Consumer Price Index of Agricultural Labour” (CPI-AL) for rural (Gaur & Rao, 2020; Mehta et al., 2011). The new methodology took into account the differences in prices between states and discontinued employing data of “National Accounts Statistics”. Following the recommendations, the Planning Commission set state and national poverty lines from 1997 to 2004-05.

Table 1: Trends of Poverty Level (Lakdawala Methodology)

Year	Poverty Ratio (%)			Number of Poor (Million)		
	Rural	Urban	Total	Rural	Urban	Total
1993-94	37.3	32.4	36.0	244.0	76.3	320.3
2004-05	28.3	25.7	27.5	220.9	80.8	301.7

Source: Mehta et al. (2018)

Table 1 displays the official figures of poverty in India adopting the techniques of the Lakdawala Committee throughout two time periods. It highlights the national poverty ratio (the proportion of a population who are poor) and the count of those below the line for 1993–1994 and 2004–2005. It is observed that rural poverty levels were higher than that of urban despite a decline in its figures for both the areas and all-India levels. It consequently put a hindrance to the country's path to progress.

The accepted poverty line, however, sparked debate regarding its adequacy. There were concerns about the precision of poverty evaluations on different reasons. Mention may be made about consumption patterns based on 1973-74 prices for setting the poverty lines for both urban and rural regions would be outdated (Mehta et al., 2011). As a result, poverty lines failed to capture variations in consumption patterns. Additionally, adoption of the CPI-AL ignored the price increase for rural residents, and hence the magnitude of rural poor relative to that of urban (Mehta et al., 2011).

5. Tendulkar Committee (2009)

A committee of experts, led by S. Tendulkar, was created in 2005 to examine the method of poverty estimation. The previous approaches had various shortcomings that the committee aimed to rectify. In 2009, the committee presented its findings, and the updated methodology was officially adopted in 2011. It recommended five changes that can improve poverty estimation in India. Firstly, calorie norms should be changed. Secondly, a single basket for both rural and urban areas needed to be changed, but with variations in prices maintained for both. Thirdly, a "Mixed Reference Period" (MRP) should be implemented instead of a "Uniform Reference Period" (URP) for estimation. Fourthly, price adjustments should be made following the same consumption expenditure to get an accuracy in the estimation. Finally, private spending on health and education should be added for the estimation (Mehta et al., 2018).

Table 2: Trends of Poverty Level (Tendulkar Methodology)

Year	Poverty Ratio (%)			Number of Poor (Million)		
	Rural	Urban	Total	Rural	Urban	Total
1993-94	50.1	31.8	45.3	328.6	74.5	403.7
2004-05	41.8	25.7	37.2	326.3	80.8	407.1
2009-10	33.8	20.9	29.8	278.2	76.5	354.7
2011-12	25.7	13.7	21.9	216.7	53.1	269.8

Source: Planning Commission of India, 2014

Table 2 presents the poverty figures at the rural, urban and overall national levels with the Tendulkar Committee's estimation. It is observed that there were significant decreases in the estimates of poverty from 1993-94 to 2011-12 (from 45.3% to 21.9%). Additionally, it is noted that although their differences have steadily narrowed over time, there has consistently been a higher number of rural poor compared to urban poor. The percentage of poverty that decreased between the two periods was 1.30%.

The Committee revised the calorie threshold for households from 2100 to 1776 in urban areas and from 2400 to 1999 in rural areas (Himanshu, 2010). Additionally, they shifted from monthly household consumption to per person consumption expenditure, with a daily expenditure of ₹26 and ₹32 for rural and urban households respectively at 2011-12 prices (Gaur & Rao, 2020). It, however, attracted large-scale criticism due to its very low estimation. It was largely criticised by the general public since it would deny many homes that needed government aid by designating them as above-poverty line (APL) households (Mehta et al., 2018).

6. Rangarajan Committee (2014)

The poverty lines established by the Tendulkar Committee were criticised for not adequately reflecting the evolving economic conditions and aspirations of the population (Government of India, 2014; More & Singh, 2015). This criticism arose as there was a significant rise in the country's per capita income or consumption in the early 2000s, leading to substantial shifts in the economy's framework. To address this, the erstwhile Planning Commission initiated the "New Expert Group" under the leadership of Rangarajan in 2012, tasked with revising the poverty line and reviewing how poverty was measured. This group presented its findings in 2014 and recommended to use "the Modified Mixed Recall Period" (MMRP) following the consumption expenditure data from the 68th round of NSS. This approach, they argued, would produce estimates closer to actual figures (Government of India, 2014). Furthermore, the group updated the daily minimum nutritional requirements for calories, proteins, and fats for 2011-12, both at the national level and separately for rural and urban populations. As a result, the estimates were redefined at ₹32 (rural) and ₹47 (urban) per day per person, up from the previous figures of ₹26 and ₹32 respectively (S. Gaur & Rao, 2020).

The committee estimated that 30.9% and 26.4% of the rural and urban populations respectively were poor in 2011-12. While the national poverty ratio was 29.5%. It indicated that in rural areas approximately 260.5 million people, and in urban areas, around 102.5 million people were caught in the grip of poverty. In total, 363 million people were poor, implying that 93.7 million people were additionally affected. This figure is in addition to the Tendulkar Committee's estimation of 269 million people for the same period (Government of India, 2014). The rural poverty ratio saw a decrease from 39.6% in 2009-10 to 30.9% in 2011-12, while in urban areas,

it reduced from 35.1% to 26.4% over this period. Across India, the overall poverty rate diminished from 38.2% to 29.5%, which means that 91.6 million people managed to escape poverty during these years (Government of India, 2014).

Later in 2015, the NITI Aayog formed the “Task Force on the Elimination of Poverty in India” with Dr. Arvind Panagariya as its chairman. It emphasised for monitoring poverty across different times and locations to effectively combat it. To achieve this objective, it proposed several options for tracking extreme poverty, including maintaining the Tendulkar poverty line; adopting higher lines for rural and urban areas similar to the Rangarajan line; tracking the advancements of the population's bottom 30% over time and monitoring specific aspects of poverty such as nutrition, housing, drinking water, sanitation, electricity, and connectivity (Mehta et al., 2018; NITI Aayog, 2016). However, the government has not made any decisions regarding these proposals, nor has it provided information on its stance regarding the recommendations of the Rangarajan Committee (Himanshu, 2014). Consequently, the Tendulkar methodology-based estimates for 2011–12 remain the last official figures for poverty based on consumption expenditure.

Multidimensional Poverty in India

We have examined monetary or unidimensional poverty trends over various periods based on consumption expenditure. However, poverty is multifaceted and ever-evolving. It encompasses more than just income or consumption levels. It is vital to explore its qualitative dimensions too. The capability approach of Amartya Sen championed the idea of poverty as multidimensional. “The Millennium Development Goals” (MDGs), “the Sustainable Development Goals” (SDGs) and different strategies of poverty measures address the multiple deprivation of poor people across the world (Mustofa et al., 2021).

In recent years, there has been significant development in the idea of the “Multidimensional Poverty Index” (MPI). “The Oxford Poverty and Human Development Initiative” (OPHI) and “the United Nations Development Programme” (UNDP) developed “the Global MPI” in 2010. The measurement of the MPI is more thorough and scientific than income poverty as it gives the combined information of the headcount ratio (proportion of people experiencing multiple deprivations) and intensity of deprivation (average proportion of deprivations they experience) (Alkire & Santos, 2010). In India, given the importance of MPI, NITI Aayog for the first-time developed India's National MPI, 2021 following the same methodology of Alkire and Foster (2011) with some changes in indicators. “The National Family Health Survey” (NFHS) data was used to develop the index. It consists of three non-monetary dimensions (education, health and standard of living) and twelve indicators (nutrition, child and adolescent mortality, maternal health, years of schooling, school attendance, cooking fuel, sanitation, drinking water, housing, electricity, assets and bank account). Each dimension carries an equal weightage of one-third which is equally distributed within the indicators of the respective dimensions.

Table 4: Trends of MPI estimates in India

Year		Headcount ratio (%)	Intensity (%)	MPI
2019-21	Rural	19.28	44.55	0.086
	Urban	5.27	43.10	0.023
	All-India	14.96	44.39	0.066
2015-16	Rural	32.59	47.38	0.154
	Urban	8.65	45.27	0.039
	All-India	24.85	47.14	0.117

Source: India National Multidimensional Poverty Index, NITI Aayog, 2023

Table 4 presents trends in MPI estimates across rural, urban, and all-India categories for 2019-21 and 2015-16. It is revealed that there have been significant reductions in poverty levels, particularly in rural areas. Headcount ratios dropped notably both in rural (from 32.59% to 19.28%) and urban areas (from 8.65% to 5.27%), indicating an overall national decrease in poverty levels. The intensity of poverty also declined. It is found that rural areas decreased from 47.38% to 44.55% and urban areas from 45.27% to 43.10%. These reductions contributed to a notable decrease in MPI, from 0.154 to 0.086 in rural areas, 0.039 to 0.023 in urban areas, and 0.117 to 0.066 nationwide. It signifies progress in addressing multidimensional poverty. However, with rural areas consistently exhibiting higher poverty levels compared to urban areas, regional disparities continue to exist in the country.

India's National MPI is not far from criticism. For instance, discarding the income or consumption aspect does not give a true picture of poverty. Incorporating both monetary and non-monetary dimensions would make the estimation of MPI meaningful. Moreover, there are many missing dimensions of social and political factors like social exclusion, conflict, corruption, environmental degradation etc. These somehow continue to limit the comprehension of poverty, despite the transition from a unidimensional to a multidimensional approach.

Conclusion

Poverty is a complex and multidimensional phenomenon that requires a holistic approach for its identification and measurement. In India, poverty has been a persistent challenge, addressed through various measures over

the years. From the consumption-based approach to the recently introduced multidimensional poverty index, poverty measurement in India has come a long way. Despite these advancements, poverty remains a pressing issue, necessitating sustained attention from policymakers. To effectively address poverty, a deep understanding of its multidimensional nature is necessary, alongside targeted interventions with its diverse aspects. By doing so, India can move towards an equitable and just society, where every individual has access to the resources and capabilities needed to lead a fulfilling life.

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