

Poverty Brief

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MEASURING POVERTY IN BANGLADESH: A CRITICAL ASSESSMENT

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Introduction

For the purpose of official assessment, poverty in Bangladesh is still viewed narrowly in terms of Direct Caloric Intake (2122 calories a day) (DCI), Cost of Basic Needs (CBN) and Food Energy Intake (FEI), and this has been the case since the mid-1990s (GOB, 2010). The DCI or CBN methods gauge changes in the monetary poverty rate for the whole country or for regions in Bangladesh, but these scores are unable to capture the changes in social,



- This study suggests using the Multidimensional Poverty Index (MPI) as a more accurate method for measuring poverty in Bangladesh.
- The MPI represents significant progress in the measurement of poverty in an internationally comparable way.
- It reveals a more accurate portrait of poverty by shifting attention from solely income factors to include other intrinsically important dimensions such as health, education and living standards.

political and cultural dimensions of poverty for a specific year. This is one of the current limitations of the poverty assessment method used in Bangladesh (Chowdhury & Mukhopadhaya, 2012).

As international studies show, poverty is multidimensional and is about more than income, with many different dimensions contributing to the lived experience of poverty, including poor health, lack of education and low living standards (Alkire & Santos, 2014; Sen 2005). Given that poverty is a multidimensional phenomenon, measuring it by any single aspect will not highlight all the dimensions (Alkire et al., 2014; Chowdhury & Mukhopadhaya, 2014). However, due to the absence of a multidimensional poverty model in Bangladesh, it is not possible to measure poverty from a wider perspective (Chowdhury & Mukhopadhaya, 2012). Poverty's multidimensional nature is traditionally ignored by DCI, CBN and FEI measurements in Bangladesh, which means that individuals living above the income poverty line may still suffer deprivations in education, health and other living conditions.

Problems with traditional approaches to measuring poverty

The customary approach to understanding poverty, albeit controversial, has been to specify the food component of the poverty line in terms of calorie requirements. However, there are numerous challenges with adopting this kind of approach. It has been argued that the food poverty line is not low enough and that caloric intake is not relevant as a criterion of nutrition. If the poor do not meet their nutritional needs because of suboptimal expenditure patterns, it is argued that this is their own fault and need not be factored into the creation of the poverty line (Bellu & Liberati, 2005). Such sub-optimality could involve the intake of more expensive calories, the search for a more balanced or a more tasty diet, or the inability to forgo compliance with social demands (Bellu & Liberati, 2005).

On the other hand, there is no precise economic rationale to define the basket of food associated with a given energy intake. Nutrition depends on the cooking systems employed and the same foods do not necessarily produce equal nutrition in the human body. Furthermore, the type and amount of food needed to be in good health may vary among individuals and between areas, with potential differences for the underlying poverty lines of different subgroups of the population (Bellu & Liberati, 2005). In addition, prices and consumption patterns vary between different geographical areas in a country, and the cost of buying a fixed energy intake may change if the prices of food items change over space and time (Sen, 2005). A significant shock has been caused by the recent steep rise in food prices, including that of the main staple, rice, which has revealed the risk posed by global price volatility for a net food-importing country like Bangladesh. This rise in food prices may have compelled households, particularly the poor, to further reduce their spending on healthcare and education. There is thus no satisfactory way to define non-food expenditures (Bellu & Liberati, 2005). Considering the above flaws in the existing measurements used in Bangladesh, we argue that updating the poverty indicators through developing and validating a multidimensional poverty model can potentially help to make the poverty-reduction strategies in the country more effective.

Recommendation

This study suggests the use of the Multidimensional Poverty Index (MPI) method as a more accurate tool to measure poverty in Bangladesh. It complements traditional income-based poverty measures by capturing the severe deprivations that each person faces with respect to education, health and living standards. The MPI can help with the effective allocation of resources by making possible the targeting of those with the greatest intensity of poverty; it can help to strategically address Sustainable Development Goals (SDGs) and monitor impacts of policy intervention. The MPI can be adapted to the national level using indicators and weights that make sense for the region or the country. It can also be used in the context of developing national poverty eradication programmes and to study changes over time in Bangladesh (UNDP, 2016).

The MPI 2014 applied by the UNDP in 49 out of 108 countries using existing household survey data included South Asia, Sub-Sharan Africa, the Middle East, East Asia, the Pacific, Europe and Central Asia, Latin America and the Caribbean (home to 5.4 billion people according to 2010 population data). Among them a total of 1.6 billion people are living in multidimensional poverty (Alkire et al., 2014). It is important that even though the MPI incorporated only a few indicators (and may not have used all possible indicators) universally, the UNDP (2013) suggested that this list can be deconstructed by regions, ethnicity and other groupings such as gender or age (Chowdhury & Mukhopadhaya, 2014). The focus of MPI is on community level data collection to measure a community's poverty level (and thus see which poverty programmes are working and where) rather than creating a different way to look at already existing national level data (Jayne, 2010). Again, the multidimensionality of poverty is often neglected at the policy formulation stage in developing countries (Chowdhury & Mukhopadhaya, 2014). This is partly due to the fact that MPI is based on a subjective threshold as opposed to the objective threshold of a monetary approach (Solbi, 2010).

However, the MPI provides a vivid picture of how and where people are poor, within and across countries, regions and the world, enabling policymakers to better target their resources at those most in need through policy interventions that tackle the many different aspects of poverty together (Alkire et al., 2014, p.1). This methodology is indeed useful because it allows us to convert the welfare, or well-being of the population, into numbers. Converting all the dimensions of welfare into numbers or monetary terms allows us to carry out a standardised welfare assessment. By employing this methodology, it is possible to select the poor and compare the welfare aspects of each household to the existing cut-off values of the country. If this methodology is well implemented, it will further allow the calculation of aggregated information about poverty in the country. Not only is the MPI a more multifaceted and accurate tool for measuring poverty, it can also be used as a tool for eradicating poverty. It directly measures the nature and magnitude of overlapping deprivations in health, education and living standards at the household level. Each person is assigned a deprivation score according to his or her household's deprivations in each of the 10 component indicators. The maximum score is 100%, with each dimension equally weighted; thus the maximum score in each dimension is 33.3%. If a person's total deprivation score is 33.3% or greater, that household (and everyone in it) is considered multidimensionally poor (Human Development Report 2013, p.7).

Multidimensional Poverty Index (MPI)

The MPI was designed by the Oxford Poverty and Human Development Initiative (OPHI) and UNDP in its Human Development Reports since 2010 (Alkire & Santos, 2010). The MPI uses 10 indicators representing three human development dimensions: two for health; two for education; and six for living standards.



Figure 1: Dimensions and Indicators of MPI. (Source: Alkire et al., 2011).

- **1.** Health (each indicator weighted equally at 1/6)
 - Child mortality: If any child has died in the family
 - Nutrition: If any adult or child in the family is malnourished
- 2. Education (each indicator weighted equally at 1/6)
 - Years of schooling if no household member has completed 5 years of schooling
 - Child school attendance if any school-aged child is out of school in years 1 to 8
- 3. Standard of Living (each of the six indicators weighted equally at 1/18)
 - Electricity if household does not have electricity
 - Drinking water if it does not meet Millennium Development Goal (MDG) definitions, or is more than 30 mins walk
 - Sanitation if it does not meet MDG definitions, or the toilet is shared
 - Flooring if the floor is dirt, sand, or dung
 - Cooking fuel if cooking done with wood, charcoal, or dung
 - Assets if do not own more than one of: radio, TV, telephone, bike, motorbike or refrigerator and do not own a car or truck (Alkire & Santos, 2014).

Each dimension and each indicator within a dimension is equally weighted. A person's deprivation score is constructed based on a weighted average of the deprivations experienced using a nested weight structure: equal weight across dimension and equal weight for each indicator within dimensions. The MPI provides a poverty headcount. This is the number of people who are considered multidimensionally poor at the chosen cut-off point, given as 30% of the weighted indicators. Ultimately, a person is identified as poor if he or she is deprived in at least one third of the weighted indicators (Alkire et al., 2011) and any person whose deprived indicators' weights sum to 3 or more is considered poor (Alkire & Santos, 2014).

Conclusion

Measuring poverty accurately is important to gauge the scale of the poverty challenge, to formulate policies and

to assess their effectiveness. In developing countries, the field is still dominated by a definition of absolute poverty in terms of income. The FEI/CBN is the most restrictive method, as it only includes food items in the calculation of the poverty line. The MPI represents significant progress in the measurement of poverty in an internationally comparable way. It shifts attention from solely income factors to include other intrinsically important dimensions. The MPI can be applied to make the best use of indicators available in Bangladesh. The MPI can be considered the first step in revealing a more accurate portrait of poverty in the world, highlighting the very high deprivation levels in core dimensions. At the moment, the MPI is not being used by the government and NGOs in Bangladesh. The challenge for institutions in developing countries such as Bangladesh, where this data is of crucial importance, is that they lack the expertise and capacity to use it effectively in human development programmes. There is a need to bridge this gap. In the case of Bangladesh,

in order to make the shift from conventional methods of measuring poverty to MPI, it is necessary to lobby within the NGOs and private sector, local and international humanitarian institutions and organisations, as well as national policy makers working on poverty reduction

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or alleviation. Although the application of MPI is still in its infancy, we hope that further applications of this and other methodologies will help to improve the empirical understanding of the multidimensional aspects of poverty.

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necessarily reflect a consensus view of the Programme. They are distributed as worthy of consideration by those concerned to "mobilize critical research for preventing and eradicating poverty".

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