

# CHILD POVERTY PROFILES: UNDERSTANDING INTERNATIONALLY COMPARABLE ESTIMATES

#### Introduction

The purpose of this brief note is to explain the rationale, content, and mechanics of internationally comparable estimates of child poverty. It should be highlighted the emphasis is on internationally comparable estimates. The virtue of this estimates is not their accuracy country-by-country, but the possibility of comparing child poverty across countries because strictly the same dimensions, the same indicators, and the same thresholds have been used. Moreover, they allow for meaningful supra-national aggregates as they allow to add "like with like" across countries and regions. Obviously, thus, they are not intended, nor should they be used, for nationally relevant child poverty assessment.

## Definition of child poverty

Within the human rights approach to poverty, there are rights constitutive of poverty. They are the rights that require directly and fundamentally material resources for their continued realization.

Child poverty is the lack of public and private material resources to realize their rights constitutive of poverty.

Child poverty and deprivation are different from poverty among adults. The main reason is that their needs are different - from nutrition through schooling to health care. Their experience of poverty and its consequences are different. Moreover, they depend on adults for support, care, and satisfaction of their needs. One of the most salient differences is that children should not work to earn a living.

# Rationale for the definition and measurement of child poverty

This definition of child poverty is independent of income. Thus, it is not that child poverty is a proxy or a substitute or a marker or cause or a consequence of lack of income. Actually, child poverty could be either or both a cause and consequence of monetary poverty. Just as monetary poverty could be a cause and consequence of child poverty.

The important issue is that child poverty is not measured because it could be a cause or a consequence of monetary poverty. We measure it because it is important in and of itself and it directly affects children today (independently of any possible causal relationship with their parents' income). The deprivation in these rights is what makes the child poor.

Importantly, all the rights ought to be assessed simultaneously for the same child. Otherwise, a dashboard instead of an estimate of child poverty would be obtained. A dashboard is not sufficient for identifying poor children. For example, let us a imagine a country where a third of the children are out of school, a third of the children are malnourished, and a third of the children lack access to health services. It is important to know if these are the same children (a third of the total child population, all suffering simultaneously three deprivations) or completely different children.

Moreover, the concept of constitutive rights is important. It helps in establishing what is included in the measurement. The rights which are assessed become dimensions in the estimate. The crucial test to include a dimension is to ask if the realization of the right depends crucially on the utilization of material resources (i.e. beyond monetary). Thus, housing, sanitation, and education, which require material resources are included but privacy or religious freedom or happiness are not. Besides the Human Rights approach, this is congruent with everyday language, the definition of poverty in a dictionary, and the Capabilities, Basic Needs, and other long-standing approaches to measure poverty.

#### Principles of child poverty measurement

Four basic principles guided the internationally comparable estimates of child poverty. First, they should be measured at the individual child, not a disaggregation of a household measure. Second, the dimensions of the metric are rights constitutive of poverty. Third, all rights are equally important, thus all dimensions are equally weighted. Finally, besides the prevalence of poverty, it is important to measure how poor children are, in particular the poorest of the poor.

#### Data limitations for an internationally comparable measurement of child poverty

There are two main data limitations. Most household surveys that can be used to estimate child poverty (because they have a wealth of information to assess realization of child rights for individual children) do not have the full ideal set of indicators. Thus, one limitation is that some elements could be missing (e.g. information about clothing) to properly ascertain if all rights constitutive of poverty are realized. The other limitation is that even if the indicator is included in the survey, it is not asked of all children (e.g. nutrition is not usually measured for adolescents).

Consequently, six dimensions were used for the global estimates. These dimensions are: **education**, **health**, **housing**, **nutrition**, **sanitation**, **and water**.

#### Further assumptions

An important consideration regarding data limitations is that no imputations are made in the absence of knowledge. For example, in a household with two school-aged children who are out of school and a child just below the age of mandatory schooling, the younger child is not considered poor, even if it is very likely that child will not attend school in a few weeks or months (once the mandatory age of schooling is surpassed).

This avoidance of imputation clearly leads to underestimation of child poverty. Nevertheless, it is better to err on the side of caution and do not overestimate child poverty.

Additionally, although the estimation of child poverty is based on the individual child, some indicators are only measured at the household level (e.g. overcrowding). Absent information about how children are distributed across the available rooms, all the children are treated the same way (i.e. if there is overcrowding in the household, all children therein are considered deprived in their right to housing).

Nonetheless, in some cases it is possible to disentangle these indicators. For example, in cases when the household is far from a safe water source, it is possible to know who actually fetches water. If girls do fetch water while boys stay home (as it is often the case), it is feasible to use this information to assess individual access to water. Similarly, access to communication and information devices (i.e. mobile phones) or access to reproductive health can sometimes be separated between boys and girls. Nevertheless, due to data limitations, unfortunately, these elements were not included in the internationally comparable estimates.

#### Logic of calculation

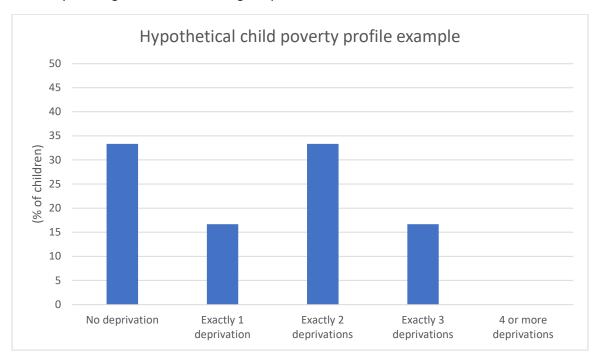
The methodology for calculating child poverty is very simple and within the canon for multidimensional poverty estimation. It is based on two steps. First, identifying which children are deprived in each dimension – identification – and second, compiling the individual child's information into a summary measure – aggregation. Although there are different ways to perform these two steps, **all measures currently being estimated by countries or multilateral organizations use this two-steps methodology**.

For example, let us assume there are six children (A, B, C, D, E, and F) who could be deprived in nine dimensions (rights constitutive of poverty) as in the table below. It can be observed that child B is deprived in terms of sanitation services and child C's rights to health, nutrition, and water are not realized. In addition, child E is deprived in the health and information dimensions while child F is deprived in the rights to play and water. These four children (B, C, E, and F) are identified as suffering at least one deprivation. Once identified, they are aggregated (counted) and expressed as a proportion of all children.

Access to:	А	В	С	D	E	F
Clothing	٧	٧	٧	٧	٧	٧
Education	٧	٧	٧	٧	٧	٧
Health	٧	٧	NO	٧	NO	٧
Housing	٧	٧	٧	٧	٧	٧
Information	٧	٧	٧	٧	NO	٧
Nutrition	٧	٧	NO	٧	٧	٧
Play	٧	٧	٧	٧	٧	NO
Sanitation facilities	٧	NO	٧	٧	٧	٧

Water	٧	٧	NO	٧	٧	NO
Poor: At least one right not realized	NO	POOR	POOR	NO	POOR	POOR

In this case, if suffering one deprivation is the minimum to be considered poor, the prevalence of poverty is two thirds (i.e. four of the six children are in poverty). More importantly, it can be seen that while two children suffer no deprivations (A and D), one of them (B) suffers one deprivation, two of them (E and F) suffer two deprivations each, and one (C, the poorest of the poor) suffers three deprivations simultaneously. This classification results in the profile of poverty which is more important for analysis than only the single number describing the prevalence.



#### **Practical considerations**

In the previous example, it is necessary to establish which indicators should be included to assess deprivation in each dimension (right) and a threshold to determine if a child should be considered deprived in each dimension. For the global estimates, two thresholds were used: one for severe deprivation and one for moderate deprivation (see appendix).

Furthermore, for simplicity and in order to avoid imbalance across dimensions, only one indicator per dimension was used. Unfortunately, there were not sufficient variables available across a large number of countries to cover all the age groups of children. As explained above, this is a source of underestimation of child poverty as only five of the six dimensions can simultaneously be measured for any individual child with the available data.

#### International thresholds

Several criteria were used to select the indicators and thresholds. These were based on:

- Simplicity: one indicator per dimension/right
- Maximize country coverage (Available for many countries)
  - I.e. the indicator should be in surveys with data for other required indicators for the same child
- Validity: Measures what it is supposed to measure (i.e. a material deprivation, not attitudes, behavior or thoughts)
- Reliability: Accurate measurement
- Internationally agreed criteria for deprivation
- Feasible to separate severe and moderate deprivation

### *Incidence* and profile

While it is important to establish the proportion of children who are considered poor, it is also important to understand how poor they are (on average) and how the poorest children are faring. This leads to the construction of a profile, establishing (for a given set of either severe or moderate thresholds) how many children suffer no deprivations as well as how many suffer exactly one, exactly two, exactly three, etc, deprivations (please, see graph above for the hypothetical example).

The profiles for each country have been estimated for boys and girls, urban and rural children, and the intersectionality between sex and residence. They have also been estimated for provinces/states (admin level 1).

From the profile, it is easy to observe the depth/breadth of child poverty as well as a measure of its severity. The latter is crucial to assess the principle of leaving no child behind which is often forgotten in many studies as formulae commonly used to estimate multidimensional poverty, albeit using the same methodology described above, cannot capture the severity of poverty.

# Annex: Dimensions, Indicators, and Thresholds for Moderate and Severe Material Shortcoming

Dimension	Unit of Analysis	Severe Deprivation Definition	Moderate Deprivation Definition (includes severe deprivation)		
Shelter	Children under 17 years of age	Children living in a dwelling with five or more persons per sleeping room.	Children living in a dwelling with three or more persons per sleeping room.		
Sanitation	Children under 17 years of age	Children with no access to a toilet facility of any kind (i.e. open defecation, or pit latrines without slabs, hanging latrines, or bucket latrines, etc).	Children using improved facilities but shared with other households		
Water	Children under 17 years of age	Children with no access to water facilities of any kind (i.e. using surface water or unimproved facilities such as. non-piped supplies).	Children using improved water sources but more than 15 minutes away (30 minutes roundtrip)		
Nutrition	Children under 5 years of age	Stunting (3 standard deviations below the international reference population).	Stunting (2 standard deviations below the international reference population).		
Education	Children between 5-14 years of age	Children who have never been to school.	Children who are not currently attending school.		
	Children between 15-17 years of age	Children who have not completed primary school.	Children who are not currently attending secondary school (or did not complete secondary school).		
Health	Children 12-35 months old	Children who did not receive immunization against measles nor any dose of DPT.	Children who received less than 4 vaccines (out of measles and three rounds of DPT).		
	Children 36-59 months old	Children with severe cough and fever who received no treatment of any kind.	Children with severe cough and fever who did not receive professional medical treatment.		
	Children 15-17 years old	Unmet contraception needs.	Unmet contraception needs (using only traditional methods)		