

GENDER-POVERTY GAP AND THE INDIAN MPI

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Abstract

Given the vast literature existing on the “feminisation of poverty” (Chant, 2003) (Argiropoulos & Rajagopal, 2003) (Chant, 2008), this essay aims to reflect on the National Multidimensional Poverty Index of India¹ and to understand if the current structure of the Indian MPI sufficiently captures the incidence of disproportionality of female poverty or not. It is widely agreed upon that measures such as the MPI were created to get a bird's eye view of the development challenges plaguing the world. Therefore, in such a situation when the outcomes of such indices are used to allocate funds and develop policy solutions, it becomes of utmost importance that they truly represent the on-ground situation.

JEL Classification: I3, O1, O2

Keywords: Poverty Measure, Gender, Health, Education

1. INTRODUCTION

The United Nations' Sustainable Development Goals of 2030 identifies eradication of poverty as the first of its 17 agendas. It recognises that poverty eradication in all its forms is the most pressing global challenge and a necessary condition for sustainable and equitable development (Poverty Eradication | Department of Economic and Social Affairs). Although until the 1970s, poverty was traditionally measured using a uni-dimensional framework of either income or consumption, it is now widely accepted that poverty is much more nuanced than just the lack of income. It also includes lack of ability to access education, healthcare, sound and safe housing, employment opportunities and much more. In light of this, it is evident that no one indicator, such as income, is capable within itself to capture the multiple dimensions of poverty². Measures of income poverty are capable of providing information at the very basic level; however, a more holistic picture of poverty requires consideration of other parameters for numerous reasons. To begin with, the presence of income doesn't guarantee that individuals are able to access what they find valuable and necessary in life. Although income might act as a good proxy for being able to access basic necessities, some important

needs might not be satisfied if there is a failure in the functioning of markets or an inability to access markets. Secondly, the ability to convert income into the satisfaction of needs also varies among individuals. Individuals having the same level of income might not be able to enjoy the same standard of living as a virtue of their specific living conditions. Furthermore, when we look at income poverty, we are able to only gauge if an individual has enough income to access, let's say, education or healthcare. Having enough income doesn't in itself translate into well-educated or well-nourished individuals (Santos & Alkire, 2011). The recognition of the above drawbacks led to the formation of poverty measures which are more representative than the unidimensional income measure. The Multidimensional Poverty Index which was the successor of the Human Poverty Index has been commonly used since 2010 post its introduction in the flagship Human Development Report by the United Nations Development Program.

2. GENDER AND POVERTY

The link between gender and poverty has been widely studied over the last few decades. Even the first of the 17 SDGs recognises the gender-based

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¹India uses Alkire-Foster (AF) methodology which is an extension of FGT and uses household level data collected via NFHS.

²According to the 2022 Global Multidimensional Poverty Index Report by UNDP, the data shows that 1.2 billion people live in acute poverty across 111 developing countries. This number is double of what we get when we use a unidimensional poverty measure of defining poor as those who live on less than \$1.90 per day.

disparities existing in poverty. Target 1.b)³ highlights the need for a gender-sensitive way forward for the eradication of poverty (Goal 1 | Department of Economic and Social Affairs). Studies have highlighted that women, girls, and female-headed households bear a disproportionate burden of poverty. A study conducted by the World Bank based on household surveys from 89 countries shows that overall girls and women of reproductive age are more likely to live in poor households than boys and men of the same age. According to the same study, 122 women between the ages of 25 and 34 live in poor households for every 100 men of the same age group (Boudet et al., 2018).

Women have less equitable access to resources which amplifies poverty by hindering access to important social systems. The incidence of poverty amongst women can be viewed by their ability (or lack thereof) to access and participate within the following social systems:

2.1. EMPLOYMENT AND ASSET OWNERSHIP

Owing to factors such as literacy rates, wage rates, social attitudes, etc. have created an uneven playing field for women in the job market, reducing their participation in the workforce. Those who find themselves in the workforce face the brunt of discrimination, gender-based wage gaps as well as occupational segregation with certain fields deemed more “man-like”. (The Gender Gap in Employment: What's Holding Women Back? 2017). This has led to lower levels of wealth accumulation with women only accumulating 74% of the wealth that their male counterparts do. (2022 Global Gender Wealth Equity Report, 2022)

2.2. HEALTH AND EDUCATION

Similarly on account of socio-economic factors women often find themselves unable to access proper healthcare which has the ability to have an adverse impact on their quality of life. It also acts as a negative externality for all other individuals in the households. The inability to access education reduces potential earning members of the family and makes the female members dependent on their male relatives.

³ Target 1.b) states that – “Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions”

⁴There are 2 major characteristics of acute poverty – It includes people who do not meet the minimum agreed standard of indicators of basic functioning and it includes the people who experience such deprivation in multiple indicators simultaneously.

2.3. GENDER BASED VIOLENCE

Around one-third of women worldwide have experienced physical and/or sexual violence by an intimate partner (The World's Women 2020: Trends and Statistics | United Nations, 2020). Public harassment is another concern that can restrict women’s mobility and curb employment and education opportunities.

2.4. SOCIAL NORMS

Women continue to bear a disproportionate burden of care work and unpaid domestic work globally. On average, globally women spend 3 times the number of hours men spend on care work and unpaid domestic work (The World's Women 2020: Trends and Statistics | United Nations, 2020). This prevents women from participating in the labour force in many cases, as well as leaving them with little time for leisure activities, upskilling, and education.

3. ABOUT GMPI

GMPI refers to the Global Multidimensional Poverty Index. It is an international measure used to measure acute poverty⁴ in more than 100 countries across the globe. It is considered a complement to the existing poverty measures by accounting for the deprivation of individuals in 3 dimensions – Health, Education and Standard of Living using 10 indicators. The GMPI employs the Alkire-Foster (AF) methodology of dual cut-off for measuring the multidimensional nature of poverty.

Table 3.1: Structure of the GMPI

Dimension	Indicator	Weightage
Health	Nutrition	1/6
	Child Mortality	1/6
Education	Years of Schooling	1/6
	School Attendance	1/6
Standard of Living	Cooking Fuel	1/18
	Sanitation	1/18
	Drinking Water	1/18
	Electricity	1/18
	Housing	1/18
	Assets	1/18

Source: Oxford Poverty and Human Development Initiative

Although the GMPI is cognizant of intra-household gender inequalities, it has not been able to integrate gender consideration into its analysis. It has been observed that MPI tends to be higher for households having a higher number of women or children (Alkire & Santos, 2013). Although ideally electing individuals as the unit of analysis and incorporating more gender-pertinent indicators might have helped to make the GMPI more gender-sensitive, it has not been possible due to technical considerations. The need to compare GMPI across countries necessitates a uniform design that incorporates indicators for which data is available for all the countries. It is found that due to the unavailability of data, the development of a women-specific GMPI is not possible for even 50 countries (Alkire & Kanagaratnam, 2021).

4. NATIONAL MULTIDIMENSIONAL POVERTY INDICES: ANALYSIS OF THE INDIAN NMPI

Countries around the world have developed their own national MPIs by harnessing the flexibility that the GMPI provides. Since NMPIs are not bound by the same restriction as the GMPI (with respect to comparability), they tend to be more flexible and can incorporate a gender lens in their poverty assessment methodology through the inclusion of gender-specific indicators and cut-offs. Generally, the NMPIs are tailored to reflect country-specific policy priorities.

The Indian MPI is based on the AF methodology which is based on the Foster-Greer-Thorbecke (FGT) class of poverty measures. This method classifies individuals as poor or non-poor on the basis

of a dual cut-off mechanism. The first cut-off is applied at the level of the individual indicator to be taken into consideration to understand if an individual is deprived in terms of a particular indicator. Thus a deprivation score is calculated for all the individuals by considering the deprivation at the level of individual indicators. The second-order cut-off then helps to identify if an individual is multidimensionally poor on the basis of this aggregated score.

Table 4.1: An example of calculation of deprivation score

Dimension	Deprived	Status	Weight	Score
Nutrition	Yes	1	1/6	0.16
Child and Adolescent Mortality	No	0	1/12	0
Maternal Health	Yes	1	1/12	0.08
Years of Schooling	No	0	1/6	0
School Attendance	No	0	1/6	0
Cooking Fuel	Yes	1	1/21	0.04
Sanitation	Yes	1	1/21	0.04
Electricity	No	0	1/21	0
Drinking Water	No	0	1/21	0
Housing	Yes	1	1/21	0.04
Assets	No	0	1/21	0
Banking Account	Yes	1	1/21	0.04
Deprivation Score				0.36

Source: Author's own calculation (based on the national MPI)

Considering the nutrition indicator, the individual is considered poor in that indicator since he/she doesn't fulfil the criteria for deprivation cut-off. This is the first cut-off. Second Order Cutoff = 0.33, thus the above individual is considered multidimensionally poor since his/her deprivation score ($0.36 > 0.33$) is greater than the second cutoff.

The indicators taken into consideration of the Indian MPI (National Multidimensional Poverty Index, 2021) are as follows:

Table 4.2: Indicators in the Indian National MPIs⁵

Dimension	Dimension Weight	Indicator	Indicator Weight	Deprivation Cut-off
Health ⁶	1/3	Nutrition	1/6	A household is considered deprived if any child (0-59 months), women (15-49 years) or man (15-54 years) - for whom nutritional information is

⁵In addition to the indicators which are considered in the global MPI measure, the Indian MPI also accounts for Antenatal Care in the Health dimension and Bank Accounts in the Standard of Living dimension.

⁶Unlike the global MPI measure, the indicators in the health dimension are not equally weighted. The indicators which take into account recent birth such as Antenatal Care and Child and Adolescent mortality share half of the weight of the health dimension equally to prevent the MPI measure to favour households that have no children or have had no birth in the preceding 5 years.

				available- is found to be undernourished. ⁷
		Child and Adolescent mortality	1/12	A household is considered deprived if a child or adolescent under 18 years has died in the 5 years preceding the survey.
		Antenatal Care	1/12	The household is deprived if any women in the household who has given birth in the 5 years preceding the survey has not received at least 4 antenatal care visits or has not received assistance from trained skilled medical personnel during the most recent childbirth.
Education	1/3	Years of Schooling	1/6	Not even one member of the household aged 10 years or older has completed 6 years of schooling.
		School Attendance	1/6	Any school-aged child is not attending school up to the age at which he/she would complete class 8.
Standard of Living	1/3	Cooking Fuel	1/21	The household cooks with dung, agricultural crops, shrubs, wood, charcoal or coal.
		Sanitation	1/21	The household has unimproved or no sanitation facility or it is improved but shared with other households.
		Drinking Water	1/21	The household does not have access to improved drinking water or safe drinking water is at least a 30-minute walk from home (as a round trip).
		Electricity	1/21	The household has no electricity
		Housing	1/21	The household has inadequate housing: the floor is made of natural materials, or the roof or the walls are of rudimentary materials.
		Assets	1/21	The household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike or refrigerator and does not own a car or truck.

⁷The deprivation construct of nutrition in the Indian MPI also ignores the age group of children from 6-14 years which comprise 18% of the Indian population, this severely underestimates the poor.

		Bank Account	1/21	No member of the household has a bank account or a post office account.
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Source: National Multidimensional Poverty Index (Baseline Report)

The unit of identification and analysis in the case of the Indian MPI is the household. Although the NFHS⁸ collects data at an individual as well as household level, the MPI considers the information of all members in the household together. Thus, all members of a household are assigned a similar score even if some are more deprived or poorer than others. Although this structure is capable of accounting for any positive or negative intra-household externalities associated with nutrition, maternal health, and education, it is not able to capture the intra-household disparities which might exist between the male and female members of the household. For example: in the Year of Schooling Indicator, a brother and a sister in the specified age group, will both be considered non-deprived if only the brother attends or has completed 6 years of schooling. Now although the above situation would be identified in the School Attendance indicator, a situation wherein there are no children in the household and even one male educated member, the entire household would be considered as non-deprived in terms of education, even if every other member has not had at least 6 years of schooling. In this regard, the NMPI of Pakistan has a much more restrictive cut-off for Years of Schooling; it declares a household as deprived if a man or a woman aged 10 or above has not completed 5 years of schooling. So, even if a man has completed the requisite years of schooling, the household will be considered deprived if the woman has not completed 5 years of schooling herself. Similarly, Afghanistan's NMPI, disaggregates schooling into female and male schooling, thus capturing the gender disparities which are present within households.

Another point of consideration is the bank account indicator. According to this indicator, a household is considered non-deprived if even one member of the household has a bank account. As per NITI Aayog, this indicator is incorporated as bank accounts enable

financial inclusion and improve the capabilities of households by allowing them to avail benefits of government social security programs, allow access to institutionalised credit and allow for savings. The report (National Multidimensional Poverty Index, 2021) further highlights the supporting role of bank accounts to escape poverty in a female headed-household, yet there is no component to make this indicator gender-sensitive⁹.

Hence poverty measures based on household-level data (which ignore the household-level disparities by assuming equitable distribution) present an unfair picture of poverty incidence. The results from such studies which try to interpret individual-level results from household data tend to obstruct the differences between poverty. A study showed that ignoring intra household inequality can result in poverty measurement errors to the extent of 30% (Kanbur & Haddad, 1990).

5. RECOMMENDATIONS

Undoubtedly, as compared to the global MPI, certain incorporations in the Indian MPI make it more sensitive to gender issues in our country such as incorporation of Antenatal Care and Cooking Fuel. Yet, there is much more that can be done. The above section highlights the weaknesses of the current national MPI of India in terms of it being sensitive to gender-based disparities. This section, aims to explore what are certain changes that can be brought about in the construction of the NMPI. As mentioned previously, gender disparities have the ability to manifest themselves in Employment and Asset Ownership, Health and Education, Gender Based Violence, and Social Norms; incorporating indicators that take into account these dimensions can make the MPI more sensitive to gender-based disparities. This has been done by several nations around the world as is represented in the table below (Dirksen, 2020),

⁸National Family and Health Survey is the national household survey which is used for the calculation of the MPI in India

⁹A similar indicator in the case of the NMPI of Palestine has a gender component associated with it.

to avail healthcare services is pertinent in the case of India where access to healthcare is skewed against women vis a vis men (Dasgupta, 2020).

In the case of the NMPI of Palestine, specific indicators of personal freedom and safety have a gender-sensitive component to them. Indicator of personal freedom concerned with females: Control of women's income or women's participation in the labour market with deprivation limit as - Any women in the household does not have a separate bank account or does not control her use of income or earnings OR Any women in the household does not work (or look for work) because of husband/father/brother's restrictions.

Whereas, indicator of the safety dimension concerned with women considers the interpersonal and state violence faced by females with deprivation limit set as - Any household member was attacked or forcibly assaulted with or without a weapon last year OR, any child or women hit or attacked by another family member during the past year OR Injuries, deaths or torture in the household from state/settler violence during the past year. Such an addition is extremely important in case of the Indian MPI

because of the high number cases of domestic and sexual violence. According to NFHS-4 data, 30% of all women in India have experienced domestic violence at least once from when they are aged 15. Literature and studies point toward significant linkage between domestic violence and poor health and well-being of not only the survivors of such violence but also the children they give birth to. (Suri et al., 2022)

6. CONCLUSION

To conclude, although some steps have been taken, there is definitely much more that can be done. Although ensuring robust data collection about more factors is a long term approach, in the short run the existing data can also be used to paint a fairer picture of the disparities faced by the females in our country. Therefore, it is necessary that the NMPI is changed and updated while keeping in mind the specific realities of Indian society and how it impacts the poor (women). This is especially true when one realises that MPI is not just a statistic but rather a tool which can be used to allocate limited budgetary resources to alleviate poverty by capturing and working on inter-related deprivations.

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