Measuring and Monitoring Child Poverty



The purpose of this position paper is to provide information to government officials and non-governmental partners about UNICEF's methodology to measure and analyze child poverty and children in poverty. The paper is based on the experience of over 100 national child poverty studies carried out with UNICEF support over the past 15 years across all regions of the world. It builds on the Global Coalition to End Child Poverty's Guide: "A World Free from Child Poverty" as well as earlier UNICEF reports and documents, including "Poverty Reduction Begins with Children," "Child Poverty in the Developing World," the Global Study on Child Poverty and Disparities, the cross-country Multiple Overlapping Deprivation Analysis, and the 2005 State of the Word's Children.

The position presented in this paper is intended to help countries, in particular National Statistical Offices, to measure and monitor child poverty in order to have information and evidence for policy design and to analyze the impact of these policies. This is done by providing a conceptual definition, principles, and clear prescriptions about the basic methodology and elements to assess the situation of children in poverty. The position paper also highlights areas of flexibility and adaptation to country context, so countries can establish and institutionalize their own, routinely periodic, estimates of child poverty.

Measuring child poverty requires

- Individual-level child poverty estimates (cross-tabulated with children in poor households).
- Estimates based on constitutive rights of poverty (not all child rights violations).
- Equal weights for all rights.
- Besides prevalence (and the proportion of households where children in poverty live), estimates of depth/breadth and severity.

Why measure child poverty?

Children living in poverty are deprived of material resources (whether purchased or publicly provided). Thus, their rights constitutive of poverty (i.e. those associated to material shortcomings) are unfulfilled. Moreover, child poverty is different from adult poverty. Children have specific nutritional, health, education, and other needs which are different from those of adults.

The ultimate objective of measuring and analyzing children in poverty is to contribute to the elimination of child poverty. Measurement and analysis allow countries to design policies to eliminate child poverty and to monitor their impact. As the child population represents between a third and a half of total population in most countries, and the conditions of children do not always move in tandem with that of the rest of the household, household-based measurement of poverty may misconstrue the evolution of child poverty.

What to measure when we measure child poverty?

It is important to disaggregate (monetary and multidimensional) household measures of poverty to explore the share of children in those households. For instance, monetary poor households cannot afford to provide a minimum standard of living to their children.

However, household-level poverty analysis alone may obscure intra-household allocations leading to child deprivations and may miss out children suffering material shortcomings in non-poor households. Consequently, while the disaggregation of household poverty provides important information concerning the situation of children (in particular regarding the satisfaction of the right to a minimum standard of living, in the case of monetary poverty), it is not sufficient to understand the experience of children living in poverty. This disaggregation may leave uncounted and invisible certain groups of children who are deprived of material resources but are not living in poor households. This points to the need for individual child-based measurement.

How to measure individual child poverty?

The basic methodology to measure individual-based child poverty, thus, is multidimensional as it measures the existence or not of deprivation across a range of dimensions. It consists of two steps. The first one is to find deprivations in each dimension (e.g. housing, water, health, etc., using appropriate indicators). The second one is to aggregate/ count children deprived across dimensions. This is done in a range of child and household estimates of poverty commonly referred to as "Bristol", "Multiple Overlapping Deprivation Analysis (MODA)," "Multidimensional Poverty Index (MPI)" and other ones (including a recently introduced World Bank multidimensional measure). Following this two-step methodology allows the identification of children suffering one, two, three, etc deprivations. The practical questions, then, are to select the dimensions to be included, the thresholds of indicators to assess deprivation in each of them, and how to aggregate across dimensions (i.e. how to determine weights and cut offs) to measure poverty.

The dimensions of individual-based child poverty

For the purpose of estimating an individual based measure of multidimensional child poverty (indistinctively called, in the various reports mentioned in the introduction, multidimensional poverty, multidimensional deprivation, material deprivation, multiple overlapping deprivations, or plainly child poverty), UNICEF's starting point is the Convention on the Rights of the Child. However, this foundation does not mean that all possible child rights violations ought to be counted as child poverty.

Thus, measurement of individual-based child poverty should be based on constitutive rights of poverty. This is a concept developed by the Office of the High Commissioner for Human Rights (OHCHR). Constitutive rights of poverty are those that crucially require a person's command over material/physical resources for their realization. Relying on (and adapting) this framework on Human Rights and Poverty provides a good rationale for choosing which dimensions to include in a child poverty measure (e.g. education, health, nutrition). In practice, it would mean that behavioral issues which are not closely tied to a lack of goods and services (privately or publicly provided) and other problems affecting children (e.g. using physical abuse to discipline children or a violation of a child's privacy) would not be included. Similarly, lack of knowledge (e.g. about appropriate feeding or where to go for HIV-testing) would not generally be considered as constituting poverty (although some of them may be

important determinants of child poverty and should be cross-tabulated with child poverty). In addition, it has to be remembered that multidimensional child poverty is not a proxy or a substitute or a marker of lack of income within a household.

Relying on constitutive rights to determine dimensions of child poverty avoids including other important dimensions which are not poverty in the sense of material shortcoming (even if they can be related to poverty) and strengthens the case for a measure centered on individual children as only children, unlike households, are rights-holders. The objective is to have a distinction between the measurement of multidimensional child poverty and issues like psychosocial and emotional deprivation, time poverty, neglect and other aspects of family interaction, violence against children, (un)happiness, etc. which are part of overall Wellbeing or Quality of Life of children (i.e concepts that include but go beyond material shortcoming or insufficient physical/ financial resources). As these non-material aspects are important, they deserve attention. As they are conceptually different from poverty (in the sense of material shortcoming), they could and should be used to complement individualbased child poverty analysis.

As mentioned above, the concept of "constitutive rights" provides a good and practical way to decide which rights/ dimensions to use. Typically, across a wide range of studies carried out by UNICEF and by others, these are: Clothing, education, health (including adolescent reproductive health and girls' particular needs such as menstrual hygiene management), housing (including proper heating when the context requires it), information, nutrition, play, sanitation, and water. Efforts are needed to include all relevant children who, within these constitutive rights, may have special needs - for instance assistive devices for children with physical impairments or health (including mental health services), nutrition, and education services to children who suffered from violence. The selection is consistent with the sociological literature, the Unsatisfied Basic Needs tradition, the Capability Approach, Relative Deprivation Theory, the Human Development framework, the Consensual Approach, and international agreements among governments (such as the World Summit on Social Development declaration). Although there are differences across these approaches, there is a very high degree of convergence in terms of the elements included in their definition of poverty - particularly in applied research and measurement. Thus, these dimensions should be the ones to be included in the measurement of individual child poverty. Data constraints sometimes prevents including all these constitutive rights or to cover all relevant children who have special needs to fulfil these rights. In this case, they should not be replaced by adding other dimensions, i.e. including elements and indicators which are not about rights constitutive of poverty.

Another common data constraint is the availability of data for some children but not others who share similar characteristics. In these cases, imputation of deprivation based on the available information for some children to other children is not acceptable. It is preferable to err on the side of caution and consider children for whom there are no data as not deprived (which would clearly result in a lower bound of child poverty).

Income/consumption insufficiency is another important dimension (linked to the right to a minimum standard of living) which, however, should be analyzed separately from the constitutive rights, given its nature and characteristics. For example, monetary income (or consumption) is associated to an indirect approach of poverty measurement. Also, children are not supposed to earn a living. However, insufficient household income/consumption affects their daily existence (as well as their life chances in the future). As children are entitled to a minimum, individual-level of consumption, it is important to treat it as separate dimension and cross-tabulate it with individual-based child poverty (based on multidimensional material poverty).

Thresholds to assess deprivation in each right constitutive of poverty

Countries could define their own thresholds to measure deprivation in each dimension (and could include different indicators for different ages). However, caveats are important. Countries are encouraged to pay attention to elements like the international immunization protocols, nutritional measurement standards, and the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene service ladders and benchmarks for access to sanitation and water, or national legislation establishing minimum number of formal school years when establishing deprivation thresholds for indicators. Consideration to the principle of Non-retrogression (Limburg Principles and General Comment # 3 of the Committee on Economic, Social, & Cultural Rights, which in this context means once a minimum standard has been established, it cannot be lowered) would prevent children in different countries (or regions in a country) and contexts suffering from material shortcoming and deprivation not to be counted as poor.

This approach, as established in the "A World Free from Child Poverty" Guide, would help to restrict manipulation of thresholds to inflate or minimize child poverty estimates (or to give more importance/weight to one right/dimension over the other ones).

Countries can establish minima for satisfaction above international standards but not below. This avoids a minimalist approach to define "rights satisfaction". Although clearly each dimension refers to a right constitutive of poverty, it is obvious that indicators would only imperfectly measure the satisfaction of rights (e.g. because sometimes there are no available data to capture the satisfaction of the right for children of different ages - which implies additional efforts are needed to gather more data).

How to weight across and within dimensions

An important consideration is how to weight indicators and dimensions. Further building upon the rights framework, when measuring individual-based child poverty, there should be equal weights across dimensions/rights and balance in terms of indicators for each dimension/right. Human rights cannot be ranked or weighted, as they are all inalienable and equally important. They are all equally valued. Thus, all dimensions/rights should be equally weighted.

Non-equal weights across rights constitutive of poverty can introduce a distortion in measurement of child poverty. If, for example, among three dimensions, one is given more weight than the other two combined, it may be incorrectly concluded that the most heavily weighted dimension is the one driving child poverty and it will be the main focus of policy interventions. Also, if it improves while the other dimensions for children worsen, the improper conclusion that poverty is being reduced would also be reached only because the improving dimension has been arbitrarily given more weight than the other rights. These problems are avoided when all dimensions/rights are weighted equally.

It should be noted that this should not be confused with weighting, or not weighting, indicators. Thus, a very important point needs to be clear, as it is often misunderstood: indicators used to assess the fulfillment of a right constitutive of poverty can be weighted and/or combined in various ways within any dimension/right.

This would translate into the possibility that each right/ dimension be measured with a different number of indicators (although not specific to child poverty measurement, the choice of indicators within each right/dimension should follow good practice guidelines such as being suitable, valid, and

reliable as well as not conflating causes and consequences of poverty among the indicators). For example, the right to nutrition could be assessed using dietary diversity and the standard anthropometric measures (stunting, underweight, and wasting). In addition, these indicators could be given different importance (for instance, dietary diversity could be weighted more than the anthropometric measures or vice-versa).

However, the aggregation (or "counting of deprivations") should be done at the level of the rights/dimensions (i.e. health, education, housing, etc). The important point is to avoid a situation in which, for instance, the right to education is measured with one indicator (e.g. access to schooling) and housing with four variables and then counting is done across the indicators. This would result in implicitly saying that housing is exactly 4.00 times more important than education.

Similarly, there should be balance in terms of indicators selected for each dimension/right. Using too many variables and indicators for one right constitutive of poverty compared to other ones could also bias the results, depending on if and how indicators are weighted. This is the case even when aggregation is done across equally weighted rights.

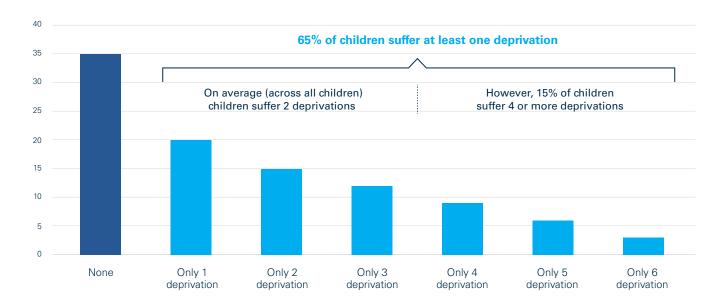
In other words, the aggregation/counting is carried out across the rights/dimensions, not the indicators. Technically, there is no need, nor rationale to weigh child rights, nor is it a more advanced or sophisticated approach.

The "child poverty cut-off"

Once the children with one, two, three, etc deprivations are identified, a cut-off in terms of number of deprivations to consider a child to be in poverty needs to be established. One option is that as long as one of the possible multiple deprivations is present the child is considered suffering from poverty. Alternatively, a minimum of two deprivations could be the minimum to be considered poor. However, there is no grounding or theoretical foundation for higher cut-offs (i.e. three or more, or their equivalent as a proportion of deprivations/dimensions).

However, the percentage of children in poverty (the prevalence), by itself, does not paint the whole picture of children's suffering. A child could be considered poor with two deprivations as well as a child with five deprivations. Their situation is certainly different. In addition, if the situation of the child suffering five deprivations improves (e.g. from five to three deprivations), the prevalence of poverty stays the same. Thus, relying only on prevalence may underestimate improvements in children's lives. Moreover, the same way that the prevalence of child poverty misses out some information about the differences among children suffering various deprivations, just counting or averaging the number of deprivations suffered by each child is not sufficient to understand what is happening with the poorest of the children in poverty (the ones suffering several deprivations at the same time).

The Child Poverty Profile



Thus, the measurement and analysis should include how many children suffer exactly one deprivation, exactly two deprivations, exactly three deprivations, etc. Also, the average number of deprivations suffered per child (usually referred to as the depth or breadth of poverty) and the percentage of children suffering simultaneously several deprivations (a measure of severity which should be complemented with other measures such as averages of deprivations where children with several simultaneous deprivations are given additional importance or the distance between the mean and the median) should be included in the analysis (as shown in the graph below). The depth/ breadth of poverty should be calculated as the average across all children in order to obtain a holistic view of child poverty in the country. Addressing equity and providing the whole distribution of deprivations is required to properly comprehend individual-based child poverty, i.e. to provide a Child Poverty Profile.

Analyzing children in poverty

Many of the documents and studies carried out by UNICEF and other partners also deal with the long and short-term relationship between children suffering multidimensional material deprivation and children living in monetary poor households (i.e. living with a level of income or consumption below the national poverty line, often also called monetary child poverty in many reports). In "A World Free from Child Poverty" issues of monetary poverty measurement, disaggregation for children, joint consumption, economics of scale, and policy and programmatic analysis, are addressed. It is important to understand the level of (monetary) resources at the disposal of the household in which children live in order to assess child poverty (as mentioned above, children have a right to consumption levels in accordance to the right to a minimum standard of living). Thus, it is important to cross-tabulate the children living in monetary poor households (based on national definitions) with the actual experience of multidimensional poverty suffered by individual children (if the data allow it). Also depending on data availability, individual child monetary consumption poverty should be cross-tabulated with individual multidimensional child poverty.

Triangulation of monetary and multidimensional child poverty provides a holistic view and full understanding of child poverty. It should not be carried out to "choose" the measurement that provides lower estimates - according to the second principle of the Fundamental Principles of Official Statistics, "To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data". Thus, child poverty indicators cannot be chosen or designed based on political considerations.

For the disaggregation of household poverty by children, the ages to be considered is children under 18 years of age, and, if possible, given information and sample size limitations, disaggregation into appropriate age groups following the life course. Moreover, the age-disaggregation of household estimates of poverty allow for a comparison of children and adults using the same measure. As was mentioned above, this may not be sufficient to capture all children living in poverty (as adult and child poverty are different). Nevertheless, the proportion of (individually identified) children in poverty (based on child-specific dimensions and indicators) and poor adults can also be compared (and added up to arrive at an overall measurement to national poverty) even if different indicators are used for different age groups. Identifying and measuring the proportion of households where children (i.e. at least one child) suffering multidimensional poverty reside also provides a fuller picture of the conditions in which children live and a comparison with adults in those households. In addition, households should be classified depending on how many children suffering multidimensional poverty (in terms of prevalence, depth/breadth, and severity) reside in them.

In the same vein, as it was mentioned above, subjective, relational, spiritual and other non-material aspects of poverty, could also be also relevant for children. These elements could be measured and cross-tabulated with individualbased multidimensional child poverty and monetary child poverty for a fuller understanding of children living in poverty.

In some countries, 'poverty' is replaced with 'well-being' in order to conform to the policy discourse and context. However, it should be clear that conceptually, and in terms of measurement, multidimensional child poverty and child well-being are different issues. Thus, it is important to understand what and how to measure rather than to focus on exact definitions or lexical discussions.

Besides cross-tabulation between household and individual child poverty, it is important to disaggregate child poverty to address equity. This means exploring differences between boys and girls, geographic location, parents' formal education and type of (un)employment, and other axes of disparities.

Summary

This position paper outlines UNICEF's approach to measuring child poverty. Children living in (monetary and/or multidimensionally) poor households should be identified. However, this not sufficient to monitor child poverty trends because children experience poverty differently from adults. Analyzing the situation of children in poor households is important and complementary (via cross-tabulation) to poverty suffered by individual children.

The individual-level child poverty estimates should be based on constitutive rights of poverty (not all rights violations or bad things that happen to children). Moreover, as a basic tenet of the Human Rights approach is that all rights are equally important, there should be equal weighting across dimensions/rights. Besides estimating prevalence (and the proportion of households where children in poverty live), the measurement of children in poverty should provide the depth/breadth and severity of multidimensional child poverty as well as the classification of households according to the number of children suffering multidimensional poverty present in them.

This document is the result of a process of consultations that took several months. The consultations included UNICEF Country and Regional Offices, Divisions within Headquarters, and external partners – National Statistical Offices, multilateral agencies, and academic experts.

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