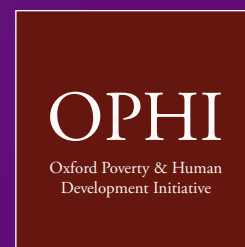
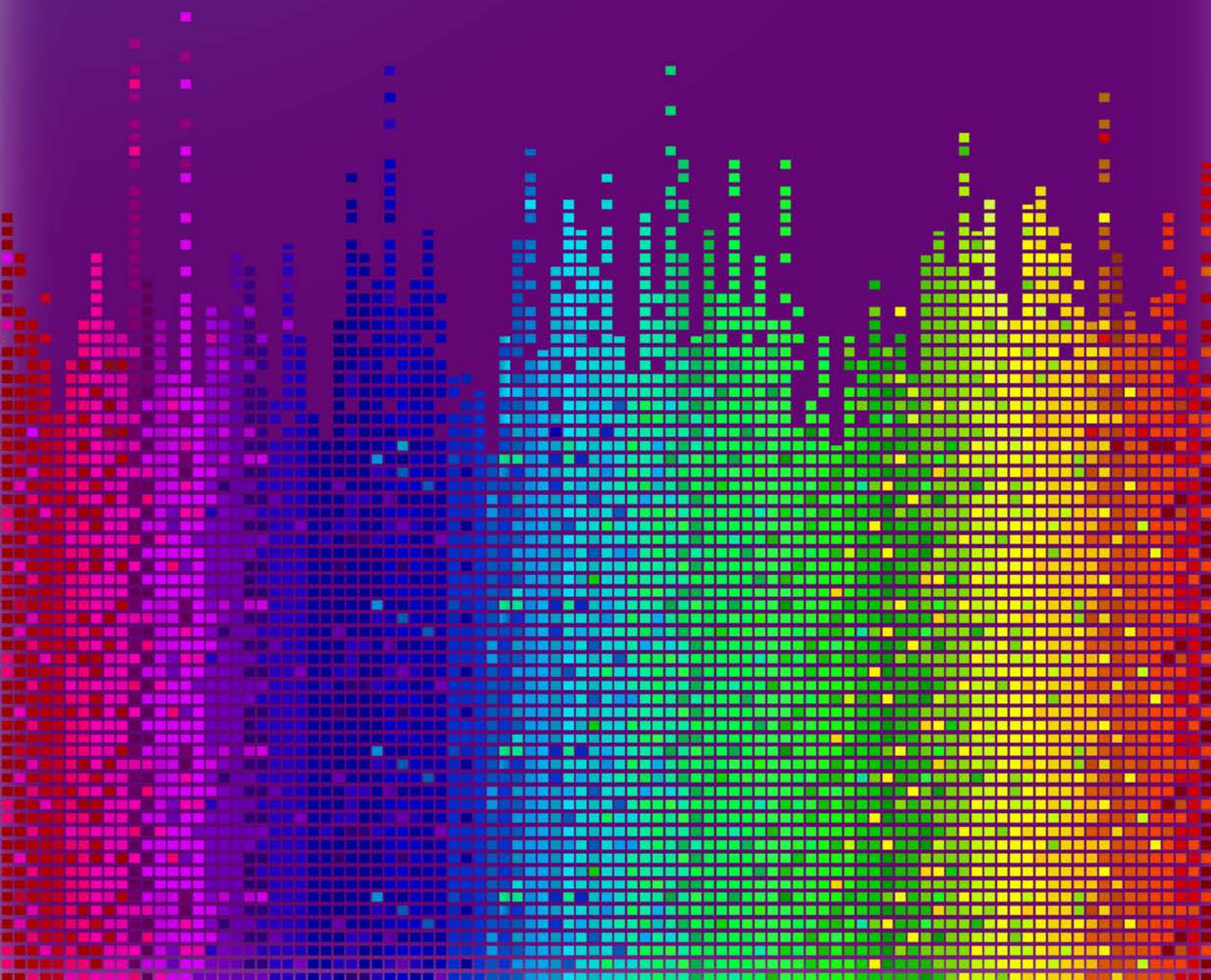
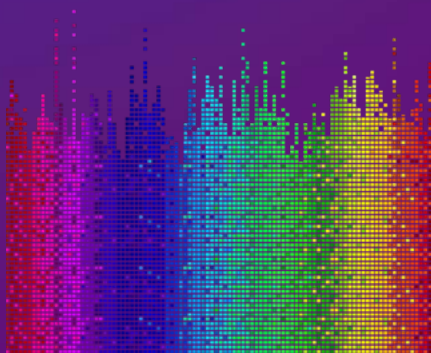


# Global Multidimensional Poverty Index 2022



## **Unpacking deprivation bundles** to reduce multidimensional poverty





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This report provides new analyses of the 2022 update of the global Multidimensional Poverty Index, whose data are open source available to anyone interested in multidimensional poverty. Visit <http://hdr.undp.org> and <https://ophi.org.uk> to further explore the data and to read technical and methodological notes and ongoing research.

For a list of any errors and omissions found subsequent to printing, please visit <http://hdr.undp.org> and <https://ophi.org.uk/multidimensional-poverty-index/>.

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**GLOBAL MULTIDIMENSIONAL  
POVERTY INDEX 2022**

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**Unpacking deprivation  
bundles to reduce  
multidimensional poverty**

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## Introduction

The lives of poor people are complex, in part because multiple deprivations strike them together. This complexity has only increased in the wake of the COVID-19 pandemic and the outbreak of the war in Ukraine. Rising food and fuel prices, climate shocks and a looming global recession have compounded uncertainties and postpandemic challenges.<sup>1</sup> Not only could more people become poor, but the intensity of poverty could increase. By looking closely at the interlinked deprivations of poor people, this report provides valuable insights on how to tackle multidimensional poverty—referred to simply as “poverty” throughout—by addressing its multiple dimensions.

The microdata used to estimate the 2022 global Multidimensional Poverty Index (MPI) values are gathered from household surveys across 111 countries, covering 6.1 billion people. This report uses those estimates to make visible, for the first time, common deprivation profiles and bundles: combinations of deprivations experienced by 1.2 billion poor people, or nearly double the number of people in monetary poverty.<sup>2</sup> Such data can be used in responses from the global to the local level. As Dr. Teresa de Jesus, who works at a health centre in Tomalá, Honduras, reminds us, “The challenge for us as a community is to join forces. Focusing only on health will not work; family income and housing conditions also limit a child’s development and increase the risk for undernourishment.”<sup>3</sup> Understanding these deprivation profiles—or bundles—helps in designing integrated policies that can tackle multiple deprivations at once.

Because most countries conducted their latest household survey prior to 2020, the impacts of the COVID-19 pandemic on poverty cannot yet be assessed. Further, the infrequency of household surveys makes it increasingly difficult to observe the latest trends in poverty. For example, the three poorest countries (Niger, South Sudan and Burkina Faso),

home to 50 million people living in acute poverty, last collected data in 2010 or 2012. Yet data on billionaires are updated every hour—a jarring data inequality.<sup>4</sup> Simulations in the 2020 edition of this report suggested that the pandemic set progress in reducing MPI values back by 3–10 years;<sup>5</sup> emerging postpandemic data indicate that the worst of these scenarios may become a reality.

Nevertheless, the MPI yields important insights by facilitating cross-country analysis and presenting long-term trends. Of the 81 countries with trend data, 72 significantly reduced their MPI value during at least one of the time periods analysed. Of these 72 countries, 68 significantly reduced deprivations among poor people in five or more indicators during that period, with 46 reducing deprivations in eight or more. These trends are promising: many countries have already reduced deprivations in multiple indicators.

A special section of this report highlights trends over 15 years in India, where the number of poor people dropped by about 415 million. The poorest states reduced poverty the fastest, and deprivations in all indicators fell significantly among poor people. Poverty among children fell faster in absolute terms, although India still has the highest number of poor children in the world (97 million, or 21.8 percent of children ages 0–17 in India).<sup>6</sup>

The report issues a call to action to conduct frequent and up-to-date household surveys in order to measure poverty and launch strategic tools to eliminate abject poverty, even as new threats arise. Recent data are vital for planning, designing policies, and incentivizing and recognizing change. Regular multitopic household surveys, while not perfect, are the best instrument for estimating multidimensional poverty. But advances in data collection have not improved the frequency or breadth of these surveys.

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### *The 2022 global Multidimensional Poverty Index*

- Across 111 countries, 1.2 billion people—19.1 percent—live in acute multidimensional poverty (referred to as “poverty” throughout). Half of these people (593 million) are children under age 18.
- The developing region where the largest number of poor people live is Sub-Saharan Africa (nearly 579 million), followed by South Asia (385 million).
- Simulations in 2020 suggested that the COVID-19 pandemic had set progress in reducing Multidimensional Poverty Index (MPI) values back by 3–10 years. Updated data indicate that the setback at the global level is likely to be on the high end of those projections.
- In India 415 million people exited poverty between 2005/06 and 2019/21, demonstrating that the Sustainable Development Goal target 1.2 of reducing at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions by 2030 is possible to achieve—and at scale. The poorest states and groups (children, lower castes and those living in rural areas) reduced poverty the fastest in absolute terms, although the data do not reflect post-Covid-19 pandemic changes.
- Of the 81 countries with trend data, covering roughly 5 billion people, 72 experienced a statistically significant reduction in absolute terms in MPI value during at least one of the periods analysed.
- Addressing poverty requires better data. The infrequency of household surveys makes it difficult to assess the true impact of the COVID-19 pandemic on poverty. The data revolution must not leave the collection of poverty data behind.

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### *Interlinkages*

- Identifying the overlaps between poverty indicators—that is, when deprivations affect the same person or household simultaneously—can make the MPI a more precise policy tool.
- Almost half of poor people (470.1 million) are deprived in both nutrition and sanitation, potentially making them more vulnerable to infectious diseases. In addition, over half of poor people (593.3 million) are simultaneously deprived in both cooking fuel and electricity.
- The magnitude of existing deprivation bundles reveals the fragility of poverty in the current context. The existing structure of deprivations is likely to amplify the shocks of rising food prices (affecting nutrition and living standards) and rising energy prices (affecting access to clean cooking fuel) and to limit the effectiveness of development strategies centred on closing digital gaps (impossible without affordable electricity).
- Deprivation profiles vary by developing region. A poor person in South Asia is more likely to be deprived in nutrition, cooking fuel, sanitation and housing, while a poor person in Sub-Saharan Africa is more likely to have those deprivations and to be deprived in drinking water and electricity as well.

## What is the global Multidimensional Poverty Index?

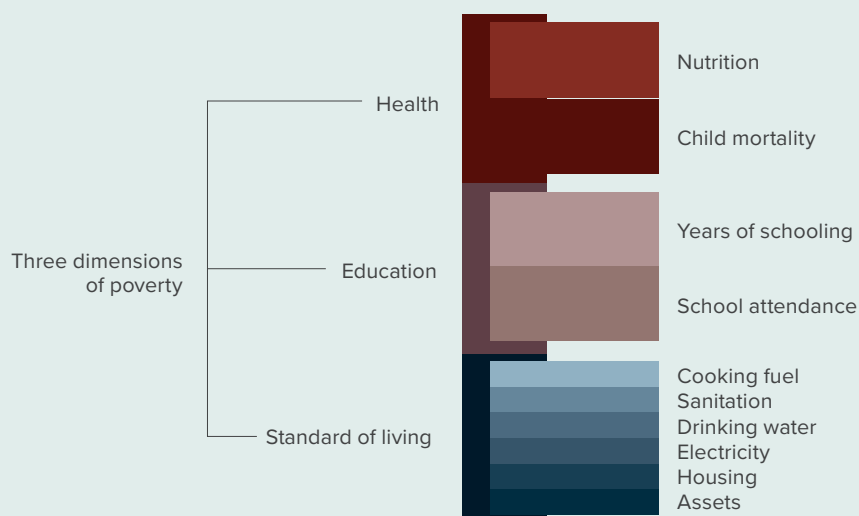
The global Multidimensional Poverty Index (MPI) is a key international resource that measures acute multidimensional poverty across more than 100 developing countries. First launched in 2010 by the Oxford Poverty and Human Development Initiative at the University of Oxford and the Human Development Report Office of the United Nations Development Programme, the global MPI advances Sustainable Development Goal 1, holding the world accountable to its resolution to end poverty in all its forms everywhere.

The global MPI begins by constructing a deprivation profile for each household and person in it that monitors deprivations in 10 indicators spanning health, education and standard of living (see figure). For example, a household and all people living in it are deprived if any child is stunted or any child or adult for whom data are available is underweight; if at least one child died in the past five years; if any school-aged child is not attending school up to the age at which he or she would complete class 8 or no household member has completed six years of schooling; or if the household lacks access to electricity, an improved source of drinking water within a 30 minute walk round trip,<sup>1</sup> an improved sanitation facility that is not shared,<sup>2</sup> nonsolid cooking fuel, durable housing materials, and basic assets such as a radio, animal cart, phone, television or bicycle. A person's deprivation score is the sum of the weighted deprivations she or he experiences. All indicators are equally weighted within each dimension, so the health and education indicators are weighted  $\frac{1}{6}$  each, and the standard of living indicators are weighted  $\frac{1}{8}$  each. The global MPI identifies people as multidimensionally poor if their deprivation score is  $\frac{1}{3}$  or higher.

MPI values are the product of the incidence of poverty (proportion of people who live in multidimensional poverty) and the intensity of poverty (average deprivation score among multidimensionally poor people). The MPI is therefore sensitive to changes in both components. The MPI ranges from 0 to 1, and higher values imply higher poverty. The precise definition of each indicator is available online, together with any country-specific adjustments and the computer code used to calculate the global MPI value for each country.<sup>3</sup>

By identifying who is poor, the nature of their poverty (their deprivation profile) and how poor they are (deprivation score), the global MPI complements the international \$1.90 a day poverty rate.<sup>4</sup>

### Structure of the global Multidimensional Poverty Index



Source: OPHI and HDRO.

#### Notes

**1.** Based on the definition for basic drinking water at <https://washdata.org/monitoring/drinking-water>. **2.** Based on the definition for basic sanitation at <https://washdata.org/monitoring/sanitation>. **3.** Alkire, Kanagaratnam and Suppa 2022a; UNDP 2022; <https://hdr.undp.org/mpi-statistical-programmes>. In addition to tables 1 and 2 of this report, disaggregated estimates by rural and urban areas, age cohort, gender of household head and subnational regions; alternative poverty cutoffs; sample sizes; standard errors; and indicator details produced by OPHI are available at <https://ophi.org.uk/multidimensional-poverty-index/data-tables-do-files/>. **4.** The \$1.90 a day poverty line is based on 2011 purchasing power parity (PPP) dollars. The World Bank recently published poverty estimates using an updated poverty line of \$2.15 a day based on 2017 PPP dollars (World Bank 2022a).

## Data update for the 2022 global Multidimensional Poverty Index

The 2022 global Multidimensional Poverty Index (MPI) uses the most recent comparable data available for 111 countries—23 low-income countries, 85 middle-income countries and 3 high-income countries. These countries—home to 6.1 billion people, 1.2 billion (or 19.1 percent) of whom live in poverty—account for about 92 percent of the population in developing regions.<sup>1</sup> The global MPI shows who they are, where they live and what deprivations hold them back from achieving the wellbeing they deserve. MPI values, the incidence and intensity of poverty, and component indicators are disaggregated by age group, rural and urban areas and gender of the household head as well as for 1,287 subnational regions. Trends in reducing MPI values are available for 81 countries and 810 subnational regions, as well as for age groups and areas. These estimates help in meeting the central, transformative promise of the 2030 Agenda for Sustainable Development: to leave no one behind.

Table 1 at the end of the report presents global MPI estimates using the latest surveys available at the time of computation. The year of the surveys ranges from 2010 to 2020/2021. This edition provides updated estimates for 12 countries, including India, and introduces estimates for three countries.<sup>2</sup> The 2022 estimates are based on Multiple Indicator Cluster Surveys for 54 countries, Demographic and Health Surveys for 45 countries and national surveys for 12 countries. For 83 countries, home to 81.3 percent of poor people, data were fielded in 2016 or later—after the Sustainable Development Goals were adopted. Of these, 35 countries, home to 37.1 percent of poor people, have data fielded in 2019 or later. Harmonized trends are presented for 81 countries using data from 2000 to 2020/2021. Of these, 35 countries have data for three points in time, and one country, Gambia, has data for four.

Although most data predate the COVID-19 pandemic, they nevertheless offer a reference point for measuring the pandemic's impact on poverty.

### Notes

**1.** All population figures refer to 2020 (in continuation of past reports, which update the population figures by one year from the previous edition) and are drawn from UNDESA (2022). **2.** The countries with updated estimates are the Dominican Republic, Ecuador, Gambia, Honduras, India, Jamaica, Malawi, Mauritania, Mexico, Peru, Rwanda and Viet Nam. The new countries with estimates are Argentina, Samoa and Tuvalu. See table 1 for survey type and year of survey.



PART

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I

**Interlinkages—  
from understanding  
overlapping deprivations  
to developing integrated  
multisectoral policies**

Multidimensional poverty—referred to simply as “poverty” throughout this report—is diverse. A poor person in one part of the world is not deprived in the same way as a poor person somewhere else. Within the same country a person who lives in a village may be poor because of deprivations in years of schooling, school attendance, sanitation and cooking fuel, while a person who lives in a city may experience poverty because of deprivations in nutrition, years of schooling, housing and assets. These differences, shown by the MPI, shed light on what poverty means for different people.

The MPI also reveals interlinkages: interlinked deprivations that affect the same person or household simultaneously, meaning that they are both (or all) part of a person’s deprivation profile. Deprivation bundles are pairs, triplets or larger groups of interlinked deprivations that make up all or a subset of a person’s deprivation profile. For example, 80 percent of poor people who are deprived in drinking water also experience deprivations in sanitation, an interlinked pair. A poor person deprived in sanitation and drinking water is also deprived in additional indicators. A poor person in Sub-Saharan Africa is more likely than a poor person in South Asia to lack clean energy, highlighting regional differences. The MPI dataset includes more than 850 combinations of the 10 measured deprivations, which can deepen understanding of the texture of poverty across developing countries.

The MPI provides unique insights into the conditions of poverty and how they vary across age groups, urban and rural areas and subnational locations. It guides policymakers on specific interventions that will be meaningful for individuals and families experiencing poverty. Integrated multisectoral policies can not only lift millions out of poverty but also minimize poor people’s burden by enabling them to overcome multiple deprivations at the same time. The Sustainable Development Goals recognize this. The global MPI information platform includes interlinkages built from extensive analysis of the deprivation profiles of poor people across 111 countries located mainly in developing regions. For the first time this report presents these deprivation profiles and, through country case studies, the policy implications that can be drawn from them. The rest of this section describes the profiles and explains how they can be used to guide policy.

## Understanding interlinked deprivations

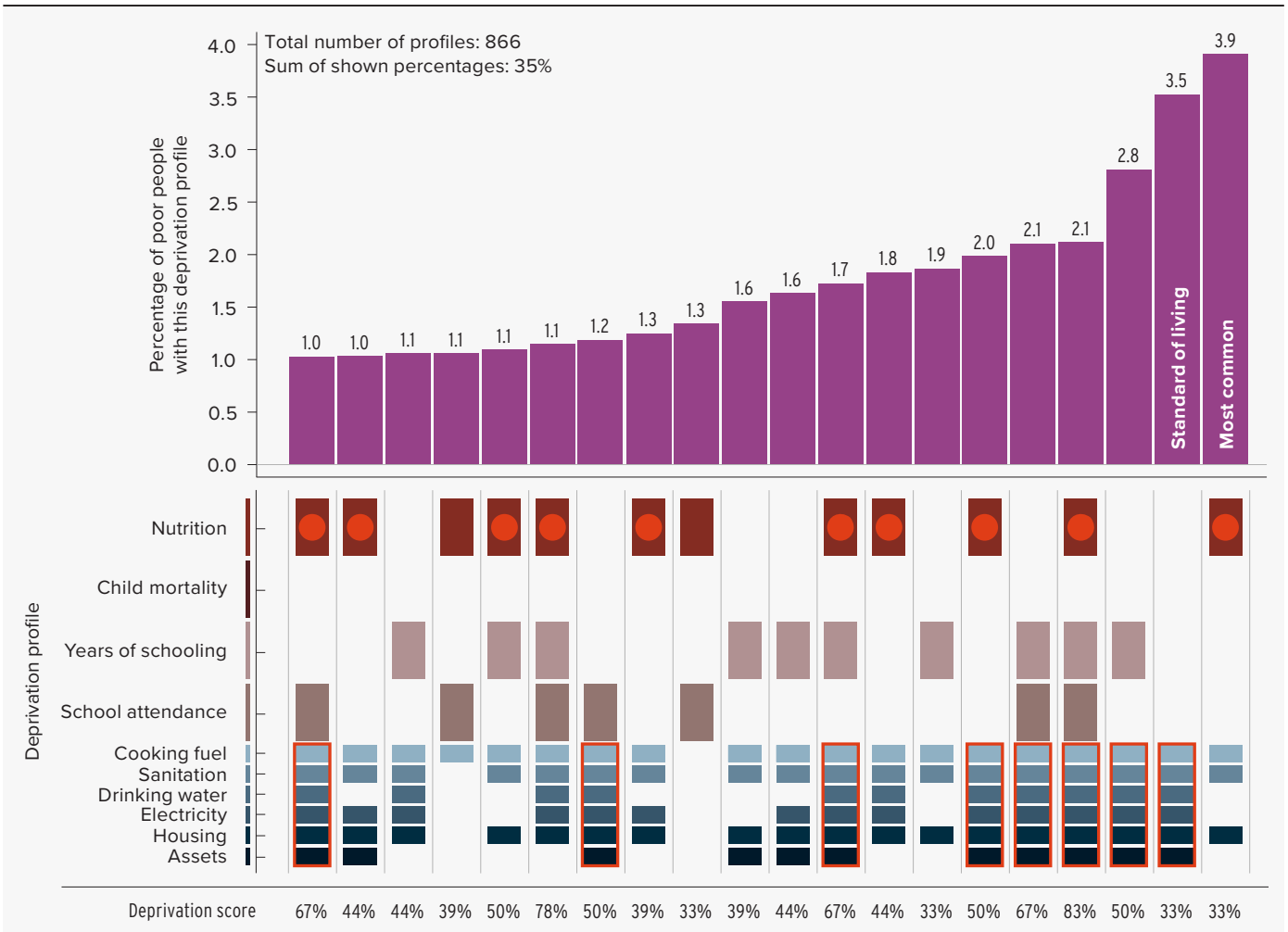
### Uncovering the poverty knots: The most common deprivation profiles

The analysis first looks at the most common deprivation profiles across 111 developing countries (figure 1). The most common profile, affecting 3.9 percent of poor people, includes deprivations in exactly four indicators: nutrition, cooking fuel, sanitation and housing.<sup>7</sup> More than 45.5 million poor people are deprived in only these four indicators.<sup>8</sup> Of those people, 34.4 million live in India, 2.1 million in Bangladesh and 1.9 million in Pakistan—making this a predominantly South Asian profile (figure 2).

The four deprivations in this bundle are embedded in other poverty profiles too. Beyond the 45.5 million poor people who are deprived in only these four indicators, 328.9 million poor people are deprived in these four indicators and others. Of the 374.4 million poor people deprived in these four indicators (some of whom are deprived in others), 224.8 million are in Sub-Saharan Africa, 122.9 million are in South Asia and 26.7 million are in other regions. Designing policies that address the four deprivations in this bundle will have a high impact on poverty by bringing people experiencing this deprivation profile out of poverty and by improving the lives of millions of other poor people who experience these deprivations along with others. Often, nutrition and standard of living interventions are pursued by different policy actions and ministries, but this analysis shows that these deprivations regularly go together. Making this deprivation bundle visible invites creative and vigorous innovations for poverty eradication policies. The solution likely requires multisectoral coordination.

The second most common deprivation profile contains only the six standard of living indicators.<sup>9</sup> Nearly 41 million poor people have this profile. It is the most common profile in Sub-Saharan Africa, where it accounts for 5.9 percent of poor people (34.2 million; see figure 2). And it is the fourth most common profile in the Arab States, where the second most common profile includes the six standard of living deprivations as well as deprivations in nutrition, years of schooling and school attendance.

**Figure 1** The 20 most common deprivation profiles among poor people across 111 developing countries



**Note:** The 10 deprivation profiles with a red dot in nutrition include the deprivations in the most common bundle (nutrition, cooking fuel, sanitation and housing), and the 8 deprivation profiles outlined in red include the deprivations in the second most common deprivation bundle (standard of living).  
**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

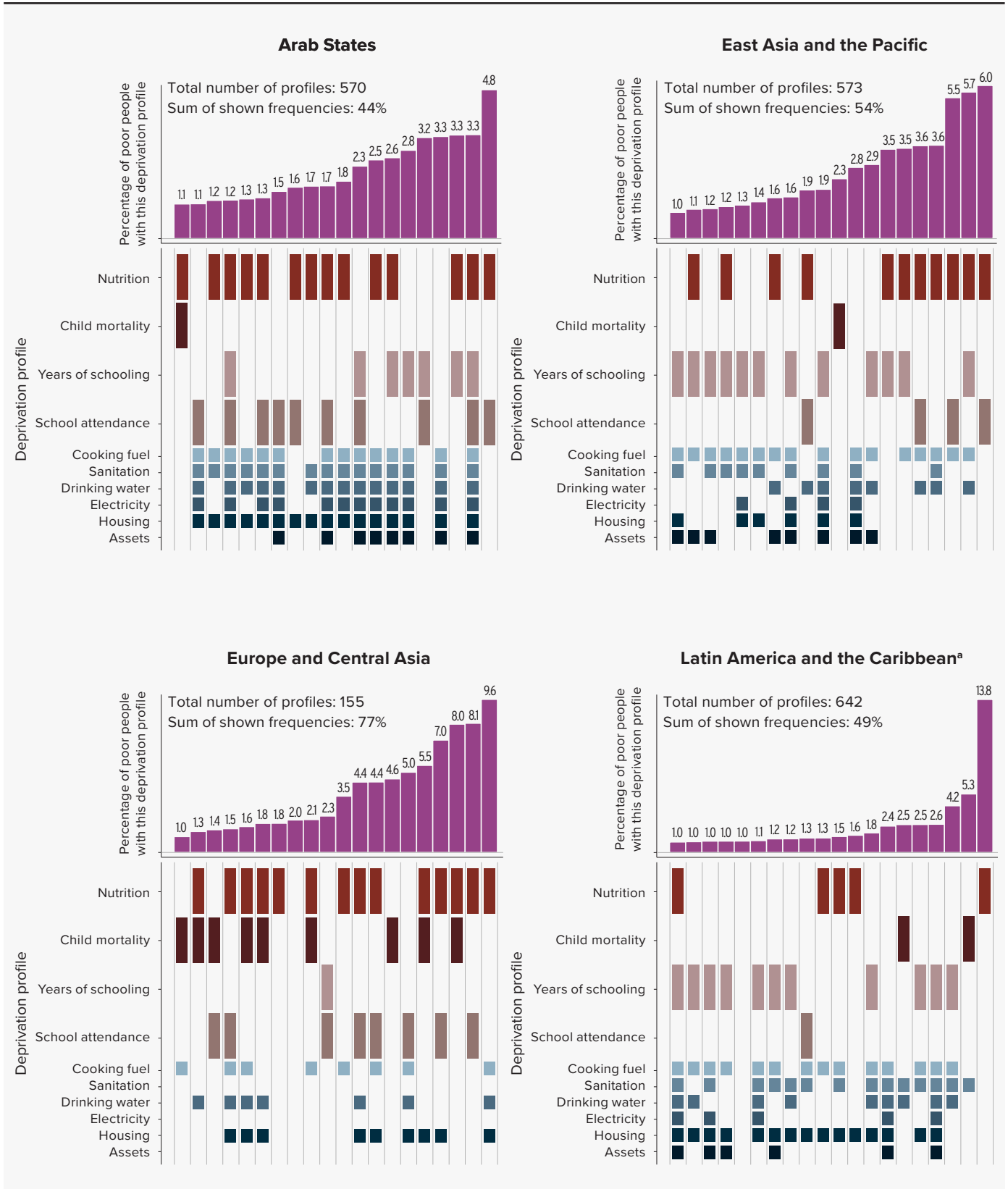
Across 111 developing countries 210.4 million poor people experience deprivations in all six standard of living indicators, and most of those people also experience deprivations in health or education indicators. For example, 8 of the 11 most common deprivation profiles in Sub-Saharan Africa and 8 of the 15 most common deprivation profiles in the Arab States include the standard of living bundle. But none of the 15 most common profiles in South Asia contains it. These findings point to policies that can improve standards of living in Sub-Saharan Africa and the Arab States by addressing challenges around housing and access to energy, basic water, sanitation and assets.

Another regional difference is that a poor person in Sub-Saharan Africa is far more likely than a poor

person in other regions to be deprived in electricity and drinking water. All 20 of the most common profiles in Sub-Saharan Africa include deprivations in electricity.<sup>10</sup> The region's electrification rate is 48.4 percent, and in at least eight countries, less than 20 percent of the population have access to electricity.<sup>11</sup> This in turn limits people's ability to access information, education, health services, legal services and more, with implications for multiple areas of human development. Despite an upward trend in access to electricity in recent years, preliminary data from the COVID-19 pandemic show a reversal of gains, with access to electricity down by 13 million people.<sup>12</sup>

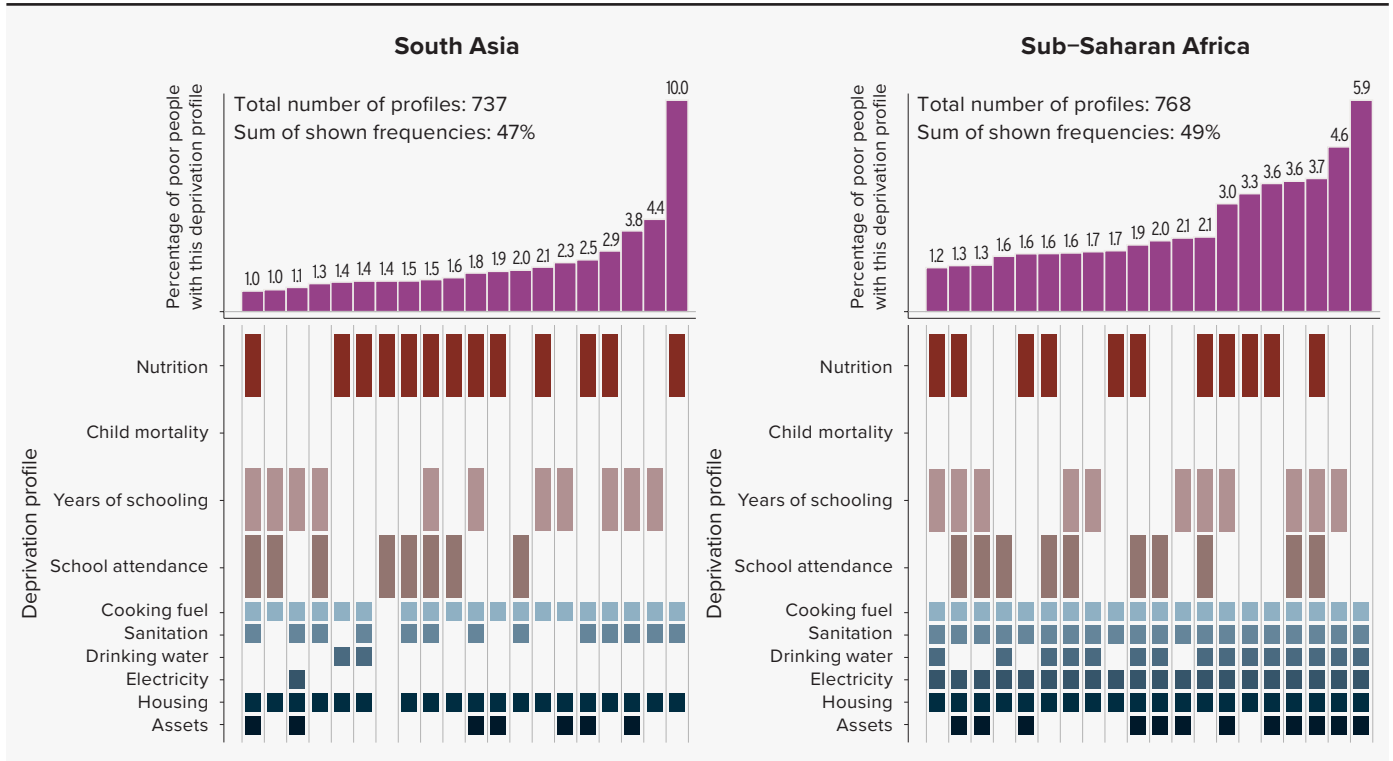
These observations touch only the surface of what the MPI reveals about the poverty conditions across

**Figure 2** The 20 most common deprivation profiles among poor people in each developing region



(continued)

**Figure 2** The 20 most common deprivation profiles among poor people in each developing region (continued)



a. The most common deprivation profile is based on the profile for Mexico, where nutrition receives the full dimension weight of  $\frac{1}{3}$ , and the second most common deprivation profile is based on the profile for Brazil, where child mortality receives the full dimension weight of  $\frac{1}{3}$ .  
**Source:** Authors' calculations based on Alkire, Nogaes and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

developing countries. Still, they highlight how poverty is multifaceted and varies across developing regions and how, in the wake of the COVID-19 pandemic and with rising food insecurity, migration and climate change risks, decisive and well-targeted policies could help tackle poverty at scale.

### Deprivation bundles: Pairs and triplets

Another policy-relevant angle is to focus on pairs and triplets of deprivations that poor people experience—and that therefore may be addressed together.

Consider deprivations in sanitation and drinking water (table A). Many programmes throughout the world group these indicators together in so-called water, sanitation and hygiene (WASH) initiatives. More than 1 billion poor people are deprived in either sanitation or drinking water, and 437.1 million are deprived in both. The overwhelming majority of people who are deprived in both live in Sub-Saharan Africa

(330.4 million), followed by South Asia (47.5 million). In Sub-Saharan Africa 57 percent of poor people are deprived in both sanitation and drinking water.

Deprivations often compound each other, so poverty reduction programmes aiming for high-impact results should analyse interlinked deprivations to design better policies. Just under half of poor people (470.1 million) are deprived in both nutrition and sanitation, potentially making them more vulnerable to infectious diseases (see table A). In addition, more than half of poor people (593.3 million) are deprived in both cooking fuel and electricity; clean energy interventions could tackle both deprivations. And 259.1 million poor people are deprived in both nutrition and school attendance. School feeding programmes are one integrated response to nutritional deprivations among children that also incentivizes school attendance.

Even countries with the same MPI value may have different deprivation profiles. For example, Liberia and Senegal have similar MPI values in a similar period (0.259 in 2019/2020 for Liberia and 0.263 in 2019

**Table A** All deprivation pairs and the number of poor people experiencing each pair across 111 developing countries (millions)

	Nutrition	Child mortality	Years of schooling	School attendance	Cooking fuel	Sanitation	Drinking water	Electricity	Housing	Assets
Nutrition	—									
Child mortality	82.9	—								
Years of schooling	279.7	55.3	—							
School attendance	259.1	54.1	242.2	—						
Cooking fuel	592.3	119.5	536.1	416.8	—					
Sanitation	470.1	100.3	447.9	339.4	808.4	—				
Drinking water	286.2	62.3	263.3	219.8	507.1	437.1	—			
Electricity	317.8	72.4	326.6	266.0	593.3	522.9	381.4	—		
Housing	506.7	101.5	485.5	368.1	862.2	735.3	444.9	547.4	—	
Assets	247.4	44.1	299.6	187.6	491.0	421.1	279.3	353.1	455.9	—
Total number of poor people deprived in indicator	681.5	145.7	595.4	474.2	1,035.4	860.7	532.7	608.2	913.7	513.2

**Note:** Each cell indicates the number of people who experience each deprivation pair. Dark green shading indicates the lowest numbers, yellow the middle numbers and dark red the highest numbers.

**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

for Senegal), but the share of poor people deprived in both sanitation and drinking water is 39.0 percent in Liberia and 21.9 percent in Senegal—both far below the Sub-Saharan Africa average of 57.1 percent. This type of information is vital for designing country-specific water and sanitation programmes.

There are 120 possible deprivation triplets, and the diversity of deprivation patterns is striking. For example, 702.7 million poor people across 111 developing countries are deprived in cooking fuel, sanitation and housing—the triplet that affects the largest number of poor people (figure 3)—and 245.2 million are deprived in nutrition, years of schooling and cooking fuel. Except for the 36 triplets that include child mortality, only one triplet (nutrition, school attendance and assets) affects fewer than 100 million people.

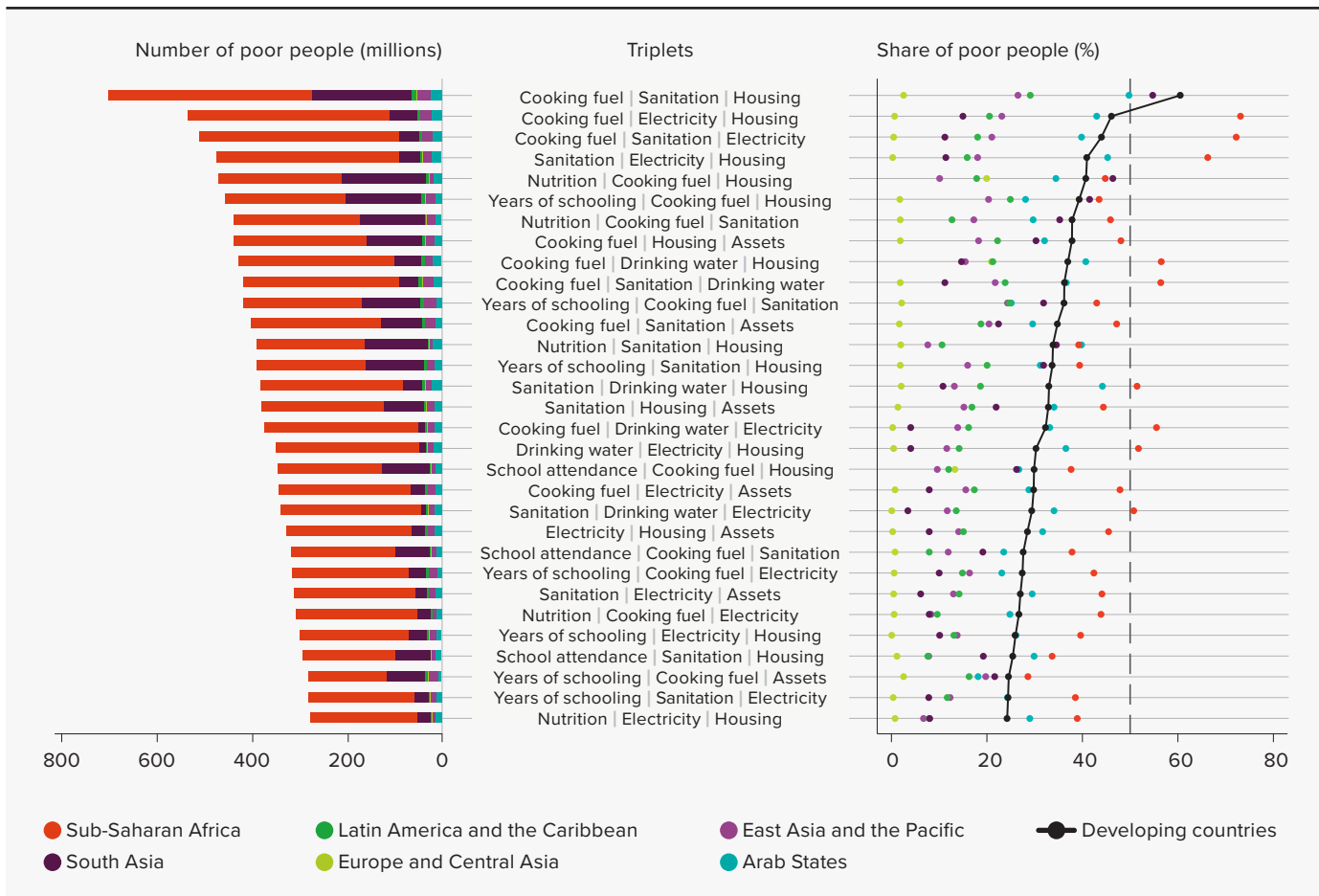
While Sub-Saharan Africa is home to the highest number of poor people experiencing the most common triplets, the distribution across developing regions varies. For example, both the electricity, sanitation and housing triplet and the nutrition, housing and cooking fuel triplet affect 41 percent of poor people across 111 developing countries. But the first triplet affects 66.2 percent of poor people in Sub-Saharan Africa, 11.4 percent in South Asia and 0.2 percent in Europe and Central Asia, while the second affects a similar

percentage of poor people in South Asia (46.4 percent) and Sub-Saharan Africa (44.8 percent) as well as 20.0 percent of poor people in Europe and Central Asia.

### Where do the poorest of the poor live?

Leaving no one behind means focusing on the people with the highest deprivation scores. Across 111 developing countries 4.1 million poor people are deprived in all 10 MPI indicators. With a deprivation score of 100 percent, they are the poorest of the poor. Some 3.8 million of these people live in Sub-Saharan Africa, including 910,000 in Nigeria, 685,000 in Niger and 615,000 in Ethiopia. It is striking that the number of people deprived in all 10 indicators is higher in the Arab States (214,000, dominated by Sudan) than in South Asia (110,000, primarily in Pakistan and Afghanistan), despite the Arab States having one-fifth the population of South Asia. In Latin America and the Caribbean, Haiti has the most people in this poorest group (20,000); in East Asia and the Pacific, Papua New Guinea (27,000) and Myanmar (24,000) do. No poor person surveyed in Europe and Central Asia experienced deprivations in all 10 indicators—a positive sign that it is indeed possible to end such heavy deprivation.

**Figure 3** The 31 deprivation triplets that affect the largest number of poor people across 111 developing countries



**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

### Poverty declines and the role of interlinkages: Three case studies

This section presents three country case studies—Ethiopia, Lao People’s Democratic Republic and Nepal—that analyse the relationship among poverty reduction, multisectoral policy interventions and interlinked deprivations.

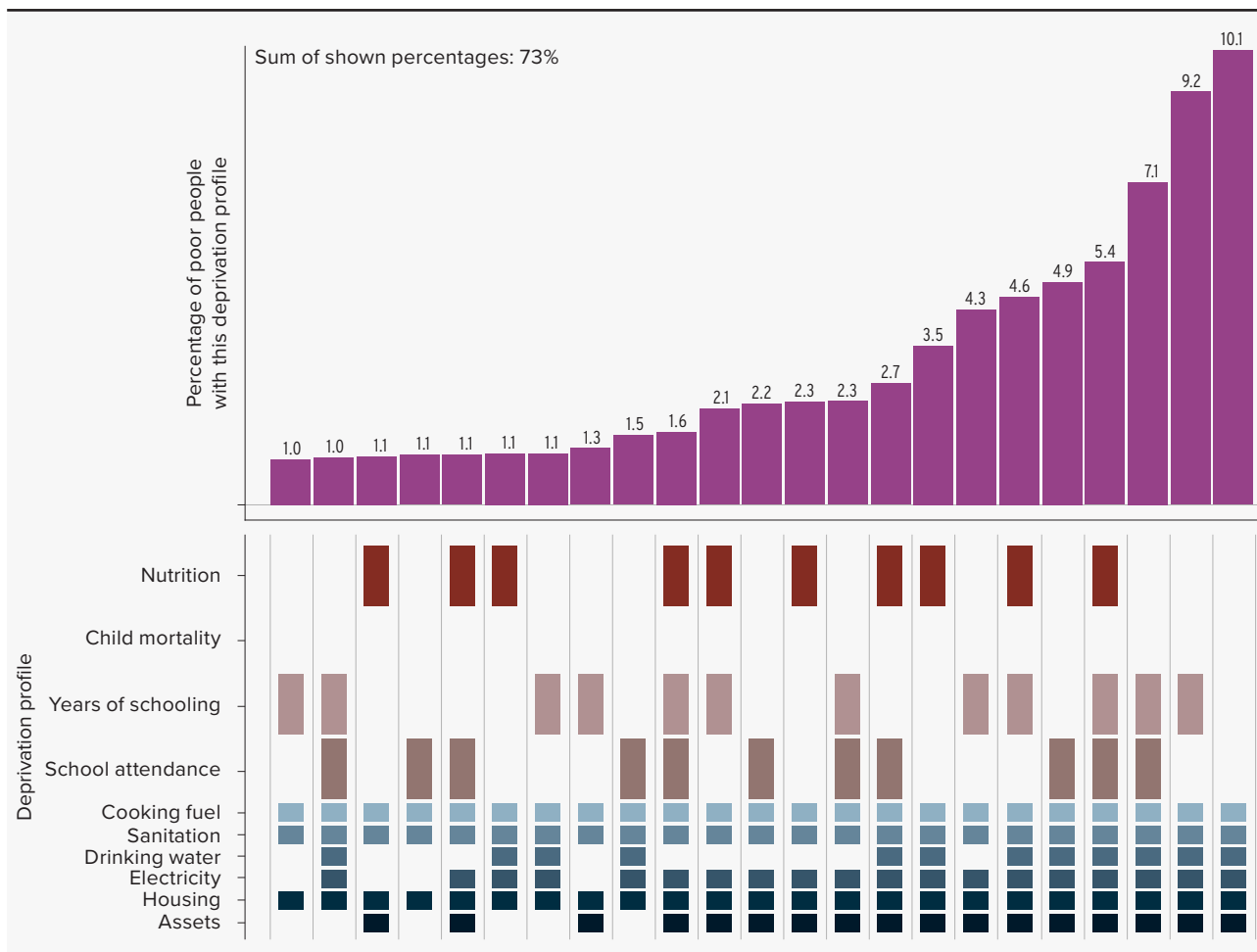
#### Ethiopia

Ethiopia registered impressive poverty reduction between 2011 and 2019, continuing the trend since the 2000s (though these data predate the COVID-19 pandemic and recent conflict). The country’s MPI value declined from 0.491 in 2011 to 0.436 in 2016 to 0.367 in 2019, and the incidence of poverty declined from

83.5 percent to 77.4 percent to 68.8 percent. The reduction of poverty in the latest period was driven by a decrease in the percentage of people who are poor and deprived in years of schooling, followed by decreases in the percentages of people who are poor and deprived in drinking water, assets, electricity, housing, cooking fuel and sanitation. However, due to the recent shocks—the COVID-19 pandemic, drought, conflict in Northern Ethiopia and the war in Ukraine—inflation has increased substantially, and poverty and human development gains may have been reversed.<sup>13</sup>

Multiple strategies have been instrumental in reducing monetary and multidimensional poverty in Ethiopia, which has seen impressive GDP growth rates, investment in infrastructure and strong agricultural growth,<sup>14</sup> coupled with a national strategy towards industrialization and structural transformation.<sup>15</sup> Among notable pro-poor government initiatives

**Figure 4** The most common deprivation profiles among poor people in Ethiopia, 2019



**Note:** Includes the 23 profiles experienced by at least 1 percent of poor people in the country (out of 248 total profiles).

**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

are the Productive Safety Net Programme (PSNP), reaching almost 12 million poor people (nearly 10 per cent of the population) in rural areas,<sup>16</sup> and its more recent urban counterpart,<sup>17</sup> which tackled poverty by providing integrated support at the household level to address multiple deprivations, including income, nutrition, education and the environment. Preliminary analysis also suggests that the safety net programmes offset some impacts of the COVID-19 pandemic by simultaneously addressing food security, the environment and livelihoods.<sup>18</sup> However, the conflict in Northern Ethiopia has affected the PSNP. The PSNP has been unavailable in Tigray since November 2020 and has been reduced in Afar and Amhara, leaving more than 1.6 million people across the three regions without support.<sup>19</sup>

The Multisectoral Woreda Transformation programme also engages multiple ministries to bring an integrated approach to development, adapting to the contexts and needs of each woreda (administrative district).<sup>20</sup> The programme tackles human development challenges at the household level by providing support with livelihoods, literacy and health. By presenting an opportunity to strengthen livelihoods through building skills, the programme also makes the most of the rising youth population and the country's demographic dividend.<sup>21</sup>

The most common deprivation profile in Ethiopia in 2019 is the standard of living profile, where people are deprived in all six standard of living indicators (cooking fuel, sanitation, drinking water, electricity, housing and assets; figure 4). The second most



common profile is the standard of living profile plus deprivations in years of schooling. Nearly one in five poor people in Ethiopia experience one of these two profiles. Going forward, the country might gain from including a housing package in pro-poor programmes that concentrates on energy, water and sanitation facilities, as well as home improvements.

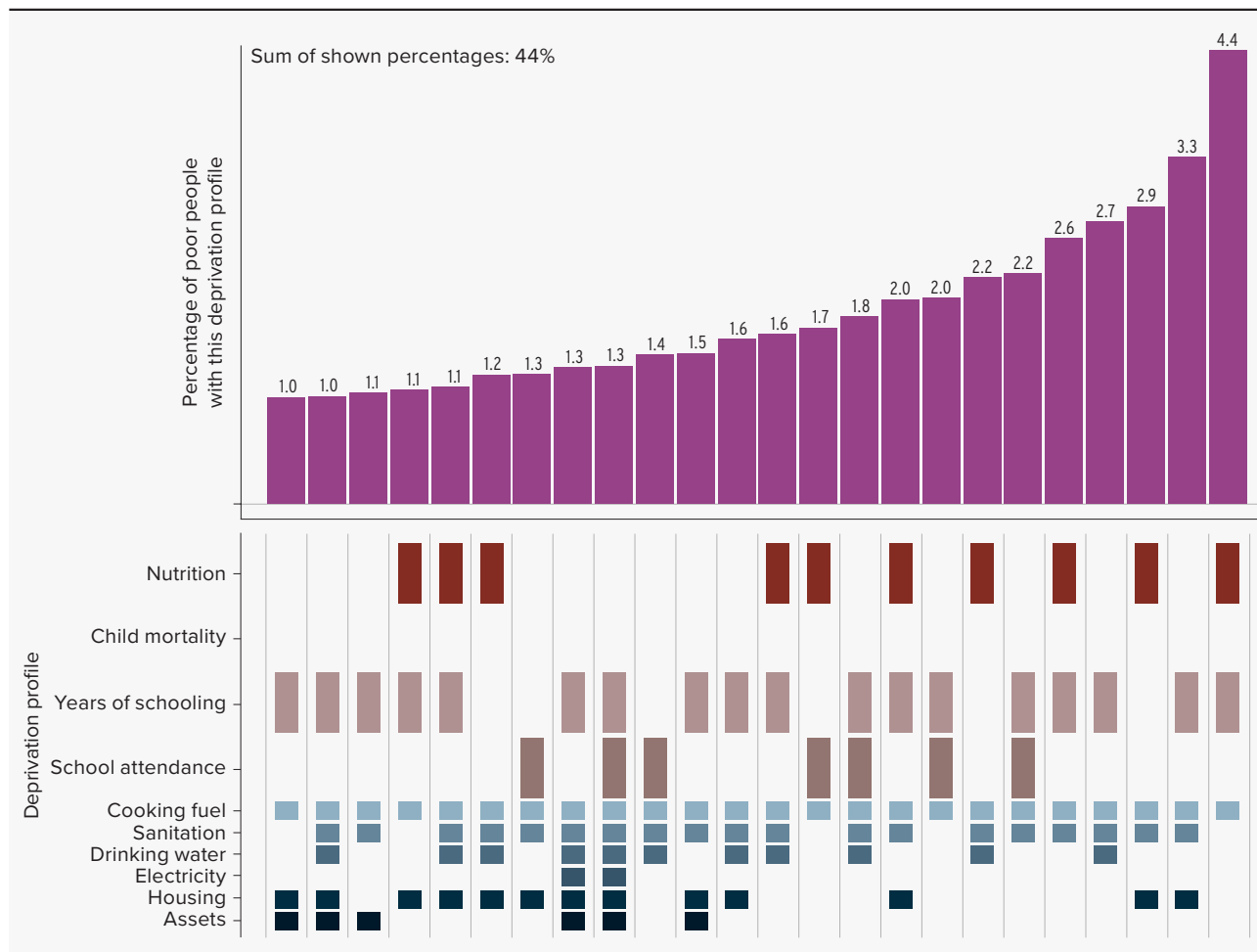
### Lao People’s Democratic Republic

Lao People’s Democratic Republic saw a remarkable decline in poverty from 2011/2012 to 2017. The country’s MPI value fell from 0.210 to 0.108, poverty incidence fell from 40.2 percent to 23.1 percent, and the percentage of people who are poor and deprived in

each indicator significantly declined. During this period the most progress was in reducing deprivations among poor people in cooking fuel, electricity, housing, sanitation and years of schooling. The percentage of people who are poor and deprived in electricity declined from 21.8 percent in 2011/2012 to 6.1 percent in 2017, while the percentage of people who are poor and deprived in cooking fuel declined from 40.2 percent to 22.9 percent. Progress was uneven across different regions, with the northern regions of Phongsaly and Oudomxay showing the largest poverty reduction.

Furthermore, between 2011/12 and 2017 rural poverty in Lao People’s Democratic Republic declined from 50.9 percent to 30.9 percent, while urban poverty declined from 9.1 percent to 5.3 percent, narrowing the rural-urban gap and reducing overall geographic

**Figure 5** The most common deprivation profiles among poor people in Lao People’s Democratic Republic, 2017



**Note:** Includes the 24 profiles experienced by at least 1 percent of poor people in the country (out of 339 total profiles).  
**Source:** Authors’ calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

inequalities. The government has invested in expanding rural infrastructure, roads, railways and services through partnerships that have enhanced market access in order to meet the growing demand for agricultural products (such as cassava, cardamom, coffee and tea) from neighbouring countries and that have improved livelihood opportunities.<sup>22</sup> Despite commendable progress in reducing poverty and inequality, vulnerability to poverty remains a key concern. Farmers are susceptible to seasonality, informality, price shocks and changes in demand and are therefore more vulnerable to falling back into poverty than nonfarm households.<sup>23</sup> Heavy dependence on agriculture for employment is a further barrier to structural transformation and development.

The most common deprivation profile in Lao People's Democratic Republic in 2017 is one where the household has at least one malnourished child, has no eligible member who has completed at least six years of schooling and cooks with solid fuels (figure 5). The second most common profile is one where people are deprived in years of schooling, cooking fuel, sanitation and housing. Some 71.6 percent of poor people in the country are deprived in both years of schooling and cooking fuel. Several studies have found a significant relationship between education and cooking fuel, showing, for example, that household solid fuel usage is associated with higher deprivations in years of schooling, school attendance and age-appropriate grade progression among children (due to direct time substitution because of solid fuel collection and preparation) and that education is a strong predictor of liquefied petroleum gas adoption.<sup>24</sup> An integrated programme focused on years of schooling and cooking fuel shows promise for tackling poverty among the country's children and families.

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## Nepal

Nepal substantially reduced poverty between 2011 and 2019. The country's MPI value fell from 0.185 in 2011 to 0.111 in 2016 to 0.075 in 2019, and the incidence of poverty fell from 39.1 percent to 25.7 percent to 17.7 percent. This progress has been accompanied by notable improvements in sanitation, which saw the largest reduction in the percentage of people deprived in this indicator—from 34.1 percent to

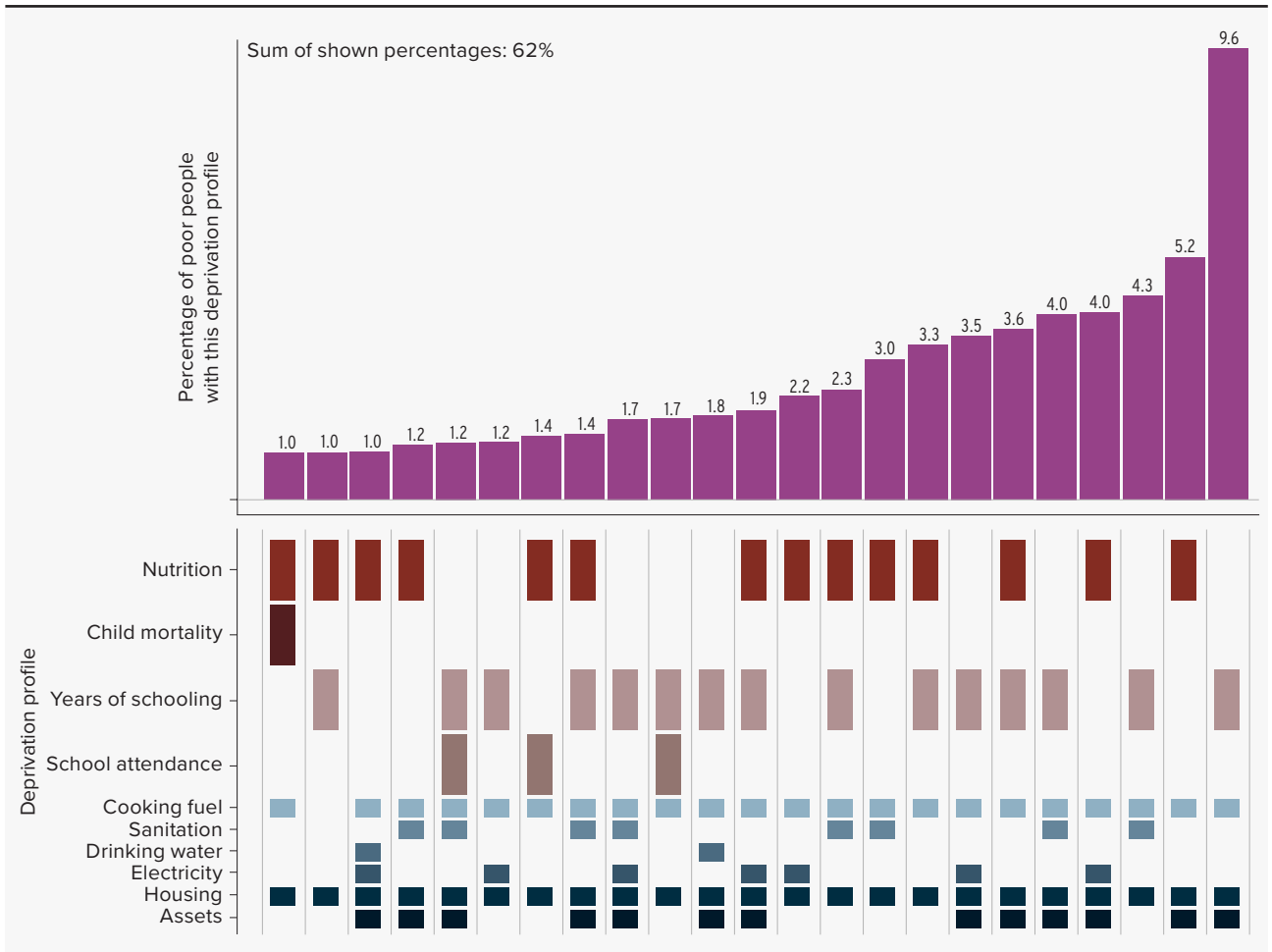
16.3 percent to 6.6 percent among poor people and from 60.6 percent to 35.9 percent to 21.4 percent among the whole population.

Improvements in sanitation are highly correlated with improvements in other health indicators, such as child nutrition, child mortality and access to drinking water. A growing body of evidence points to the positive health benefits of having access to an improved sanitation facility and drinking water on child health and wellbeing through lower diarrhoeal incidence,<sup>25</sup> a leading cause of child mortality in developing countries.<sup>26</sup> Improved water and sanitation interventions can improve children's growth and nutritional status;<sup>27</sup> poor nutrition accounts for nearly 45 percent of deaths among children under age 5 worldwide.<sup>28</sup> The recent progress in reducing deprivations in sanitation and drinking water might have driven the improvement in children's nutrition and the decrease in childhood mortality in Nepal, contributing to the recent decline in MPI value.

The government of Nepal has endorsed a multisectoral approach to tackling the pervasive undernutrition problem among children under age 5. The Multi-Sectoral Nutrition Plan I (2013–2017)<sup>29</sup> and II (2018–2022)<sup>30</sup> targeted both nutrition-specific and nutrition-sensitive programmes implemented through health, education, water and sanitation, and agriculture and livestock agencies. Most nutrition programmes have been based on multisectoral approaches to improve food security, nutritional practices, WASH facilities, behavioural change and communication strategies to address the underlying causes of undernutrition.<sup>31</sup> In recent years the share of the government's budget allocated to the WASH sector has increased considerably, to NPR 44.2 billion in 2021/2022, up 1.3-fold from 2016/2017.<sup>32</sup> In 2019 Nepal declared itself free of open defecation after a decade-long effort at various levels to make improved toilets accessible to every household.<sup>33</sup>

The most common deprivation profile in Nepal in 2019 is one where people are deprived in years of schooling, cooking fuel, housing and assets (figure 6). Nearly 1 in 10 poor people in the country experiences this profile. An integrated, high-impact policy response might include a housing package that considers energy concerns and home improvement grants, paired with targeted lifelong learning programmes among poor households.

**Figure 6** The most common deprivation profiles among poor people in Nepal, 2019



**Note:** Includes the 23 profiles experienced by at least 1 percent of poor people in the country (out of 212 total profiles).

**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

## Galvanizing policy efforts to reduce interlinked deprivations

This report not only unveils the first analysis of the in-depth deprivation profiles from data on millions of households; it also analyses the routes out of poverty that have successfully addressed poverty. The motivation to recognize success in the case studies is clear: given the COVID-19 pandemic and tight fiscal constraints faced worldwide, progress must surge ahead with extra determination and skill to reduce acute poverty. These examples show that reducing poverty is possible, and the profiled successes underscore that high-impact policies tend to step beyond institutional silos and address interlinked dimensions of poverty together.

Of the 81 countries with trend data, 72 significantly reduced their MPI value during at least one of the time

periods analysed, and 61 did so in the most recent period. Of these 72 countries, 68 significantly reduced deprivations among poor people in five or more indicators, with 46 reducing deprivations in eight or more. Some 66 countries reduced the MPI value in rural areas, and 63 countries reduced deprivations among poor people in rural areas in five or more indicators, with 43 reducing deprivations in eight or more and 22 reducing deprivations in all 10 MPI indicators. Some 49 countries significantly reduced the MPI value in urban areas, and 41 reduced deprivations among poor people in urban areas in five or more indicators, with 20 reducing deprivations in eight or more. This shows that reductions in multiple deprivations are possible in both rural and urban areas and can be emboldened through multisectoral policies and interventions, using evidence-based targeting of interlinkages.



**PART**

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**Levels and trends  
from the 2022 global  
Multidimensional  
Poverty Index**

This section presents updated results and trends from the 2022 global Multidimensional Poverty Index (MPI), covering 6.1 billion people across 111 developing countries. Some 1.2 billion people—19.1 percent of the population in those countries—live in multidimensionally poverty—referred to simply as “poverty” throughout this report.

## Who are the 1.2 billion poor people, and where do they live?

- Half of poor people (593 million) are children under age 18. Nearly one in three children lives in poverty compared with one in seven adults. About 8.1 percent of poor people (nearly 94 million) are age 60 or older.
- For the first time since the global MPI was introduced, the number of poor people is highest in Sub-Saharan Africa (579 million), followed by South Asia (385 million). The two regions together are home to 83 percent of poor people. This new prominence of Sub-Saharan Africa in the global MPI is due in part to more recent data for South Asia (the population-weighted average is from 2019/2020 for South Asia and from 2017 for Sub-Saharan Africa) and in part to large reductions in India, the second most populous country in the world.<sup>34</sup> Moreover, for the first time since the global MPI was introduced, the number of poor people in Sub-Saharan Africa is larger than the combined number for South Asia and East Asia and the Pacific (494 million).
- Nearly 83 percent (964 million) of poor people live in rural areas, and 17 percent (198 million) live in urban areas.
- More than 66 percent of poor people live in middle-income countries, where the incidence of poverty ranges from 0.1 percent to 66.8 percent nationally and from 0.0 percent to 89.5 percent subnationally.
- Nearly half of poor people (518 million) live in severe poverty, meaning their deprivation score is 50 percent or higher.
- One in six poor people lives in a female-headed household.<sup>35</sup>
- The number of poor people who experience deprivations in each indicator ranges from 146 million living in households that lost at least one child in the last five years to more than 1 billion living in households that cook with solid fuels (figure 7).

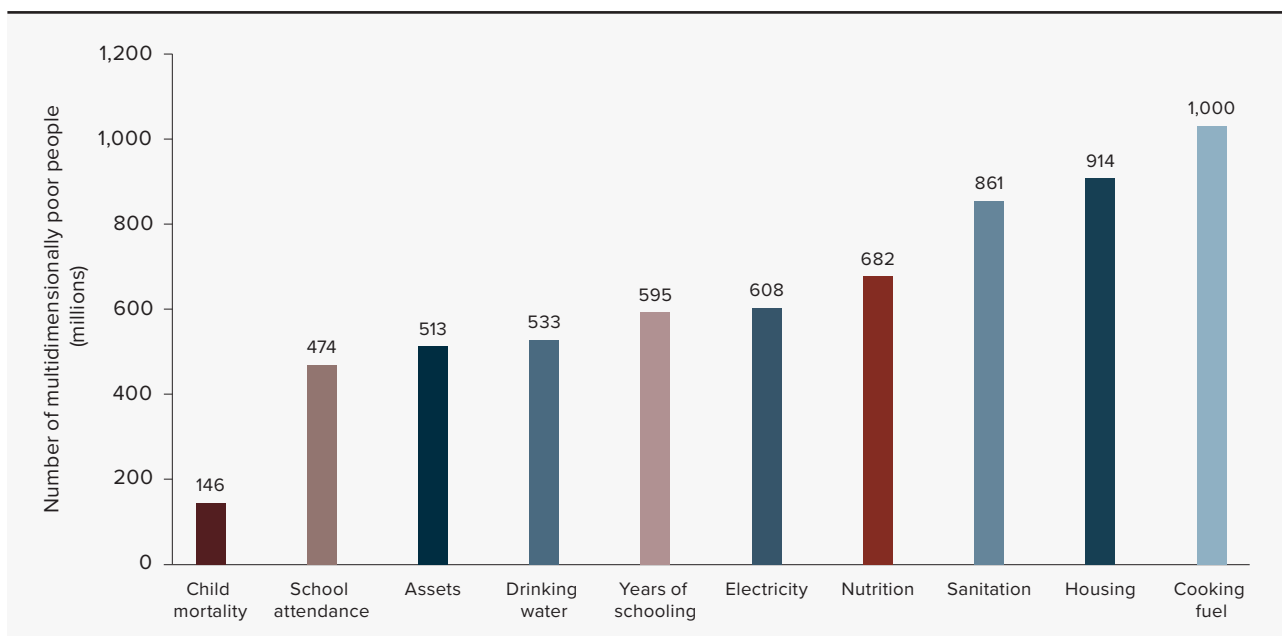
## How well were countries reducing poverty before the COVID-19 pandemic?

- Of the 81 countries with trend data, covering roughly 5 billion people, 72 experienced a statistically significant reduction in absolute terms in MPI value during at least one period. Central African Republic and Guinea experienced an increase in MPI value between the two most recent surveys.<sup>36</sup>
- Of the 20 countries that reduced their MPI value the fastest, 12 were in Sub-Saharan Africa, 3 were in South Asia, 3 were in East Asia and the Pacific and 2 were in Latin America and the Caribbean.<sup>37</sup>
- Some 26 countries experienced a statistically significant reduction in deprivations in every indicator—that is, the percentage of people who were poor and deprived declined in each indicator in at least one period.<sup>38</sup> Three of these countries (Plurinational State of Bolivia, Honduras and India) saw reductions in all indicators over two periods.
- In 40 countries—half of those covered—there was either no statistically significant reduction in poverty among children<sup>39</sup> or the MPI value fell more slowly among children than among adults during at least one period.<sup>40</sup> In Gambia, Guinea and Malawi both outcomes occurred. And Central African Republic experienced a statistically significant increase in MPI value among children between 2010 and 2018/2019.
- In 15 countries in Sub-Saharan Africa and 1 country in the Arab States the number of poor people increased during at least one period, despite a statistically significant decrease in the incidence of poverty, showing that population growth outpaced poverty reduction.<sup>41</sup>
- In some countries subnational regions that were initially among the poorest in their country reduced poverty faster in absolute terms than the national average, narrowing the poverty gap. These include both Lempira and Intibucá in Honduras (2011/12–2019), Bihar, Jharkhand and Uttar Pradesh in India (2015/2016–2019/2021), East and South in Rwanda (2014/2015–2019/2020) and Mekong River Delta in Viet Nam (2013/2014–2020/2021).

## How has the COVID-19 pandemic affected multidimensional poverty?

The 2020 global MPI report noted that the COVID-19 pandemic could set back progress in poverty

**Figure 7** What deprivations do poor people face?



**Source:** Table 1 at the end of the report.

reduction by 3–10 years.<sup>42</sup> The analysis built on microsimulations informed by data on school closures and food security published by UN agencies in early 2020.<sup>43</sup> Recent estimates suggest that the most pessimistic scenarios are plausible: updated data from the United Nations Educational, Scientific and Cultural Organization show that, on average, students across the globe lost half a year in schooling due to the pandemic—broadly consistent with the earlier simulation result that half of children stopped attending school during the first year of the pandemic.<sup>44</sup> Even where school attendance has swiftly rebounded, the learning process has still been negatively affected in many cases, and some children never went back to school.<sup>45</sup> Furthermore, the most recent data on food insecurity from the World Food Programme suggest that the number of people living in food crisis or worse increased to 193 million in 2021.<sup>46</sup>

### **India: 415 million people exit poverty in 15 years, Multidimensional Poverty Index value and incidence of poverty more than halved**

The reduction in Multidimensional Poverty Index (MPI) value in India was swift across the two most recent periods. MPI estimates based on the

recently released 2019/2021 Demographic and Health Survey for the country show that 415 million people exited poverty between 2005/2006 and 2019/2021—including about 140 million since 2015/2016—and that the country’s MPI value and incidence of poverty were both more than halved (see table 2 at the end of this report). The MPI value fell from 0.283 in 2005/2006 to 0.122 in 2015/2016 to 0.069 in 2019/2021, and the incidence of poverty fell from 55.1 percent to 27.7 percent to 16.4 percent. Sustainable Development Goal target 1.2 is to reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions by 2030, and India’s progress shows that this goal is feasible, even at a large scale.

The effects of the COVID-19 pandemic on poverty India cannot be fully assessed because 71 percent of the data from the 2019/2021 Demographic and Health Survey for the country were collected before the pandemic. But the results are striking, showing a significant reduction in all 10 MPI deprivations among poor people. Still, major challenges remain. The rest of this section presents the latest poverty estimates and trends in poverty reduction, analyses deprivation bundles and briefly reviews the country’s poverty reduction policies.

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## The latest poverty estimates

The 2019/2021 data show that about 16.4 percent of India's population live in poverty, with an average intensity of 42.0 percent. About 4.2 percent of the population live in severe poverty (meaning their deprivation score is 50 percent or higher).<sup>47</sup> About 18.7 percent of people, roughly the same proportion as in 2015/2016, are vulnerable to poverty because their deprivation score ranges from 20 percent to 33 percent. Two-thirds of these people live in a household in which at least one person is deprived in nutrition—a worrying statistic. Based on 2020 population data for India, it has by far the largest number of poor people worldwide (228.9 million), followed by Nigeria (96.7 million projected in 2020).

*Rural disparities are stark.* The percentage of people who are poor is 21.2 percent in rural areas compared with 5.5 percent in urban areas. Rural areas account for nearly 90 percent of poor people: 205 million of the nearly 229 million poor people live in rural areas—making them a clear priority. Only 23 countries covered have a higher proportion of poor people living in rural areas.<sup>48</sup>

*Among poor people, deprivations in cooking fuel and housing are the most common, followed by nutrition and sanitation.* Because deprivations in nutrition have a larger weight ( $\frac{1}{6}$  instead of  $\frac{1}{18}$ ), they contribute by far the most to MPI value—nearly as much as cooking fuel, housing and sanitation combined. Despite progress, India's population remains vulnerable to the mounting effects of the COVID-19 pandemic and to rising food and energy prices. Integrated policies tackling the ongoing nutritional and energy crises should be a priority.

*Children are still the poorest age group.* More than one in five children are poor (21.8 percent) compared with around one in seven adults (13.9 percent). This translates to 97 million poor children.

*India is the only country in South Asia in which poverty is significantly more prevalent among female-headed households than among male-headed households.* About 19.7 percent of people living in female-headed households live in poverty compared with 15.9 percent in

male-headed households. One in seven households is a female-headed household, so around 39 million poor people live in a household headed by a woman. In Mali, where a similar proportion of households are female-headed, there is no statistically significant difference in poverty rates between male- and female-headed households.

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## Trends in poverty reduction

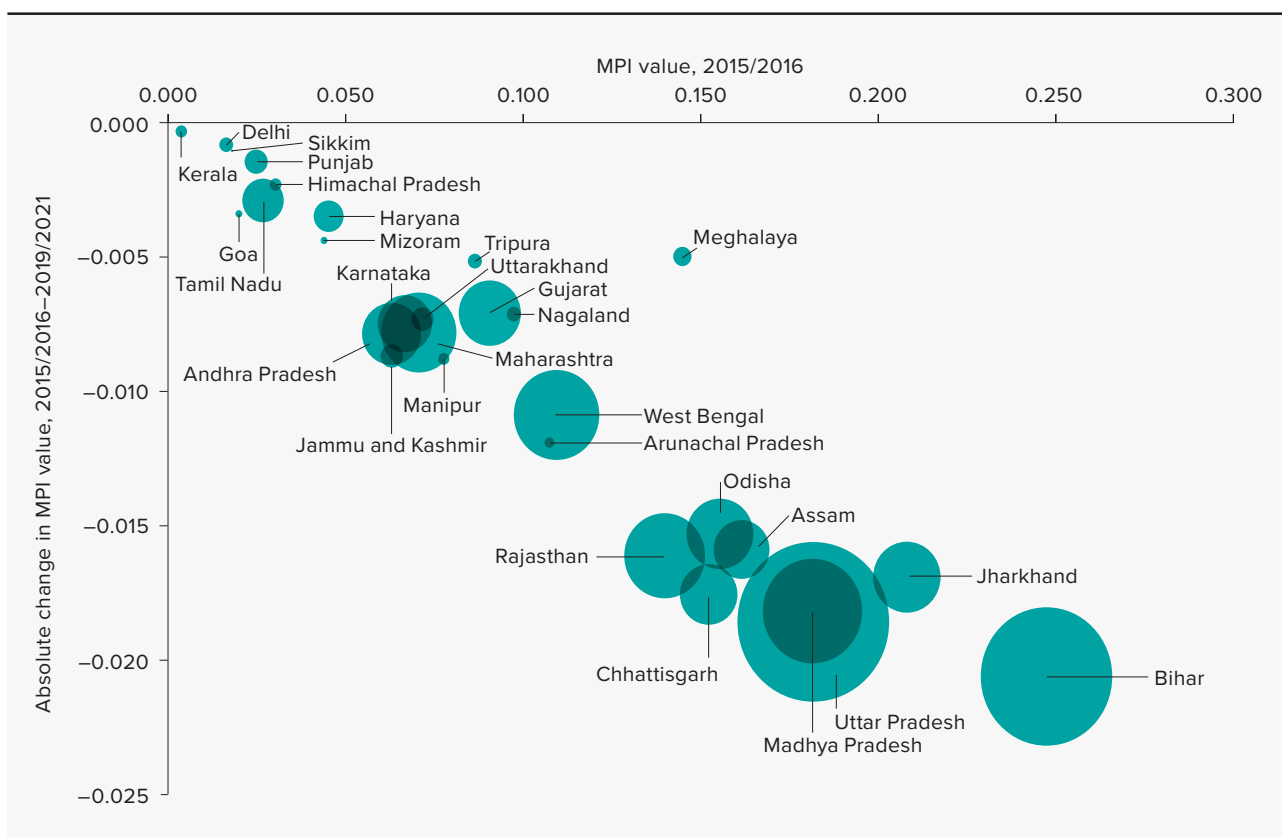
Of the nearly 415 million people who exited poverty in the 15 years prior to the COVID-19 pandemic, roughly 275 million did so between 2005/2006 and 2015/2016<sup>49</sup> and 140 million did so between 2015/2016 and 2019/2021. Deprivations in all 10 MPI indicators saw statistically significant reductions in both periods.

India's reduction in MPI value continued to be poor in absolute terms, as it was from 2005/2006 to 2015/2016. Rural areas were the poorest and saw the fastest reduction in MPI value. The incidence of poverty fell from 36.6 percent in 2015/2016 to 21.2 percent in 2019/2021 in rural areas and from 9.0 percent to 5.5 percent in urban areas. Children, the poorest age group, saw the fastest reduction in MPI value. The incidence of poverty fell from 34.7 percent to 21.8 percent among children and from 24.0 percent to 13.9 percent among adults. Similarly, the poorest caste and religious groups saw the fastest absolute reduction in the recent period.<sup>50</sup> This general pattern continues across the states and union territories (figure 8). Bihar, the poorest state in 2015/2016, saw the fastest reduction in MPI value in absolute terms. The incidence of poverty there fell from 77.4 percent in 2005/2006 to 52.4 percent in 2015/2016 to 34.7 percent in 2019/2021.

It is also essential to scrutinize changes using the relative reduction in poverty—the percentage of the distance to zero poverty covered. Nationally, the relative reduction from 2015/2016 to 2019/21 was faster: 11.9 percent a year compared with 8.1 percent from 2005/2006 to 2015/2016. This is unsurprising because relative poverty reduction is easier to achieve when starting levels of poverty are lower. In relative terms adults covered more distance to zero poverty than children did. Across states and union territories the fastest reduction in relative terms was in Goa,



**Figure 8** The poorest states in India saw the fastest absolute reduction in Multidimensional Poverty Index (MPI) value from 2015/2016 to 2019/2021



**Note:** The size of the bubble is proportional to the number of poor people in 2015/2016.

**Source:** Alkire, Kanagaratnam and Suppa 2022c.

followed by Jammu and Kashmir, Andhra Pradesh, Chhattisgarh and Rajasthan. In relative terms the poorest states have not caught up. Of the 10 poorest states in 2015/2016, only one (West Bengal) was not among the 10 poorest in 2019/2021. The rest—Bihar, Jharkhand, Meghalaya, Madhya Pradesh, Uttar Pradesh, Assam, Odisha, Chhattisgarh and Rajasthan—remain among the 10 poorest.

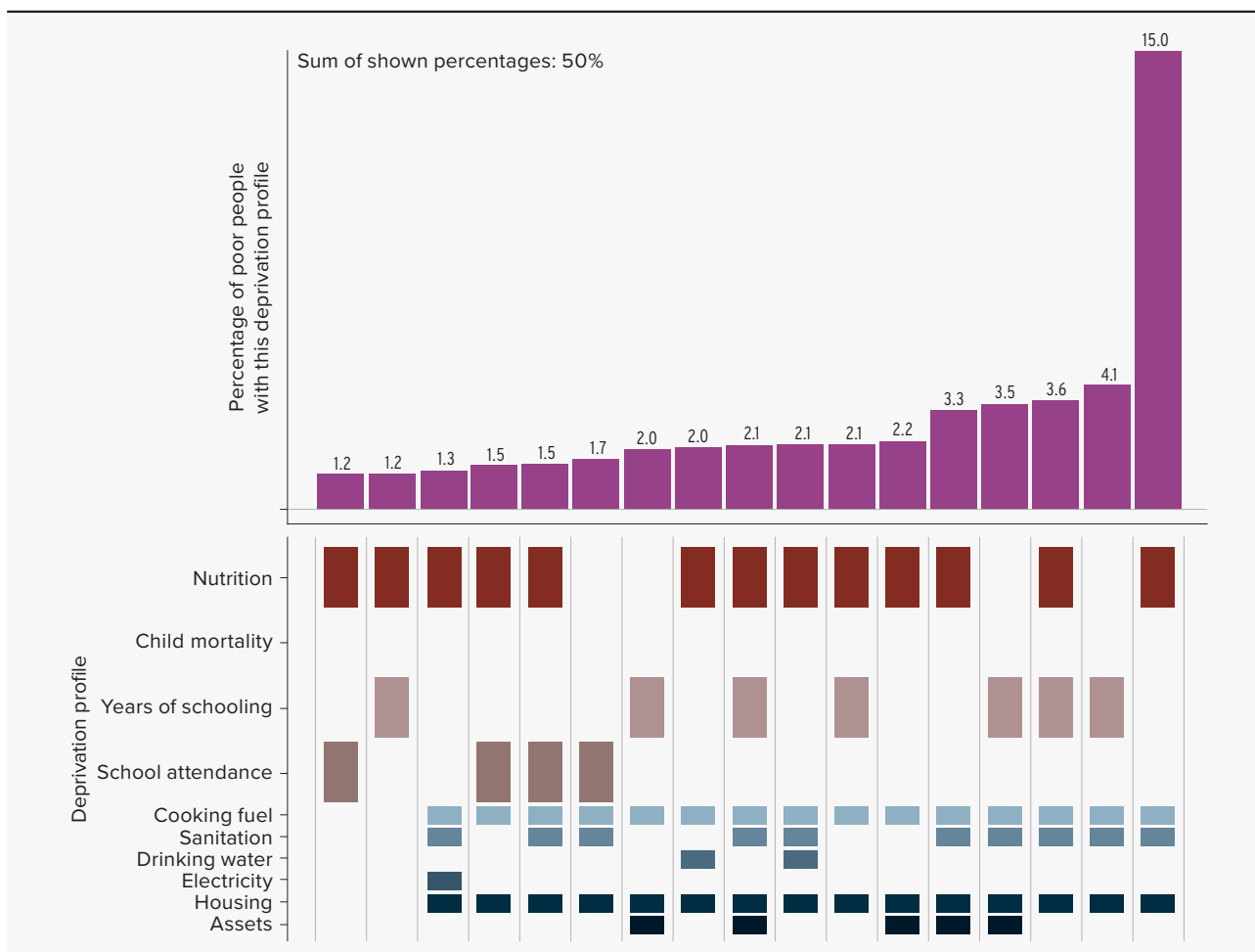
Deprivations in sanitation, cooking fuel and housing fell the most from 2015/2016 to 2019/2021. The share of the population who were poor and deprived in sanitation dropped from 24.4 percent in 2015/2016 to 11.3 percent in 2019/2021. The share of the population who were poor and cooked primarily with wood, dung, charcoal or another solid fuel was nearly halved—from 26.0 percent in 2015/2016 to 13.9 percent in 2019/2021—accompanied by a large reduction in the share of the population who were poor and deprived in electricity—from 8.6 percent to 2.1 percent.

### Deprivation bundles

The most common deprivation profile in India is the same as the most common profile across 111 developing countries: one where people are deprived in nutrition, cooking fuel, sanitation and housing (figure 9). An integrated policy response might include a housing, sanitation and cooking fuel package (nearly 125 million Indians experience deprivation profiles that include those three deprivations) that also ensures households benefit from subsidized food, early childcare centres and midday cooked meals for school children.

Looking at interlinked deprivations subnationally can also be useful. Recall that 90 percent of India's poor people live in rural areas and 10 percent in urban areas, and take school attendance as an example: 1.9 percent of people (8.2 million) in urban areas are poor and living with an out-of-school child compared with 4.8 percent (46.3 million) in rural areas. Who are they? In rural areas 82.4 percent of poor people who are deprived in

**Figure 9** The most common deprivation profiles among poor people in India, 2019/2021



**Note:** Includes the 17 profiles experienced by at least 1 percent of poor people in the country (out of 652 total profiles).

**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

school attendance live in households that are also deprived in housing, and 84.7 percent live in households that are also deprived in cooking fuel, whereas in urban areas the percentages are 45.4 percent and 41.6 percent (figure 10). In both rural and urban areas nutritional deprivation is rampant, with around 60 percent of people experiencing it. Schooling programmes such as the midday cooked meals scheme address some interlinked deprivations affecting out-of-school children while also supporting their educational attainment.

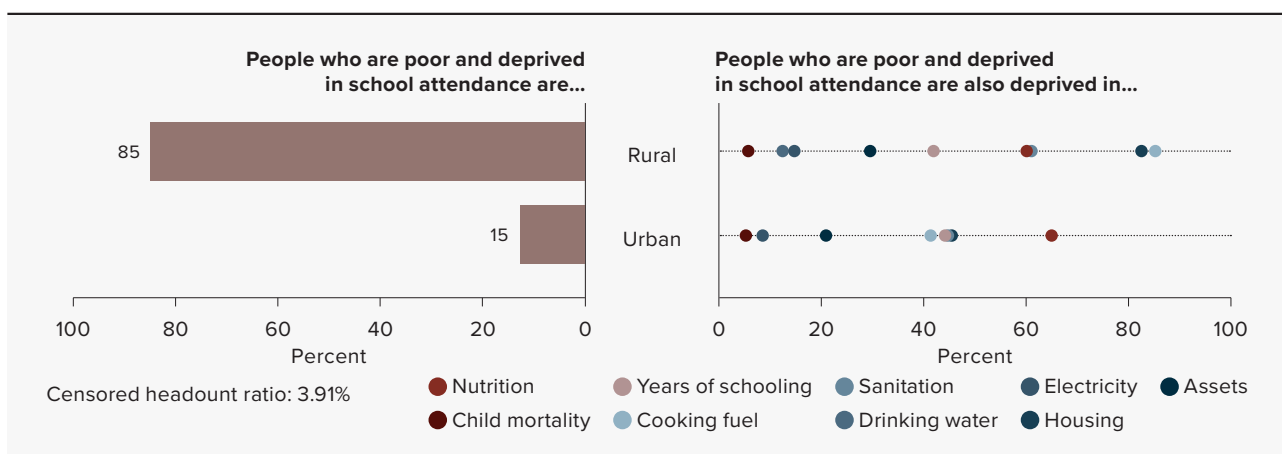
### Poverty reduction policies

The pace and patterns of MPI reduction in India vary across states and union territories. While additional analysis is needed to clarify the drivers of change in

each context, it is clear that multiple policy actions and schemes underpin these results. There have been visible investments in boosting access to sanitation, cooking fuel and electricity—indicators that have seen large improvements. A policy emphasis on universal coverage—for example, in education, nutrition, water, sanitation, employment and housing—likely contributed to these results. But questions remain as to how spending patterns, performance incentives, institutions, nonstate actions, integrated policy packages and local dynamics in each setting drove change. Such studies will benefit many countries seeking to swiftly and massively reduce acute poverty.

India is an important case study for the Sustainable Development Goals, the first of which is to end poverty in all its forms and to reduce at least by half the proportion of men, women and children of all ages living

**Figure 10** Interlinked deprivations with school attendance among poor people in India, 2019/2021



**Source:** Authors' calculations based on Alkire, Nogales and Suppa (2022) and microdata underlying the Multidimensional Poverty Index computations in table 1 at the end of the report.

in poverty in all its dimensions according to national definitions by 2030, all while leaving no one behind. In roughly 15 years, from 2005/06 to 2019/21, the MPI value, the incidence of poverty and deprivations among poor people in the 10 MPI indicators were each more than halved. In terms of leaving no one behind, the poorest groups—states, rural areas and children—saw the fastest progress in absolute terms, although the data do not reflect post-COVID-19 pandemic changes.

Despite tremendous gains, the ongoing task of ending poverty for the 228.9 million poor people in 2019/2021 is daunting—especially as the number has nearly certainly risen since the data were collected. There were still 97 million poor children in India in 2019/21—more than the total number of poor people, children and adults combined, in any other country covered by the global MPI. Yet, these multipronged policy approaches show that integrated interventions can improve the lives of millions of people.

### Call to action: The data revolution risks leaving poverty data behind

To end poverty efficiently and using evidence-based policies, it must be measured regularly. The COVID-19 pandemic made it clearer than ever that data are tied to people's visibility, survival and care<sup>51</sup> and that good data and responsible data governance are essential for evidence-based policymaking. Good data collection requires granularity, regularity, comparability and transparency. With good data, policymakers can identify

emerging policy concerns, inform programme design and policy choices, forecast trends, monitor policy delivery and evaluate programme impact. The irregularity of multitopic household surveys—the main tools of poverty measurement and analysis—hinders the power and potential of the global MPI. Now, at a time when the risk of postpandemic backslides into poverty is the highest in decades, it is time to emphatically raise the alarm on missing data for measuring poverty.

### Where are we now?

After the launch of the Sustainable Development Goals in 2015, the High Level Panel on the Post-2015 Development Agenda called for a data revolution<sup>52</sup>—transformative actions needed to improve data production, collection, usability, diversity and literacy—but did not include improving household surveys among its recommendations. The World Bank's 2021 World Development Report stresses the need for poverty surveys.<sup>53</sup> However, the 2017 Atkinson Report of the Commission on Global Poverty highlighted several issues around quality and coverage of data to measure both multidimensional and monetary poverty that remain unaddressed:

- The country (or territory) not having a regular household survey.
- The survey not being publicly available.
- The survey coverage itself being incomplete.
- Groups being systematically excluded from the sample design.<sup>54</sup>

Furthermore, the need to advance household surveys was also profiled at the first UN World Data Forum in Cape Town, South Africa—the global stage for innovation, partnerships and debate around the development data ecosystem.<sup>55</sup>

Global MPI country data suggest that the data revolution's progress may have bypassed household surveys, despite their being more reliable than phone surveys trialled during the COVID-19 pandemic or private data. The global MPI relies on publicly available household survey datasets that are comparable for developing countries. The two most widely used surveys are Demographic and Health Surveys (DHS) and Multiple Indicators Cluster Surveys (MICS). The US Agency for International Development and the United Nations Children's Fund—in partnership with national statistics offices—produce high-quality data on multiple topics from these surveys, with national and subnational representativeness, without which there would be no global MPI.

A key issue for monitoring poverty is data irregularity. More frequent data are needed to track progress, evaluate policies and ultimately get the information needed to accelerate poverty reduction.

The methodological decision to exclude countries from the global MPI with survey data from before 2010 also means that some countries, such as Djibouti, Somalia and Syrian Arab Republic, are not included in the global MPI estimates.<sup>56</sup> Consistent financing of surveys is needed that can generate comparable, high-quality estimates on poverty and its disaggregation.

Peru provides another practical example of the difficulties in monitoring poverty after the COVID-19 pandemic. Peru replaced the Standard DHS, conducted at the typical five-year interval, with the Continuous DHS, with data collected and reported annually by a permanent office integrated within the national statistical office.<sup>57</sup> The most recent year with data was 2020. Due to the countrywide lockdown, a substantial proportion of households and people were not reached in person during data collection. The nutrition indicator thus included a large proportion of missing values (about 30 percent of eligible women and children), which generated doubts around the accuracy of the estimates. So the 2020 survey could not be used to calculate the country's global MPI value for 2022. It is hoped that the 2021 survey will include the data needed to measure the pandemic's impact on poverty in the country.

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## Where do we need to go?

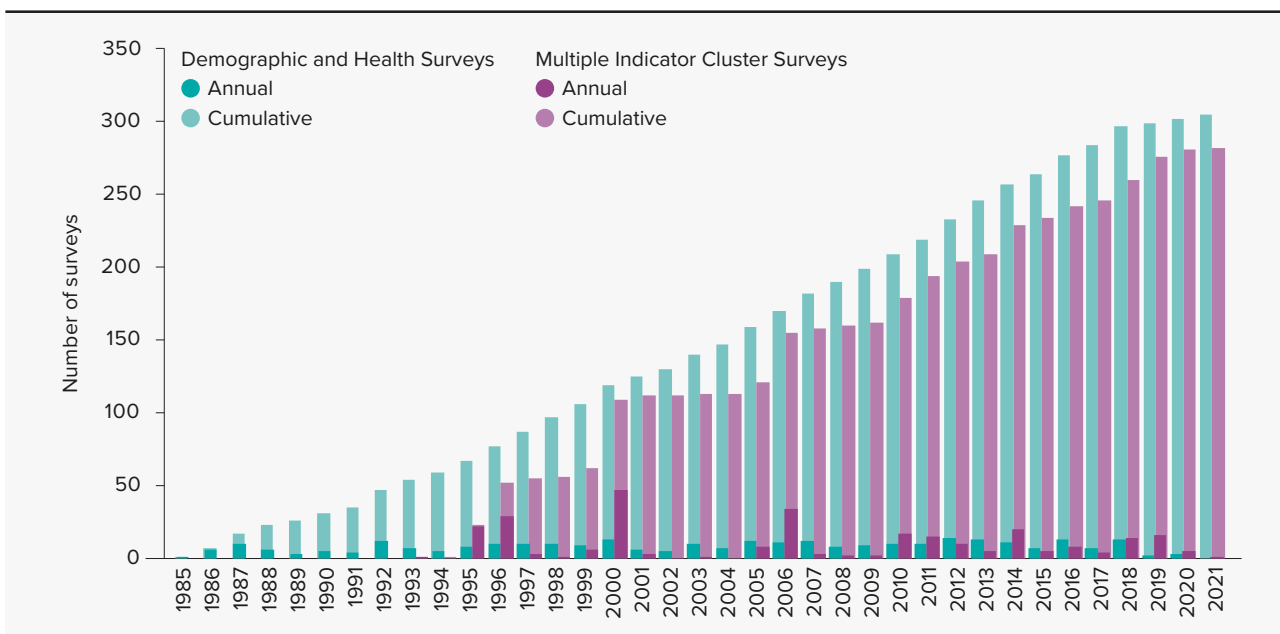
Three key strategies can transform the poverty data landscape:

- Committing funding to ensure the continuation and greater frequency of multitopic household surveys that can be used to estimate multidimensional poverty.
- Supporting capacity building for national statistics offices to gather high-quality poverty data with extensive disaggregation and to cover left-behind groups.
- Including new modules to address missing data on vital topics for poverty, such as work (including informal work), physical insecurity and household health.

The number of DHS and MICS conducted annually has not increased since 2015, despite the post-2015 call for a data revolution (figure 11).<sup>58</sup> Funding should include statistical-capacity training for national statistics offices to empower countries to track their progress in reducing poverty and achieving other Sustainable Development Goals.

Due to limited funding, DHS and MICS also tend to exclude various important topics that poor people themselves identify when asked about their lives. Integrating new modules into household surveys would go a long way to capturing human development and the lived reality of poverty. These include gendered questions on the quality of work (on informal and formal employment and care work, fair treatment and safety hazards), empowerment (on control, coercion and desires in public and private domains), physical safety (on freedom from violence, crime and conflict) and social connection (on shame, humiliation, loneliness and isolation). These need be only short, 8–10 minute modules that can be integrated into national household surveys.<sup>59</sup> Similarly, if and when feasible, the global MPI indicators would benefit from improvements to specifications. Information is lacking on ventilation for cooking fuel and service interruption for electricity and water access. School attendance can be measured but not quality of education. Roughly half of countries have anthropometric nutrition data only for children under age 5. Questions that yield data on these topics in household surveys would empower the global MPI as a measurement and policy tool.

**Figure 11** Number of Demographic and Health Surveys and Multiple Indicator Cluster Surveys conducted annually, 1985–2021



**Note:** Demographic and Health Surveys (DHS) include only Standard DHS and Continuous DHS only. Multiple Indicator Cluster Surveys (MICS) include all rounds, including individual district surveys or settlement or subgroup population surveys. For all DHS and MICS that spanned more than one year, the survey was recorded for the last year—for example, the 2019–2020 Rwanda DHS was counted in 2020. Results for 2020 and 2021 are incomplete, as some surveys are still being processed and have not released final numbers. The figure includes only surveys that have been completed, that were national or country surveys (with two exceptions) and that have a final report or were included in global Multidimensional Poverty Index computations. The exceptions related to national or country surveys are that the 1999 Sudan (South) MICS was included because it now reflects South Sudan, and the 1999 Nigeria DHS was excluded because the DHS Program noted that it “cannot stand behind the quality of this survey.”  
**Source:** Author’s compilation from <http://dhsprogram.org> and <http://mics.unicef.org> (accessed 26 September 2022).

On a positive note, DHS and MICS have introduced modules on physical or development disabilities, and some surveys ask respondents about their ethnicity or the ethnicity of the household head. The character of these surveys reveals the most about people of reproductive age and children under age 5 and less about older children, adolescents and older adults.<sup>60</sup> One survey cannot do everything, but deepening these treasured data sources, where feasible, could have a

huge impact—including by permitting the development of a measure of moderate poverty that could better capture deprivations in less-improverished areas.

At present, the data used to estimate acute poverty for the 50 million poor people in the three poorest countries were collected in 2010 or 2012. Yet data on billionaires are updated every hour<sup>61</sup>—a jarring data inequality. The data revolution should not leave household data on poverty behind.

# Notes and references

## Notes

- 1 UNDP 2022a, 2022b.
- 2 In September 2022 the World Bank released the latest update on people in extreme monetary poverty (World Bank 2022a): 668 million using the \$1.90 a day in 2011 purchasing power parity (PPP) terms poverty line and 648 million using the new \$2.15 a day in 2017 PPP terms poverty line. These figures are for 2019. Most surveys considered for this report on multidimensional poverty collected data during 2016–2019.
- 3 UNDP 2020.
- 4 See <https://www.forbes.com/real-time-billionaires>.
- 5 UNDP and OPHI 2020.
- 6 This is explained in part by India's large population.
- 7 Another way to articulate interlinkages and common deprivation bundles among poor people is to use latent class analysis (a statistical procedure for classifying individual observations into mutually exclusive and exhaustive types) in order to observe patterns of association between deprivations. While these are more complex to interpret, they corroborate profiles already noted (such as the most common bundle) and reveal new core bundles (Alkire, Nogales and Suppa 2022).
- 8 The people with the most common profile (and those with the standard of living profile, discussed later) are poor, but because these deprivations sum to a deprivation score of  $\frac{1}{3}$ —which is also the poverty cutoff ( $k$ )—they are also at the verge of exiting poverty if any one deprivation is eliminated.
- 9 As with the most common profile, the deprivations in this profile (with six indicators) also sum to a deprivation score of just  $\frac{1}{3}$ , so eliminating one deprivation would bring people with this profile out of poverty.
- 10 For detail on electricity deprivation and its interlinkages with the global MPI, see OPHI and Rockefeller Foundation (2021).
- 11 World Bank 2022a.
- 12 Cozzi and others 2020.
- 13 UNDP Ethiopia 2022.
- 14 World Bank 2020a.
- 15 UNDP Ethiopia 2018.
- 16 World Bank 2022a.
- 17 World Bank 2021a.
- 18 Abay and others 2021.
- 19 UNDP Ethiopia 2022.
- 20 Government of Ethiopia 2019.
- 21 Government of Ethiopia 2019.
- 22 World Bank 2020b.
- 23 Government of the Lao People's Democratic Republic 2018.
- 24 Biswas and Das 2022; Gould and Urpelainen 2019.
- 25 Bekele, Rawstorne and Rahman 2020; Fewtrell and others 2005.
- 26 Perin and others 2022.
- 27 Bekele, Rawstorne and Rahman (2020).
- 28 WHO 2020.
- 29 Government of Nepal 2012.
- 30 Government of Nepal 2017.
- 31 USAID 2013.
- 32 WaterAid 2022.
- 33 UNSDG 2019.
- 34 To be precise, if the survey year is weighted by the number of poor people, the average survey year is 2019 for South Asia and 2016/2017 for Sub-Saharan Africa; if weighted by population, the average is 2019/2020 for South Asia and 2017 for Sub-Saharan Africa.
- 35 China is excluded from the analysis by gender of household head because that information was not collected (Alkire, Kanagaratnam and Suppa 2022b).
- 36 All changes refer to absolute reductions (the simple difference in poverty levels between two periods) that are significant at the  $p < .05$  level.
- 37 The 20 fastest countries are Bangladesh, Plurinational State of Bolivia, Cambodia, Congo, Côte d'Ivoire, Ethiopia, Gambia, Guinea, India, Lao People's Democratic Republic, Liberia, Malawi, Mali, Mozambique, Nepal, Nicaragua, Sao Tome and Principe, Sierra Leone, Timor-Leste and Togo.
- 38 The 26 countries are Bangladesh, Plurinational State of Bolivia, Ecuador, Kingdom of Eswatini, Ethiopia, Gabon, Guinea, Honduras, India, Indonesia, Iraq, Kenya, Lao People's Democratic Republic, Lesotho, Malawi, Mongolia, Morocco, Mozambique, Nicaragua, Niger, Sao Tome and Principe, Sierra Leone, Timor-Leste, Togo, Viet Nam and Zambia.
- 39 This occurred in 23 countries: Armenia, Benin, Burkina Faso, Cameroon, Gambia, Guinea, Guinea-Bissau, Guyana, Jordan, Mauritania, Mexico, Republic of Moldova, Montenegro, North Macedonia, Peru, State of Palestine, Senegal, Serbia, Suriname, Thailand, Togo, Turkmenistan and Ukraine.
- 40 This occurred in 19 countries: Central African Republic, Colombia, Democratic Republic of the Congo, Cote d'Ivoire, Dominican Republic, Ethiopia, Gabon, Gambia, Ghana, Guinea, Madagascar, Malawi, Mali, Mozambique, Niger, Rwanda, Sierra Leone, United Republic of Tanzania and Uganda.
- 41 The Sub-Saharan African countries are Burundi, Central African Republic, Democratic Republic of the Congo, Ethiopia, Gambia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Senegal, United Republic of Tanzania and Zambia, and the Arab States country is Sudan.
- 42 See Alkire and others (2021) for the underlying analysis.
- 43 See <https://covid19.uis.unesco.org/global-monitoring-school-closures-covid19/> for school attendance data and <https://www.wfp.org/publications/global-report-food-crises-2022> for data on food insecurity.
- 44 Patrinos, Vegas and Carter-Rau 2022.
- 45 See, for example, Chatterji and Li (2021) and Zulaika and others (2022).
- 46 The World Food Programme (WFP 2021) reported 135 million people in food crisis or worse in 2020.
- 47 Using a destitution measure that has precisely the same structure as the global MPI but applies extreme deprivation cutoffs for each indicator (Alkire, Kanagaratnam, and Suppa 2020) shows that 5.2 percent of poor people, nearly one-third of all poor people, are destitute.
- 48 The 23 countries are Afghanistan, Armenia, Belize, Bhutan, Plurinational State of Bolivia, Burundi, Cambodia, Kingdom of Eswatini, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Malawi, Mali, Myanmar, Nicaragua, Niger, Papua New Guinea, Rwanda, Serbia, Sri Lanka, Tonga, Uganda and Zimbabwe.
- 49 The 2018 and 2019 editions of this report estimated that more than 270 million exited poverty from 2005/2006 to 2015/2016. This value was based on population estimates from the 2017 revision of the United Nations Department of Economic and Social Affairs' *World Population Prospects* (UNDESA 2017). The higher value presented here (275 million) is based on updated population estimates from the 2022 revision of *World Population Prospects* (UNDESA 2022).
- 50 See Alkire, Oldiges and Kanagaratnam (2022) and UNDP and OPHI (2021).
- 51 Milan and Treré 2020.
- 52 UN Data Revolution 2022.

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53 World Bank 2021b.

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54 World Bank 2017. Excluded population groups may include people experiencing homelessness (adults and children), institutionalized individuals (those in care homes, hospitals, prison, school dormitories, military compounds and refugee camps), nomadic and pastoralist groups, difficult-to-reach groups (people living in fragile or disjointed households, urban informal settlements and insecure or isolated areas), people who are stateless or in transit

between states, people who live with disabilities, and lesbian, gay, bisexual, transgender, queer and other sexual and gender minority populations. See also Carr-Hill (2013).

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55 See objective 3.1 of the Cape Town Global Action Plan: Strengthen and expand household survey programmes (Global Data Forum 2021).

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56 The latest data for Djibouti and Somalia are from their respective 2006 Multiple Indicator Cluster Surveys, and the latest data for Syrian

Arab Republic are from the 2009 Pan Arab Project for Family Health survey.

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57 Rutstein and Way 2014.

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58 Croft and others 2018.

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59 See <https://ophi.org.uk/research/missing-dimensions/survey-modules> for sample modules.

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60 Data2x 2020.

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61 See <https://www.forbes.com/real-time-billionaires>.



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# Statistical tables





TABLE 1

Notes	Definitions	Main data sources
a Not all indicators were available for all countries, so caution should be used in cross-country comparisons. When an indicator is missing, weights of available indicators are adjusted to total 100 percent. See <i>Technical note 5</i> at <a href="http://hdr.undp.org/sites/default/files/mpi2022_technical_notes.pdf">http://hdr.undp.org/sites/default/files/mpi2022_technical_notes.pdf</a> and <i>Methodological Note 52</i> at <a href="https://ophi.org.uk/mpi-methodological-note-52/">https://ophi.org.uk/mpi-methodological-note-52/</a> for details.	<b>Multidimensional Poverty Index:</b> Proportion of the population that is multidimensionally poor adjusted by the intensity of the deprivations. See <i>Technical note 5</i> at <a href="http://hdr.undp.org/sites/default/files/mpi2022_technical_notes.pdf">http://hdr.undp.org/sites/default/files/mpi2022_technical_notes.pdf</a> and <i>Methodological Note 52</i> at <a href="https://ophi.org.uk/mpi-methodological-note-52/">https://ophi.org.uk/mpi-methodological-note-52/</a> for details on how the Multidimensional Poverty Index is calculated.	<b>Column 1:</b> Refers to the year and the survey whose data were used to calculate the country's Multidimensional Poverty Index value and its components.
b <i>D</i> indicates data from Demographic and Health Surveys, <i>M</i> indicates data from Multiple Indicator Cluster Surveys, <i>N</i> indicates data from national surveys and <i>P</i> indicates data from Pan Arab Population and Family Health Surveys (see <a href="http://hdr.undp.org/en/mpi-2022-faq">http://hdr.undp.org/en/mpi-2022-faq</a> and <i>Methodological Note 52</i> at <a href="https://ophi.org.uk/mpi-methodological-note-52/">https://ophi.org.uk/mpi-methodological-note-52/</a> for the list of national surveys).	<b>Multidimensional poverty headcount:</b> Population with a deprivation score of at least 33.3 percent. It is expressed as a share of the population in the survey year, the number of multidimensionally poor people in the survey year and the projected number of multidimensionally poor people in 2020.	<b>Columns 2–12:</b> HDRO and OPHI calculations based on data on household deprivations in health, education and standard of living from various household surveys listed in column 1 using the methodology described in <i>Technical note 5</i> (available at <a href="http://hdr.undp.org/sites/default/files/mpi2022_technical_notes.pdf">http://hdr.undp.org/sites/default/files/mpi2022_technical_notes.pdf</a> ) and <i>Methodological Note 52</i> at <a href="https://ophi.org.uk/mpi-methodological-note-52/">https://ophi.org.uk/mpi-methodological-note-52/</a> . Columns 4 and 5 also use population data from United Nations Department of Economic and Social Affairs. 2022. <i>World Population Prospects: The 2022 Revision</i> . New York. <a href="https://esa.un.org/unpd/wpp/">https://esa.un.org/unpd/wpp/</a> . Accessed 7 August 2022.
c Data refer to the most recent year available during the period specified.	<b>Intensity of deprivation of multidimensional poverty:</b> Average deprivation score experienced by people in multidimensional poverty.	<b>Columns 13 and 14:</b> World Bank. 2022. World Development Indicators database. Washington, DC. <a href="http://data.worldbank.org">http://data.worldbank.org</a> . Accessed 7 August 2022.
d Missing indicator on nutrition.	<b>Inequality among the poor:</b> Variance of individual deprivation scores of poor people. It is calculated by subtracting the deprivation score of each multidimensionally poor person from the intensity, squaring the differences and dividing the sum of the weighted squares by the number of multidimensionally poor people.	
e Value is not reported because it is based on a small number of multidimensionally poor people.	<b>Population in severe multidimensional poverty:</b> Percentage of the population in severe multidimensional poverty—that is, those with a deprivation score of 50 percent or more.	
f Urban areas only.	<b>Population vulnerable to multidimensional poverty:</b> Percentage of the population at risk of suffering multiple deprivations—that is, those with a deprivation score of 20–33.3 percent.	
g Considers child deaths that occurred at any time because the survey did not collect the date of child deaths.	<b>Contribution of deprivation in dimension to overall multidimensional poverty:</b> Percentage of the Multidimensional Poverty Index attributed to deprivations in each dimension.	
h Revised estimate from the 2020 MPI.	<b>Population living below national poverty line:</b> Percentage of the population living below the national poverty line, which is the poverty line deemed appropriate for a country by its authorities. National estimates are based on population-weighted subgroup estimates from household surveys.	
i Captures only deaths of children under age 5 who died in the last five years and deaths of children ages 12–18 years who died in the last two years.	<b>Population living below PPP \$1.90 a day:</b> Percentage of the population living below the international poverty line of \$1.90 (in 2011 purchasing power parity [PPP] terms) a day.	
j Missing indicator on cooking fuel.		
k Missing indicator on child mortality.		
l Indicator on sanitation follows the national classification in which pit latrine with slab is considered unimproved.		
m Following the national report, latrines are considered an improved source for the sanitation indicator.		
n Because of the high proportion of children excluded from nutrition indicators due to measurements not being taken, estimates based on the 2019 Serbia Multiple Indicator Cluster Survey should be interpreted with caution. The unweighted sample size used for the multidimensional poverty calculation is 82.8 percent.		
o Missing indicator on school attendance.		
p The methodology was adjusted to account for missing indicator on nutrition and incomplete indicator on child mortality (the survey did not collect the date of child deaths).		
q Based on the version of data accessed on 7 June 2016.		
r Given the information available in the data, child mortality was constructed based on deaths that occurred between surveys—that is, between 2012 and 2014. Child deaths reported by an adult man in the household were taken into account because the date of death was reported.		
s Missing indicator on housing.		









TABLE 2

Country	Year and survey <sup>b</sup>	Multidimensional Poverty Index <sup>a</sup> Value	Population in multidimensional poverty		People who are multidimensionally poor and deprived in each indicator										
			Headcount		Intensity of deprivation	Nutrition	Child mortality	Years of schooling	School attendance	Cooking fuel	Sanitation	Drinking water	Electricity	Housing	Assets
			(thousands)	(%)											
			In survey year	(%)											
Togo	2017 M <sup>f</sup>	0.213	43.0	3,373 <sup>c</sup>	49.6	18.3	17.7	19.3	11.3	42.5	40.7	24.7	33.0	27.7	15.5
Tunisia	2011/2012 M	0.006	1.4	154 <sup>c</sup>	40.0	0.6	0.2	1.1	0.5	0.2	0.7	0.7	0.2	0.1	0.6
Tunisia	2018 M	0.003	0.8	94 <sup>c</sup>	36.5	0.4 <sup>d</sup>	0.1	0.7 <sup>d</sup>	0.4 <sup>d</sup>	0.0 <sup>d</sup>	0.2	0.2	0.0	0.1 <sup>d</sup>	0.1
Turkmenistan	2006 M <sup>g</sup>	0.012	3.3	161 <sup>c</sup>	37.8	2.1	2.6	0.0	1.3	..	0.4	1.1	0.0	1.1	0.8
Turkmenistan	2015/2016 M <sup>h,k</sup>	0.004	1.1	63 <sup>c</sup>	34.9	0.9	1.0	0.0 <sup>d</sup>	0.2	..	0.1 <sup>d</sup>	0.0	0.0 <sup>d</sup>	0.0	0.0
Turkmenistan	2019 M <sup>h,k</sup>	0.003 <sup>d</sup>	0.9 <sup>d</sup>	58 <sup>c</sup>	33.6 <sup>d</sup>	0.9 <sup>d</sup>	0.9 <sup>d</sup>	0.0	0.2 <sup>d</sup>	..	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>
Uganda	2011 D	0.349	67.7	22,550 <sup>c</sup>	51.5	42.2	9.7	29.3	15.2	67.3	60.3	51.4	66.4	61.9	31.9
Uganda	2016 D	0.281	57.2	22,157 <sup>c</sup>	49.2	35.1	5.3	22.6	13.8 <sup>d</sup>	56.9	50.4	41.9	50.2	49.7	26.4
Ukraine	2007 D <sup>i</sup>	0.001	0.4	165	36.4	..	0.3	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1
Ukraine	2012 M <sup>j</sup>	0.001	0.2 <sup>d</sup>	107	34.5	..	0.2 <sup>d</sup>	0.1 <sup>d</sup>	0.1 <sup>d</sup>	0.1 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>
Viet Nam	2013/2014 M <sup>l</sup>	0.019	4.9	4,495	39.3	..	0.9	3.6	1.4	4.5	4.1	1.3	0.4	3.1	1.2
Viet Nam	2020/2021 M <sup>l</sup>	0.008	1.9	1,871	40.3 <sup>d</sup>	..	0.5	1.3	0.6	1.5	1.3	0.5	0.1	1.2	0.6
Zambia	2007 D <sup>e</sup>	0.343	65.2	8,082 <sup>c</sup>	52.7	36.6	9.3	18.7	30.7	64.1	58.3	51.4	63.0	55.6	39.8
Zambia	2013/2014 D <sup>e</sup>	0.263	53.3	8,388 <sup>c</sup>	49.3	31.3	6.4	13.7	21.8	53.0	45.0	35.4	50.6	44.2	25.2
Zambia	2018 D	0.232	47.9	8,544 <sup>c</sup>	48.4	25.7	4.2	12.0 <sup>d</sup>	22.8 <sup>d</sup>	47.6	37.7	28.6	44.5	40.2 <sup>d</sup>	24.3 <sup>d</sup>
Zimbabwe	2010/2011 D <sup>e</sup>	0.156	36.1	4,702 <sup>c</sup>	43.3	18.8	4.2	4.4	8.1	35.5	29.6	23.7	34.3	26.8	25.0
Zimbabwe	2015 D <sup>e</sup>	0.130	30.2	4,276 <sup>c</sup>	43.0 <sup>d</sup>	16.7	3.7 <sup>d</sup>	4.1 <sup>d</sup>	5.9	29.7	24.5	21.7 <sup>d</sup>	29.4	20.9	16.5
Zimbabwe	2019 M	0.110	25.8	3,962 <sup>c</sup>	42.6 <sup>d</sup>	12.3	3.2 <sup>d</sup>	3.5 <sup>d</sup>	7.8	25.2	21.4	19.8 <sup>d</sup>	19.3	16.4	15.0 <sup>d</sup>

## Notes

Suggested citation: Alkire, S., Kanagaratnam, U., and Suppa, N. 2022. "A Methodological Note on the Global Multidimensional Poverty Index (MPI) 2022 Changes over Time Results for 84 countries." OPHI MPI Methodological Note 54, Oxford Poverty and Human Development Initiative, University of Oxford, Oxford, UK. This paper has a section on each country detailing the harmonization decisions on each dataset. More extensive data tables, including disaggregated information, are available at <https://www.ophi.org.uk>.

- a When an indicator is missing, weights of available indicators are adjusted to total 100 percent. See *Technical note 5* at [http://hdr.undp.org/sites/default/files/mipi2022\\_technical\\_notes.pdf](http://hdr.undp.org/sites/default/files/mipi2022_technical_notes.pdf) and *OPHI MPI Methodological Note 52* and *OPHI MPI Methodological Note 54* at <https://ophi.org.uk/publications/mipi-methodological-notes/> for details.
- b D indicates data from Demographic and Health Surveys, M indicates data from Multiple Indicator Cluster Surveys, P indicates data from Pan Arab Population and Family Health Surveys and N indicates data from national surveys.
- c The number of poor people differs from previously published estimates due to updated population data.
- d The difference between the harmonized estimates for this survey year and for the previous survey year is not statistically significant at the 95 percent confidence interval.

e At least one other survey collected data on child nutrition only; in order to harmonize the data for trends, data on adult nutrition from this survey were omitted from the calculations. Typically, Demographic and Health Surveys collect data on child and adult nutrition, while Multiple Indicator Cluster Surveys collect data on child nutrition only.

f Considers child deaths that occurred at any time because the survey at one or all points in time did not collect data on the date of child deaths.

g Missing indicator on child mortality.

h Based on the version of data accessed on 7 June 2016.

i Missing indicator on housing.

j Missing indicator on nutrition.

k Missing indicator on cooking fuel.

l Missing indicator on electricity.

m Indicator on sanitation follows the national classification in which pit latrine with slab is considered unimproved.

n Missing indicator on school attendance.

## Definitions

**Multidimensional Poverty Index:** Proportion of the population that is multidimensionally poor adjusted by the intensity of the deprivations. See *Technical note 5* at [http://hdr.undp.org/sites/default/files/mipi2022\\_technical\\_notes.pdf](http://hdr.undp.org/sites/default/files/mipi2022_technical_notes.pdf) and *OPHI MPI Methodological Note 52* and *OPHI MPI Methodological*

*Note 54* at <https://ophi.org.uk/publications/mipi-methodological-notes/> for details on how the Multidimensional Poverty Index is calculated.

**Multidimensional poverty headcount:** Population with a deprivation score of at least 33.3 percent. It is expressed as a share of the population in the survey year and the number of poor people in the survey year.

**Intensity of deprivation of multidimensional poverty:** Average deprivation score experienced by people in multidimensional poverty.

**People who are multidimensionally poor and deprived in each indicator:** Percentage of the population that is multidimensionally poor and deprived in the given indicator (censored headcount).

## Main data sources

**Column 1:** Refers to the year and the survey whose data were used to calculate the country's MPI value and its components.

**Columns 2–15:** Data and methodology are described in Alkire, S., Kanagaratnam, U., and Suppa, N. 2022. "A Methodological Note on the Global Multidimensional Poverty Index (MPI) 2022 Changes over Time Results for 84 countries." OPHI MPI Methodological Note 54, Oxford Poverty and Human Development Initiative, University of Oxford, Oxford, UK. Column 5 also uses population data from United Nations Department of Economic and Social Affairs. 2022. *World Population Prospects: The 2022 Revision*. New York. <https://esa.un.org/unpd/wpp/>. Accessed 7 August 2022.

## Human story



Fanja\* is 59 years old and lives in a town of 5,000 people in eastern Madagascar. The town is situated on the outskirts of a forest and national park. The park is globally renowned for its lemur population. Fanja's household comprises two sons (ages 39 and 16) and a grandson (age 12). Fanja and her family live in a house with a metallic roof with mud and wattle walls and a beaten earth floor. Due to the dense rainforest surrounding the town, it rains a lot, and the roof leaks. It also gets very cold; for warmth the family huddles around their wood cook stove in the evenings. They do not have a toilet and instead use the bushes close to the house. They draw water from one of the abundant natural streams that flow from the forested hills near their home. For lighting they use kerosene lanterns and candles. The house is not connected to electricity, even though the village is connected to the main grid.

Fanja became the head of the family in 2001 after her husband died. She moved in with her sister's family in 2017 after her own house was destroyed by Tropical Cyclone Ava. She tried to reconstruct the house shortly afterward, but the unfinished structure was destroyed in 2020 during Tropical Storm Chalane.

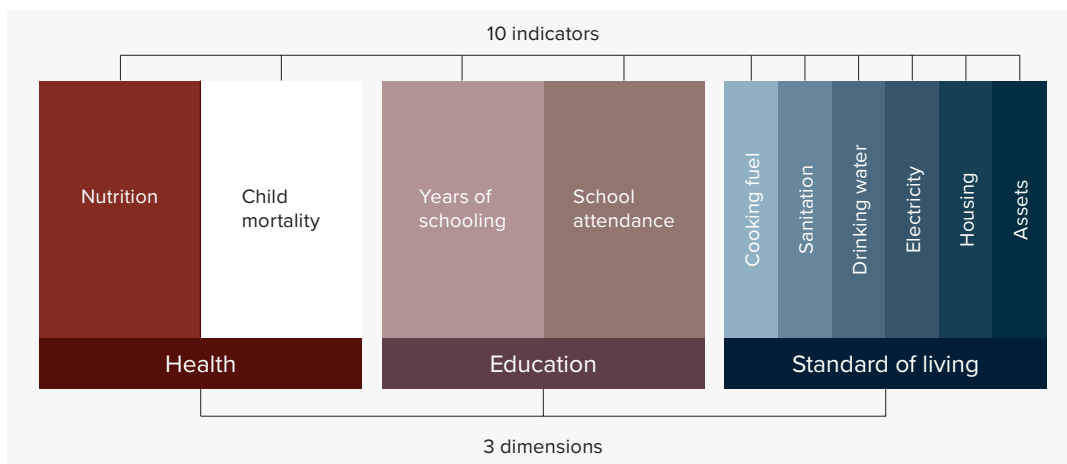
For work Fanja crushes large rocks into gravel by hand using a mallet—a job she has done daily since she was 25. Crushing gravel starts with carrying rocks from the top of a steep hill near the house.

On each trip Fanja carries rocks weighing up to 20 kilograms. This takes about an hour round trip. Fanja used to make five trips a day, but at her current age she manages up to three. Each trip generates roughly one bag of gravel that usually sells for 2,000 ariary (50 cents). However, sometimes Fanja will accept less than 2,000 ariary just to get money to buy food. Fanja would willingly accept less strenuous work but admits her prospects are very low because she never went beyond reading and writing classes in school. Her older son started school but dropped out in the third year of primary education and now works as a night guard in town, where he earns 100,000 ariary (\$25) a month plus supper on most nights. He also spends part of his day helping his mother crush rocks. During their holidays Fanja's grandson and younger son join her in crushing rocks to raise money for their school fees. Her younger son is currently in the sixth year of primary education at the local public school. Her grandson is in the third year of primary education, but the family has been unable to raise enough money for him to start school again in September.

Given her advancing age, Fanja worries that she may not be able to manage the physicality of gravel making for much longer. Her work does not guarantee secure access to food, and the family plot of land is too small to support their food needs. They often have to share a single ration among them.

Fanja and her family are considered multidimensionally poor because they are deprived in nine indicators, which translates into a deprivation score of 83.3 percent. Furthermore, they are living in severe multidimensional poverty because their deprivation score is higher than 50 percent.

*\* Some details have been changed.*

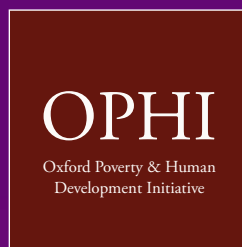


**Note:** Indicators in white refer to a nondeprivation.



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