OPHI and UNDP Regional MPI Brief

Sub-Saharan Africa:
An age group analysis of the 2021 global MPI
Acknowledgements

This brief utilizes the global Multidimensional Poverty Index (MPI) 2021 microdata and conducts analysis from countries within the region included in the 2021 global MPI database. The microdata were cleaned, standardized and produced for further analysis by Alkire, Kanagaratnam, and Suppa (2021). Significant recognition goes to the hard work of Usha Kanagaratnam and Nicolai Suppa for their role in preparing the data analysed within this report, and to Human Development Report Office colleagues for their leadership of the global MPI within UNDP. We are grateful to Oxford Poverty and Human Development Initiative team members Ross Jennings, Fanni Kovesdi, Davina Osei for their analysis. The authors gratefully acknowledge support from the United Nations Development Programme in commissioning, reviewing and contributing to this brief. Special thanks go to Mansour Ndiaye, Nathalie Bouche, Christian Oldiges and colleagues of the Inclusive Growth team at the UNDP Bureau for Programme and Policy Support (BPPS) for their comments and inputs. All errors remain our own.

Disclaimer

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Introduction
Children tend to bear the brunt of poverty in sub-Saharan Africa (SSA). Children (defined as persons below the age of 18) show higher rates of multidimensional poverty with well over half of multidimensionally poor people in SSA being children under the age of 18 (321 million children out of 556 million people).\(^1\) Almost 6 out of every 10 (59 percent) children are poor compared with 47 percent of adults in SSA. Based on the global MPI data for 42 countries and trend data for 36 countries, the brief focuses on the poverty levels of different age cohorts and presents the evolution of multidimensional poverty in SSA between the 2000–2019/2020 period.\(^2\) Emphasis is placed on whether the reductions in multidimensional poverty are pro-poor or not, with pro-poor reflecting that the fastest reduction in poverty in a country is occurring in the poorest areas or amongst the poorest groups.

Key findings:

- Only 9 out of 31 countries that had children as the poorest age cohort in the initial year of study reduced child poverty the fastest between 2010 and 2019.
- The countries with the fastest absolute pro-poor child poverty reduction were Togo (2013/2014–2017) and Rwanda (2010–2014/2015).
- SSA has a non–pro-poor trend in the reduction of poverty (in relation to age cohorts).
- Though the intensity of poverty decreased in most countries for all age cohorts, there were significant increases in the intensity of poverty for children in Central African Republic (2010–2018/2019) and Guinea (2016–2018) while there were increases for the elderly in Guinea (2016–2018) and Benin (2014–2017/2018).\(^3\)
- Except for Seychelles, children bear the greatest burden of multidimensional poverty in all SSA countries based on the 2021 global MPI data.
- Children are over-represented among the poor in SSA as they constitute 52 percent of the total population and 58 percent of those who are multidimensionally poor.
- Given the potential impact of the COVID-19 pandemic, it is of concern that more than half of the population in Chad (55.5 percent) are multidimensionally poor and live in a household where at least one school-aged child is not attending school.
- Across age cohorts, poor children are the most deprived in 8 out of the 10 indicators, while the censored headcount ratio for the elderly is highest in years of schooling and assets.

State of poverty in sub-Saharan Africa
Almost half of multidimensionally poor people globally (43 percent) live in SSA (556 million). Out of 1 billion people in SSA (using 2019 population data for countries in the global MPI database), 53 percent are identified as MPI poor. In SSA, 70 percent of people in rural areas (457 million people) are multidimensionally poor compared with 26 percent (99 million people) in urban areas.

Across the different countries, there is a large variation in the incidence of poverty (see Figure 1). At the tail end of the poverty spectrum, Seychelles and South Africa have less than 1 in 10 people being multidimensionally poor. South Sudan and Niger, on the other hand, have more than 9 out of every 10 people living in poverty in the year of the survey. This is the same for more than 8 out of every 10 people in Burkina Faso, Chad and

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\(^1\) The analysis in this briefing is based on the global MPI 2021 data published by Alkire, Kanagaratnam and Suppa (2021). The 2019 population statistics from UNDESA are employed throughout the brief.

\(^2\) Where countries have harmonized estimates for three time periods, the changes over time analysis uses the more recent time period estimates. The surveys in Year 1 were conducted between 2000 and 2017 and those in Year 2 were conducted between 2010 and 2019/2020.

\(^3\) The intensity of multidimensional poverty reflects the depth of poverty by identifying the average share of weighted deprivations that those who are poor experience simultaneously.
Central African Republic. Comoros, Togo and Kenya have around a third of people being multidimensionally poor. This huge variation is also observed at the subnational level with 30 subnational regions having an incidence of less than 10 percent and 33 regions having an incidence of over 90 percent (Alkire, Kanagaratnam and Suppa, 2021).

**Figure 1: Incidence of multidimensional poverty by country**

![Incidence of multidimensional poverty by country](image)

Source: Alkire, Kanagaratnam and Suppa (2021).

**Evolving trends of poverty in sub-Saharan Africa**

Based on a unique dataset for 36 SSA countries, we are able to explore how the multidimensional poverty of the different age groups, particularly children, has evolved between 2000 and 2019/2020. The data observes changes between two time periods (the changes are annualized as the periods under consideration differs for
each country). We first observe whether children were the poorest group in the first period and whether any progress made in the reduction of poverty has been pro-poor.

Figure 2: Age group with highest initial MPI value by country

Note: The grey areas shown on the map are areas not covered in the study.

Source: Alkire, Kanagaratnam and Suppa (2021).

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4 All discussion of changes in this section refer to statistically significant changes, which can be considered to have occurred with at least 90 percent confidence.

5 For the analysis, three age groups are used: people aged 0-17 years are classified as children, 18-59 years as adults and 60+ years as elderly.
From Figure 2, 31 out of 36 SSA countries (for which there is trend data) have children as the poorest cohort in the first year of study based on the MPI values of the different age cohorts. Congo, eSwatini, Gabon, Lesotho, Sao Tomé and Principe all have the elderly being the poorest age cohort. For these five countries, pro-poor poverty reduction strategies will seek to reduce poverty fastest among the elderly rather than children.

Figure 3: Annualized absolute change in MPI by age (for top ten countries that reduced MPI fastest)

A closer look at the 31 countries that had the highest MPI value for children in the initial year reveals that only nine of these countries had a pro-poor reduction of their poverty levels (that is, the reduction was fastest among children, the poorest age cohort in the initial year). This is less than half of the countries that had children as the poorest cohort in the initial year. In Ethiopia, Gambia, Kenya, Liberia, Nigeria, Rwanda, Senegal, Sierra Leone and Togo, children were the poorest age cohort in the first period and were also the age cohort that reduced poverty the fastest in these countries. The countries with the fastest absolute pro-poor child poverty reduction were Togo (2013/2014–2017) and Rwanda (2010–2014/15). As detailed in Figure 3, 6 out of the top 10 countries that reduced poverty the fastest in SSA reduced poverty fastest for children. Three countries (Côte d’Ivoire, Mali and Mauritania) reduced poverty fastest for the elderly.

The story of the evolution of child poverty in SSA will not be complete if absolute changes are not compared with relative changes in MPI. This is because relative changes take the initial value of the MPI in the first year into account while absolute changes do not. Figure 4 shows a negative correlation between annualized relative poverty reduction and initial MPI levels. This means that the countries which had low MPI values for children in the first year are the ones that reduced children’s poverty the fastest, relative to their starting point in the

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6 The absolute rate of change is the simple difference in poverty levels between two periods, while the relative rate of change is the difference in levels across two periods as a percentage of the initial period.
initial year. This presents a clear non–pro-poor trend (in relation to age cohorts) in the reduction of poverty. Governments, therefore, have to consciously integrate children’s well-being policies into anti-poverty strategies that are adopted in SSA.

**Figure 4: Annualized relative change in children’s MPI**

![Diagram showing annualized relative change in children’s MPI](image)

*Note: Purple points are countries which recorded no statistically significant relative change in children’s MPI.*

*Source: Alkire, Kanagaratnam and Suppa (2021).*

A great feature of the MPI is that it not only gives information about poverty levels but also about how intense the poverty faced by the poor is. Looking solely at how the intensity of poverty has evolved within the 2000–2019/20 period for the different age cohorts in SSA (see Figure 5), we observe that not only did Togo reduce the incidence of child poverty fastest, but it also managed the greatest reduction in the intensity of poverty among children. In comparison, we also observe that there were significant increases in the intensity of poverty for children in Central African Republic (2010-2018/19) and Guinea (2016-2018). In Guinea, there were
significant increases in intensity across all age cohorts, while in Central African Republic, there were significant increases in intensity for the adult cohort. In the only other country to witness significant increases in intensity, there was an increase in Benin (2014-2017/18) among the elderly.

Figure 5: Annualized absolute change in intensity of poverty by age

![Figure 5: Annualized absolute change in intensity of poverty by age](image)

*Note: Lighter shaded bars represent statistically insignificant changes.*

*Source: Alkire, Kanagaratnam and Suppa (2021).*

**Current snapshot of child poverty in sub-Saharan Africa**

Though overall multidimensional poverty has reduced in SSA in the period under study, and some countries have even made pro-poor reductions by reducing child poverty the fastest, in all countries except for Seychelles, children still bear the greatest burden of multidimensional poverty (see Figure 6). This is because, based on the most recent data, there is still an observed vast difference in MPI value between adults and children with children having much higher MPI values than adults. The lowest difference in MPI is seen in Sao Tomé and Principe (0.012) while the largest difference is seen in Mauritania (0.096). Seychelles is the only country in SSA where adults tend to be poorer than children, albeit marginally with a difference of 0.0002. Children also tend
to be over-represented among the poor in SSA. While they constitute 52 percent of the total population across the region, children constitute 58 percent of those who are multidimensionally poor. This is a clear indication that one population cohort being left behind in most SSA countries are children.

Figure 6: Difference in MPI between children and adults

Given the high incidence of multidimensional poverty among children, we delve deeper into the various deprivations which affect children, directly and indirectly.

Out of the 10 indicators which constitute the global MPI, school attendance affects children directly. UNICEF (2021) reports that 168 million children of school-going age, globally, have remained out of school for an entire year due to school closures in certain parts of the world, mostly in Latin America and the Caribbean. It is also
estimated that due to the economic impact of COVID-19, around 23.8 million additional children and youth (from pre-primary to tertiary) globally may drop out or not have access to school during 2021 (UNICEF, 2020). The global MPI data on school attendance gives us a picture of the plight of children in SSA, with regard to their school attendance in the pre-COVID period. Focusing on survey data from 2019, more than half of the population in Chad (55.5 percent) are multidimensionally poor and live in a household where at least one school-aged child is not attending school, with worryingly high censored headcount ratios also seen in Senegal (43.9 percent) and Ethiopia (31 percent) during 2019 (Alkire, Kanagaratnam and Suppa, 2021). With the economic and social impacts of COVID-19, these figures will likely increase if policies are not put in place to ensure that children at risk of dropping out of school are supported to complete their basic and secondary education.

Figure 7: MPI and censored headcount ratios for school attendance

Source: Ayush Patel and author using data from Alkire, Kanagaratnam and Suppa (2021).
Figure 7 helps to shed further light on school attendance by showing if the poorest countries are the same ones with the most school-age children out of school. The darkest purple shade on the map represents countries with both a high MPI and a high school attendance deprivation rate. The lighter purple represents countries with both a low MPI and a low school attendance deprivation rate. The sea blue represents countries with high MPI but low school attendance deprivation. Finally, the bright red shade represents countries with low MPI but high school attendance deprivation rates. We observe a slightly positive trend with most countries either having high MPI and high school attendance deprivation rates or low MPI and low school attendance deprivation rates. There are however a number of countries in the mid-range but none at the opposite extremes. This means that there are no countries in SSA with very high levels of school attendance and low MPI and neither does the opposite hold true.

Aside from school attendance, other indicators affect children indirectly due to the households they grow up in. Based on the global MPI 2021 data, Figure 8 shows the percentage of people who are poor and deprived in the 10 indicators by age cohort in SSA. Poor children are the most deprived in 8 out of the 10 indicators – all except years of schooling and assets. The indicator with the largest deprivation gap between the elderly (60+) and children is nutrition. Children are most deprived in the two environmental indicators of cooking fuel and sanitation. This is a crucial finding for which policy must be targeted. This is because poor sanitation and the use of solid fuels for cooking both impacts the health of individuals. Given that children are already the most deprived in nutrition, the compounded effect of poor nutrition and poor environment on the long-term health of the children will be significant if steps are not taken to reverse these effects and improve these very important household conditions.
Figure 8: Censored headcount ratios by age

Though censored headcount ratios present relevant information on the deprivations of poor children, they do not reflect the varying weights given to the different indicators within the MPI and thus cannot tell us the exact contributions of the different indicators to the MPI of children in SSA. For this, we look at the weighted contributions of the different indicators to the MPI. Nutrition still features prominently as the highest contributing indicator to the MPI of children. The education variables – years of schooling and school attendance – contribute the second and third highest to the MPI of children. Since the indicators within the living standards dimension have the lowest weights, the environmental indicators – sanitation and cooking fuel – contribute less to the overall MPI of children even though they are the highest contributing indicators within that dimension.

Source: Alkire, Kanagaratnam and Suppa (2021).
Concluding remarks
The 2030 global agenda of ‘no poverty’ and ‘leaving no one behind’ remains a global policy goal. These goals can be effectively monitored and tracked using the MPI. It is evident that in most SSA countries, children bear the greatest burden of poverty, with the elderly also of concern in a number of countries. Despite this burden, poverty reductions that have occurred across the subcontinent have largely left children behind. This analysis, it is hoped, will serve as a clarion call to prioritize the needs of children in SSA to reduce, first, their deprivations and, ultimately, their poverty levels. Health and education stand out as the dimensions that require more interventions for children in SSA. Given that children are a vulnerable population and are also the future of the world, attention ought to be given to these dimensions that tend to have long-term individual and societal impacts to avoid leaving such a critical and vulnerable section of the population behind.
References


