International Journal of Research
in Academic World

Measurement of Poverty-Multidimensional Poverty Index

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Abstract

Poverty is powerlessness, lack of representation and freedom. Poverty is hunger. Poverty is lack of shelter and money. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. The traditional definition of poverty updated over time; the world's understanding of extreme poverty has also emerged. Multidimensional Poverty Measures can be used to create a more comprehensive picture. These measures reveal who is poor and how they are poor-the range of different disadvantages they experience. The Global Multidimensional Poverty Index (GMPI) is released by OPHI in association with UNDP and its national counterpart National MPI (NMPI) is prepared and released by NITI Ayog in India, based on the National Family Health Survey.

Keywords: MPI, OPHI, UNDP, NITI Ayog

Introduction

Many economists defined the poverty as the lack of money and poor standard of living. As the conventional definition of poverty updated over time, the world's understanding of extreme poverty has also emerged. The fullest definition of poverty now goes beyond just the amount of money a person or family earns. It expands upon the conventional economic definition of poverty to define poverty holistically. However, the poor people themselves consider their experience of poverty much more broadly. A person who is poor can suffer multiple disadvantages, at the same time, they may have poor health or malnutrition, a lack of clean water or electricity, poor quality of work or little schooling. Focusing on one factor alone, such as income, is not enough to capture the true reality of poverty. Defining and measuring poverty and calculating the percentage of poor people in a country or a region is not just a matter of numbers and averages.

Amartya Kumar Sen rightly said that the poverty can be seen and experienced by everyone. According to A. K. Sen, the poverty, like inequality, is a complex and multifaceted problem that requires a clear analysis in all of its many dimensions. The poor generally lack a number of elements, such as education, access to land, health and longevity, justice, family and community support, credit and other productive resources, a voice in institutions and access to opportunity. According to him, being poor does not mean living below an imaginary poverty line, such as an income of two dollars a day or less. It means having an income level that does not allow an individual to cover certain basic necessities, taking into account the circumstances and social requirements of the environment.

Therefore, Multidimensional Poverty Measures can be used to create a more comprehensive picture. These measures reveal who is poor and how they are poor-the range of different disadvantages they experience. UNDP's human development approach has long argued that tracking incomes alone is not enough. To understand the lives of the poor, you must go beyond the income measure-$1.90 or $2.15 a day-and ensure the poor have opportunities, choices, and access to the most basic human needs. Increased incomes are only a means to this agenda, not an end. Therefore, since 2010, United Nations Development Programme (UNDP) has partnered with the Oxford Poverty and Human Development Initiative (OPHI) to present a new international measure of poverty-the *Multidimensional Poverty Index or MPI.*

What is Multidimensional Poverty Index? Multidimensional Poverty Index (MPI) looks at how people experience poverty in multiple, overlapping ways. It reveals who is poor and how they are poor-the range of different disadvantages they experience because of poverty. The Multidimensional Poverty Index identifies acute deprivations in health, education and standard of living by interrogating Ten parameters or indicators-nutrition, child mortality, years of schooling, school attendance, access to cooking fuel, sanitation, drinking water, electricity, and housing, ownership of assets.
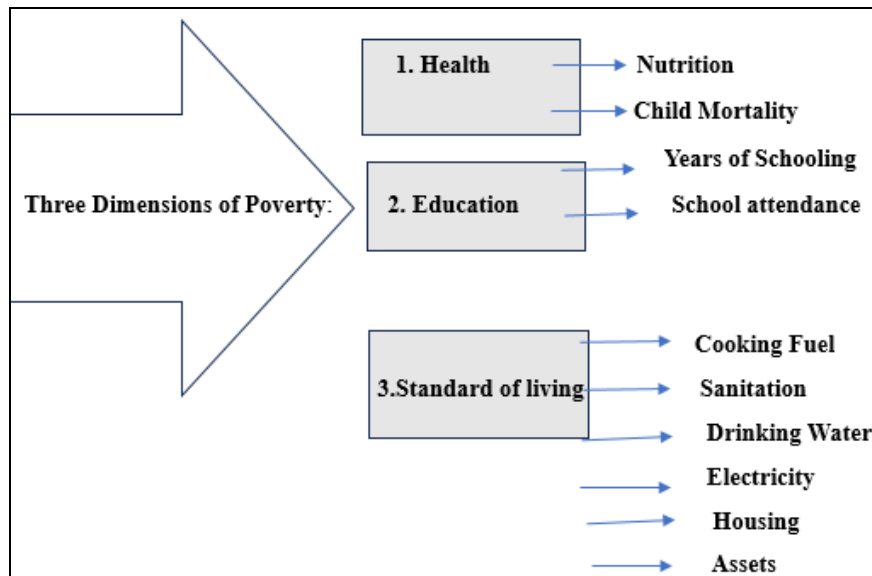
Fig 1: Multidimensional Poverty Index or MPI

Oxford Poverty & Human Development Initiative (OPHI) and United Nations Development Programme (UNDP) developed Global Multidimensional Poverty Index (MPI) in 2010 and uses Health, Education and Standard of living indicators to determine the incidence and intensity of poverty experienced by a population. Since then, MPI has been used to measure acute poverty across over 100 developing countries. The Global MPI is released annually by UNDP and OPHI and the results published in their websites. The Global MPI is published along with the Human Development Index (HDI) in the Human Development Report. It superseded the Human Poverty Index (HPI).

The Global Multidimensional Poverty Index uses the household as its unit of analysis. A household is deprived for a given indicator if they fail to satisfy a given cutoff i.e., having at least one adult member with at least six years of education. A household is assigned a deprivation score determined by the number of parameters they are deprived in and the 'weights' assigned to those indicators. Each dimension, (health, education, standard of living, etc.) is typically given an equal weighting and each indicator within the dimension is also typically weighted equally. A person is *multidimensionally poor* if she/he is deprived in one third or more (means 33% or more) of the weighted indicators (out of the ten indicators). Those who are deprived in one half or more of the weighted indicators are considered living in *extreme multidimensional poverty*.

The Multidimensional Poverty Index is a medium to calculate poverty in all developing countries of the world. The Global MPI results are released annually, usually in July, by OPHI in association with the UNDP. India ranked 62 in the Global MPI 2020 which ranked 107 countries. MPI India rank was last released in September 2021, when India ranked 66 out of the 109 countries that are assessed in the survey. Nearly 1.3 billion people were found to be multi-dimensionally poor under this index.

National Multidimensional Poverty Index (NMPI): Global Multidimensional Poverty Index's National counterpart is released by the NITI Aayog, namely *National Multidimensional Poverty Index (NMPI)*. The National MPI is India's equivalent of the Global Multidimensional Poverty Index developed by the NITI Aayog. It uses the robust procedures followed by the Oxford Poverty and Human

Development Initiative and the UNDP to determine the multidimensionality of poverty among the Indian masses.

This MPI report is based on a base report of NFHS (National Family Health Survey) and it has considered the period between 2015 to 2016 for its findings. It was released on 26th of November 2021. Through the first MPI of India we can now easily get some approximation at district level which would be much more efficient in comparison at the country level and it is calculated through *12 indicators-nutrition, child and adolescent mortality, years of schooling, school attendance, access to cooking fuel, sanitation, drinking water, electricity, and housing, ownership of assets and bank account.*

The National Family Health Survey was performed between 2015 and 2016, and the national MPI was prepared by NITI Aayog in cooperation with 12 ministries and in partnership with state governments and index publishing bodies, specifically OPHI and UNDP. It is one of the first reports since the new government took office in India, and it replaces the previous poverty line technique. Access to prenatal care and financial inclusion as assessed by bank accounts are also included in India's national MPI.

India has registered a significant decline of 9.89 percentage points in the number of multidimensionally poor, from 24.85% in 2015-16 to 14.96% in 2019-2021, according to the 'National Multidimensional Poverty Index:

Based on the latest National Family Heath Survey [NFHS-5 (2019-21)], this second edition of the National Multidimensional Poverty Index (MPI) represents India's progress in reducing multidimensional poverty between the two surveys, NFHS-4 (2015-16) and NFHS-5 (2019-21). It builds on the Baseline Report of India's National MPI launched in November 2021. The broad methodology followed is in consonance with the global methodology. A Progress Review 2023. The report was released by the Niti Aayog in New Delhi on July 17 2023. In April, India surpassed China to become the world's most populous nation with 142.86 crore people, according to UN data. "Notably, India saw a remarkable reduction in poverty, with 415 million people exiting poverty within a span of just 15 years (2005-06-2019-21)," the report said. The state of Uttar Pradesh registered the largest decline in number of poor with 3.43 crore people escaping multidimensional poverty. Providing multidimensional poverty estimates for the 36 States and

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Union Territories and 707 Administrative Districts, the Report states that the fastest reduction in the proportion of multidimensional poor was observed in the States of Uttar Pradesh, Bihar, Madhya Pradesh, Odisha, and Rajasthan. The dedicated focus of the Government on improving access to sanitation, nutrition, cooking fuel, financial inclusion, drinking water, and electricity has led to significant advancements in these areas. Consistent implementation across a diverse set of programmes and initiatives that have strong interlinkages has led to significant reduction in deprivations across multiple indicators.

All 12 parameters of the MPI have shown marked improvements. Flagship schemes like the Poshan Abhiyan and Anaemia Mukt Bharat have contributed to reduced deprivations in health. Initiatives such as Swachh Bharat Mission (SBM) and Jal Jeevan Mission (JJM) have improved sanitation across the country. The impact of these efforts is evident in the swift 21.8 percentage points improvement in sanitation deprivations. The provision of subsidized cooking fuel through the Pradhan Mantri Ujjwala Yojana (PMUY) has positively transformed lives, with a 14.6 percentage points improvement in cooking fuel deprivations. Initiatives like Saubhagya, Pradhan Mantri Awas Yojana (PMAY), Pradhan Mantri Jan Dhan Yojana (PMJDY), and Samagra Shiksha have also played a major role in significantly reducing multidimensional poverty in the country. The remarkable progress achieved through extremely low deprivation rates especially for electricity, access to bank accounts and drinking water, reflects the Government's unwavering commitment to improving citizens' lives and creating a brighter future for all.

"The report demonstrates that poverty reduction is achievable. However, the lack of comprehensive data during the period of the COVID-19 pandemic poses challenges in assessing immediate prospects," it said. In India, 415 million poor people moved out of poverty from 2005-2006 to 2019-2021, with incidence falling from 55.1% in 2005-06 to 16.4% in 2019-21. In 2005-2006, about 645 million people were in multidimensional poverty in India, with this number declining to about 370 million in 2015-16 and 230 million in 2019-21.

A total of 415 million people moved out of poverty in India within just 15 years from 2005-2006 to 2019-2021, the United Nations (UN) said on July 11, highlighting the remarkable achievement by the world's most populous nation. The report noted that deprivation in all indicators declined in India and "the poorest States and groups, including children and people in disadvantaged caste groups, had the fastest absolute progress." According to the report, people who are multidimensionally poor and deprived under the nutrition indicator in India declined from 44.3% in 2005-06 to 11.8% in 2019-21, and child mortality fell from 4.5% to 1.5%. "Those who are poor and deprived of cooking fuel fell from 52.9% to 13.9% and those deprived of sanitation fell from 50.4% in 2005-06 to 11.3% in 2019-21," according to the report. In the drinking water indicator, the percentage of people who are multidimensionally poor and deprived fell from 16.4 to 2.7 during the period, electricity (from 29% to 2.1%) and housing from 44.9% to 13.6%.

The measurement MPI replaced the Human Poverty Index. because HPI combined average deprivation levels for each dimension and thus could not be linked to any specific group of people, whereas MPI directly measures the combination of deprivations that each household experiences. It complements traditional monetary-based poverty measures by capturing the acute deprivations that each person faces at the same time with respect to three dimensions of poverty I, e., education, health and living standards. Therefore MPI is considered as best measurement of poverty, which also helpful to the governments to review and realise the impact of various poverty alleviation programme initiated by them in order to reduce poverty.

Conclusion
Though the Government of India and states have launched various poverty alleviation programmes from time to time, the journey to eradicate poverty is quite long. Through the first MPI of India we can now easily get some estimation of poverty on the district level which is much more efficient as compared to country level and it is calculated through twelve indicators-nutrition, child and adolescent mortality, maternal health, years of schooling, school attendance, access to cooking fuel, sanitation, drinking water, electricity, and housing, ownership of assets and bank accounts. It will also help the government in reaching their aims of Antyodaya Yojana, MGNREGA, Pradhan Mantri Jeevan Jyoti Bima Yojana, Poshan Abhiyan and other poverty alleviation programmes, which means reaching to the last men in the queue.

If they are implemented properly then these can seriously improve the conditions of the poor people who need the most help regarding this and its main aim is also to look out solutions for poverty elevations of the poorest of the poor. The Human Poverty Index (HPI) was superseded by the MPI, as it can display the composition of poverty is complex, affecting diverse geographies and ethnic groups or any other subgroup of the population having policy consequences.

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