

## TECHNICAL BRIEFING NOTE 4: THE CHILD POVERTY PROFILE

### *Introduction*

The measurement of child poverty should go beyond the percentage of children in poverty. It should also include how many children suffer one deprivation, two deprivations, three deprivations, etc. Moreover, in order to address equity, the average number of deprivations suffered per child and the percentage of children suffering simultaneously several deprivations (a measure of severity) should also be included in the measurement and analysis of child poverty. All of this can easily be represented and summarized in a child poverty profile.

### *Why?*

There are mainly three reasons to include this type of profile in the analysis and monitoring of child poverty. One is that the headcount<sup>1</sup>, by itself, does not paint the whole picture of children's suffering, as explained in the UNICEF position on measuring and monitoring child poverty. For instance, a child could be considered poor with two deprivations as well as a child with five deprivations. Their situation is certainly different.

Secondly, if in the example in the previous paragraph the situation of the child suffering five deprivations improves (e.g. from five to three deprivations), the incidence of poverty stays the same. This type of information needs to be included to properly assess the evolution of child poverty.

Thirdly, the same way that the incidence 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 to the poorest of the poor children (the ones suffering several deprivations at the same time). This point can be observed in the graph below.

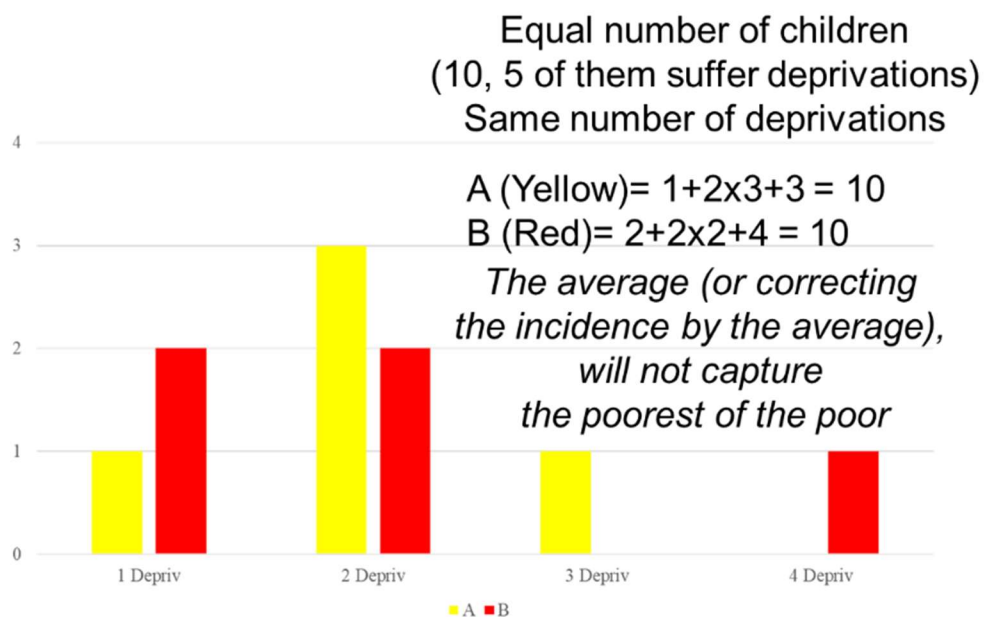
In the graph, the situation of two countries, A and B, is depicted. There are ten children in each country. In both cases, five children suffer at least one deprivation. Assuming the cut-off to be considered poor is deprivation in at least one right, the headcount is the same in both countries (50%). However, it can be observed that the distribution of deprivation is not the same. In country A one child suffers one deprivation, three children suffer two deprivations, and one child suffers three simultaneous deprivations.

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<sup>1</sup> Also described as incidence or prevalence, it answers the question "What percentage of children are poor?"

This amounts to ten “total deprivations”<sup>2</sup>. In contrast, in country B, two children experience one deprivation, two children experience two deprivations, and one child experiences four simultaneous deprivations. Although the distribution is different, it is clear that the “amount” of deprivations is also ten<sup>3</sup>. Thus, the average number of deprivations per child is the same in both countries<sup>4</sup>. In other words, in each case, on average, children suffer one deprivation<sup>5</sup>. This is a good metric for “how poor” children are. However, and contrary to what is often found in the literature<sup>6</sup>, this measure is not sufficient to understand how severe poverty among children is (i.e. how the poorest of the poor, the most likely to be left behind, are faring). Consequently, we need to calculate the whole profile and explore what is happening to the children suffering many simultaneous deprivations. In this case, the situation in country B is worse than in country A because in the latter there are no children afflicted by four simultaneous deprivations.

Figure 1: Equal headcount and average number of deprivations but different severity of child poverty



<sup>2</sup> I.e. the first child suffers one deprivation, then there are three children suffering two deprivations each, which is equivalent to six deprivations. In addition to the deprivation of the first child, there are seven deprivations. The last child suffers three deprivations which added to the other seven makes a total of “ten deprivations”.

<sup>3</sup> Following similar steps as in the previous example, there are two deprivations from the two children experiencing a deprivation each. These deprivations are added to the four deprivations of the two children experiencing two deprivations each, to obtain six deprivations. As the last child experiences four deprivations, the total is ten.

<sup>4</sup> Given there are an equivalent number of children with at least one deprivation in both countries, whether this average (representing the breadth or depth of poverty) is calculated out of all children or only children in poverty would be the same.

<sup>5</sup> Or two, if the average is calculated among children in poverty.

<sup>6</sup> Multiplying, the headcount by this number will not help either, as the product would still be the same in both countries. Moreover, such multiplication is confusing because it makes it difficult to know if a difference (across countries or through time) is due to the headcount or the average number of deprivations being larger or smaller – a crucial distinction for policy design.

Thus, portraying, calculating, and analyzing the child poverty profile provides more information than just the headcount and the average. Using the child poverty profile also helps avoid issues related to choosing either one or two deprivations as the cut-off of poverty because the whole distribution is more telling of the situation of children than a single number.

#### *What is a child poverty profile?*

A child poverty profile is a graph (or table) presenting how many children suffer exactly<sup>7</sup> one deprivation, exactly two deprivations, exactly three deprivations, etc. The profile is not cumulative<sup>8</sup> (although the information in it could easily be used to estimate cumulative percentages)<sup>9</sup>.

As countries have flexibility to determine the cut-off to establish which children ought to be counted as poor (e.g. one or two deprivations), the child poverty profile can provide this information. However, the child poverty profile provides much more additional information – in particular about how poor children are on average as well as a measure of the severity of child poverty.

#### *How can the child poverty profile be applied in practice?*

A simple child poverty profile is introduced below. It shows the percentage of children suffering exactly  $x$  numbers of deprivations (1,2,3, etc). The headcount of child poverty can also be depicted in the graph. In this example, the accumulation of all the children suffering at least one deprivation (in this example it is one, but it could be two depending on the country context) is portrayed. It also provides the average number of deprivations each child suffers. In addition, it shows the percentage of children suffering an inordinate number of simultaneous deprivations (in this example it is at least four, but it could be a different number depending on the country context).

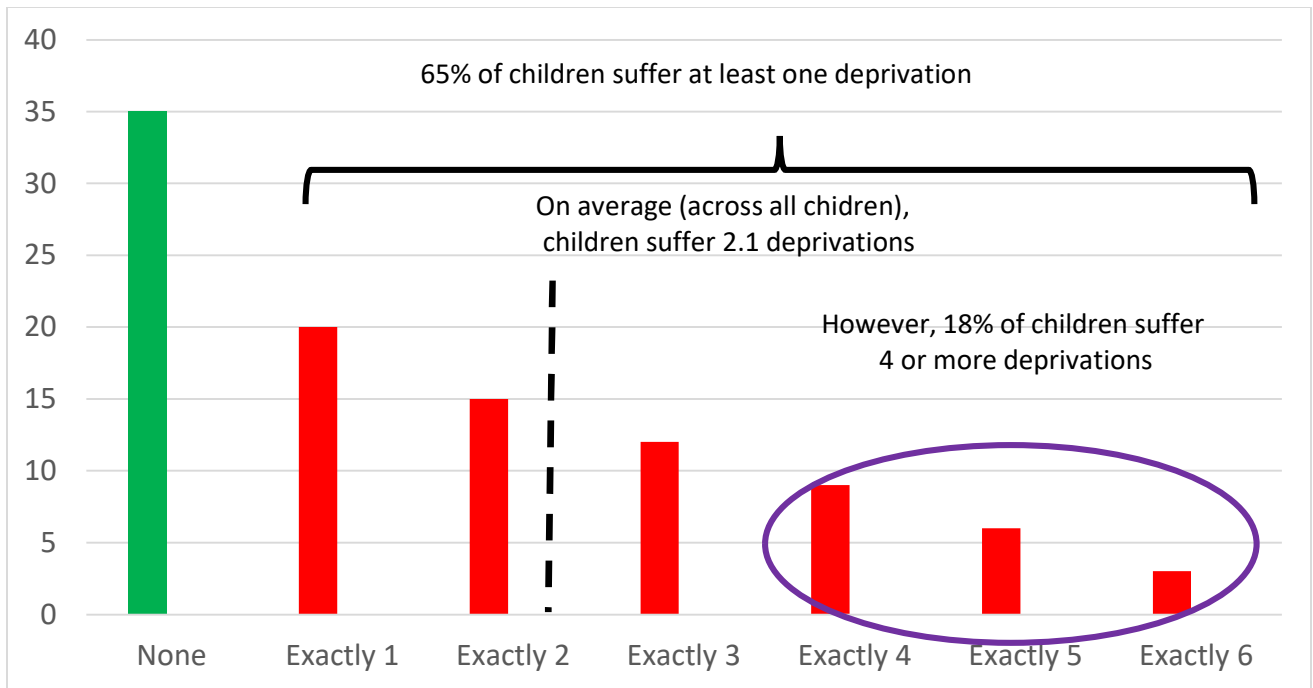
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<sup>7</sup> It is important to understand what is meant by “exact” in this context. Given that there is a specific number of dimensions assessed for each child, it is possible to count the number of deprivations suffered by each child (the same way we can count how many persons live in a household, how many years of formal schooling someone has completed, or the number of shoes a person owns). This will be a natural number. When counting across children, we obtain an approximate (given sampling and other errors) percentage of children suffering one deprivation and not more than one deprivation. It is also possible, again within margins of error, the percentage of children suffering two but not more than two deprivation (and not one either). Similarly, it is possible to estimate (with confidence intervals) the percentage of children that suffer three and only three deprivations. I.e. we can establish the approximate percentage of children that suffer exactly one, exactly two or exactly three deprivations (given the standards to establish deprivation in each dimension). That is the meaning of “exactly” in the child poverty profile and the graphs below.

<sup>8</sup> Although not a typical histogram (as each bar is for a point of a discrete variable and not for a range of a continuous variable), it is not a typical bar chart either as the variable along the horizontal axis is ordinal, not categorical.

<sup>9</sup> This is not a novel proposition. The United Nations (1954) made the case to present frequency distributions to assess and compare social and economic development across countries.

Figure 2: The Child Poverty Profile



It is also possible to combine child poverty profiles, e.g. to compare urban and rural<sup>10</sup> situations or using different thresholds (severe and moderate levels of deprivation across dimensions). Examples are provided in Figures 3 and 4.

<sup>10</sup> Or other groups, including intersectionality (e.g urban boys, urban girls, rural boys, and rural girls)

Figure 3: Comparison of Child Poverty Profile using moderate and severe thresholds of deprivation in each dimension

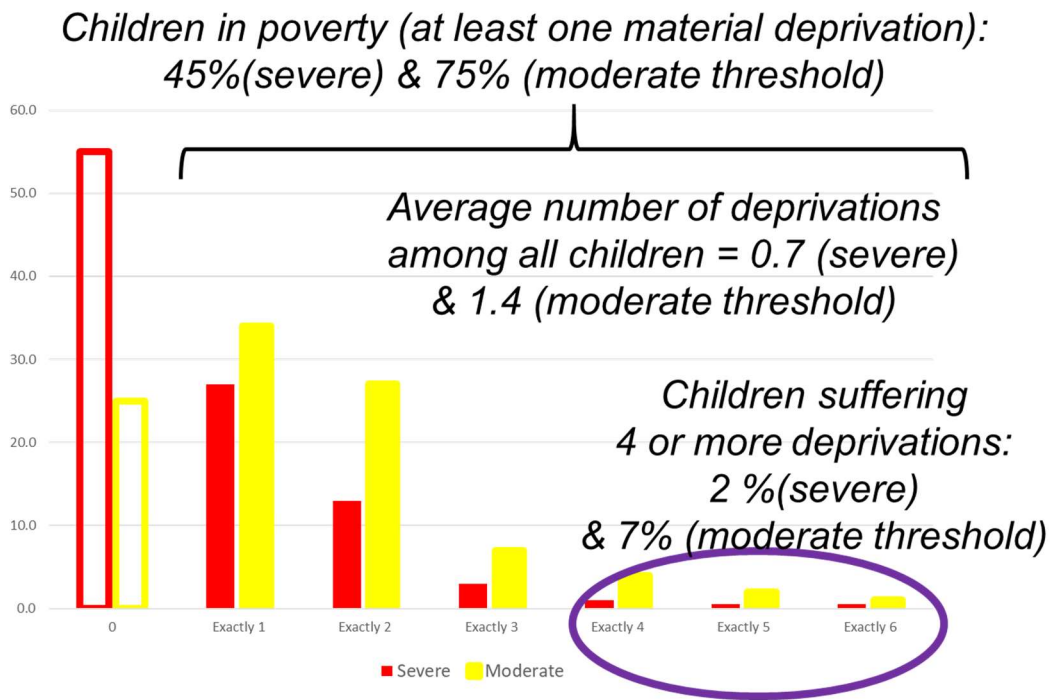
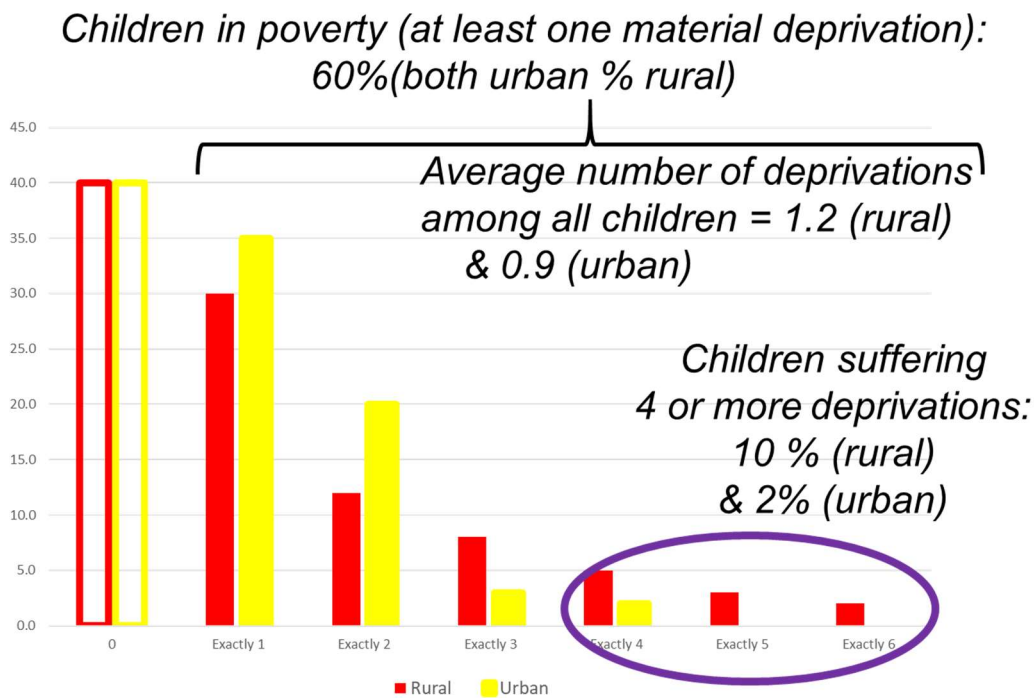
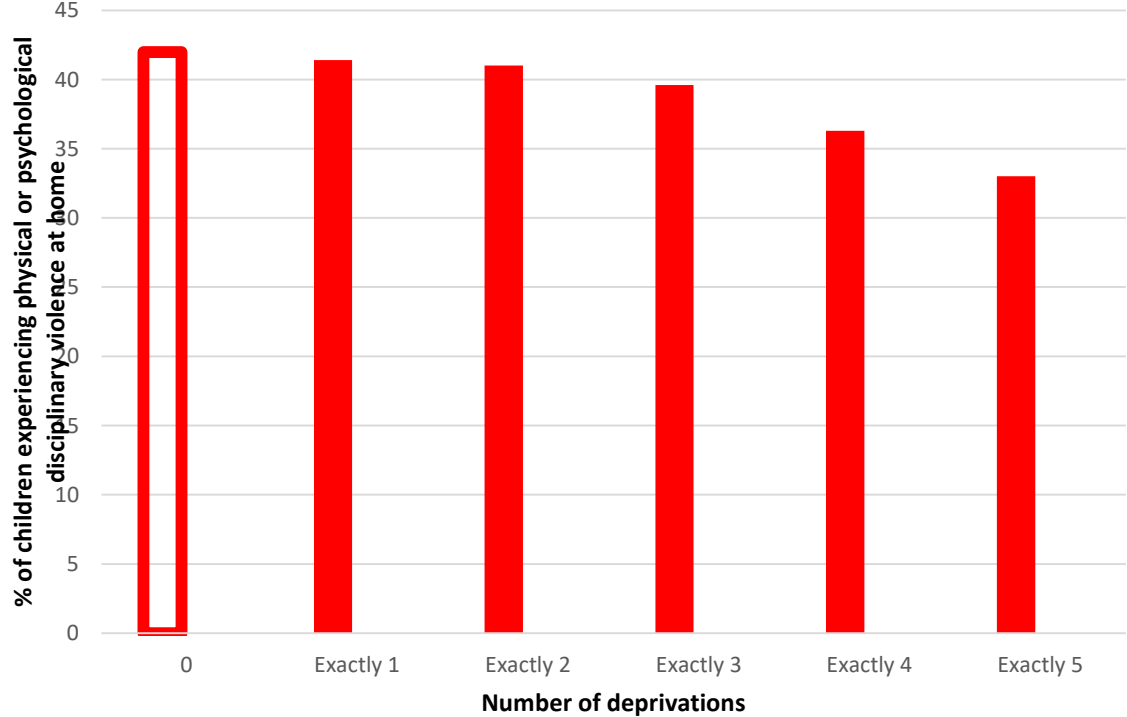


Figure 4: Child Poverty Profile for sub-national groups



They can also be used to compare two points in time or various geographic units<sup>11</sup> (intra-country or different countries) or to portray the correlation with other rights violations (Cid-Martinez, 2020). An example of the latter is offered in Figure 5<sup>12</sup>. However, it useful to notice that unlike in the other examples, the vertical access does not portray the proportion of children suffering a certain level of deprivations. In this case, the vertical access measures the proportion of children affected by the issue at hand (disciplinary violence at home).

Figure 5: Child Poverty Profile and disciplinary violence at home



NOTA BENE: In this case, the percentages on the vertical access concern the children suffering disciplinary violence at home (not the percentage of children suffering deprivations)

*Conclusions*

It is important calculate and analyze child poverty beyond the headcount. The child poverty profile presents all the relevant information. Presenting the child profile also avoids issues related to the cut off being one or two deprivations.

<sup>11</sup> Obviously, this information can be used as input for dominance analysis.  
<sup>12</sup> See also, [Technical Briefing Note #5](#). In addition, it is important to highlight the importance of including confidence intervals in this type of graphs and analyses because there may be few cases with many deprivations. In other words, the profile allows disaggregation of results for other issues of importance to children. For instance, children with and without functional difficulties were classified according their number of material deprivations along a child poverty profile (UNICEF, 2021).

The child poverty profile not only shows the average number of deprivations per child (“How poor are children?”) but also a measure of severity of child poverty (“How poor are the poorest children?”). This can be done easily. Moreover, the child poverty profile can be used to compare child poverty (and its levels or gradient) with other child rights violations.

### *Bibliography*

Cid Martinez, I. (2020) “Multidimensional Child Poverty and Child Well-being in Cameroon, Côte d’Ivoire, and Nigeria” in G. Nébié et al (editors) *Child Poverty and Social Protection in Western and Central Africa*, CROP and Ibidem-Verlag: Stuttgart

UNICEF (2021) *Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities*, UNICEF: New York.

United Nations (1954) *Report on International Definition and Measurement of Standards and Levels of Living*, New York.