Children's Multidimensional Poverty: Disaggregating the global MPI

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With the adoption of the Sustainable Development Goals (SDGs), the international community affirmed the importance of eradicating child poverty, identifying within Goal 1 the need to reduce the proportion of men, women and children living in multidimensional poverty. The international definition of a child, also used here, is anyone less than 18 years of age.
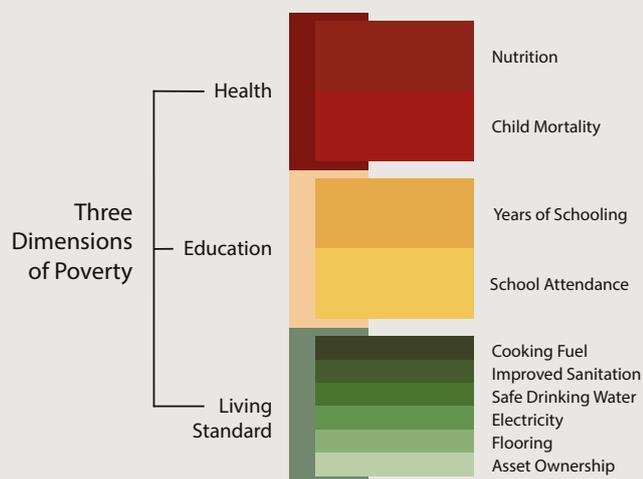
This briefing disaggregates the 2017 global Multidimensional Poverty Index (global MPI) by age group to analyze the particular situation of 1.8 billion children who live in 103 countries.[1] The findings are striking – and deeply troubling:

- Half of all multidimensionally poor people – 48% – are children.

- Nearly two out of every five children – 37% – are multidimensionally poor. This means 689 million children are living in multidimensional poverty.

- Eighty-seven percent of these 689 million poor children are growing up in South Asia and in Sub-Saharan Africa – roughly equal numbers in each region. Half of South Asia's children and two-thirds of Sub-Saharan children are multidimensionally poor.

- Global MPI estimates are higher for children than for adults for all 103 countries. Children are also deprived in more indicators at the same time; they are deprived in 52% of the MPI's weighted indicators on average.

- In 36 countries, including India, at least half of all children are MPI poor. In Ethiopia, Niger and South Sudan over 90% of children are MPI poor.

- Half of the MPI poor children live in 'alert' level fragile states, and child poverty levels are the highest in the worst of the fragile states.

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The global MPI reflects children's deprivation

- The global MPI is an index of acute multidimensional poverty that measures the nature and magnitude of overlapping deprivations in health, education and living standard at the household level.

Three Dimensions of Poverty

Health
- Nutrition
- Child Mortality

Education
- Years of Schooling
- School Attendance

Living Standard
- Cooking Fuel
- Improved Sanitation
- Safe Drinking Water
- Electricity
- Flooring
- Asset Ownership

- A person is identified as multidimensionally poor (or 'MPI poor') if he or she lives in a household deprived in at least one third of the weighted MPI indicators.

- The MPI includes indicators of children's achievements such as school attendance and nutrition. It includes indicators that affect children's life chances, such as adequate sanitation, safe water, flooring and clean cooking fuel. And it reflects household features that shape children's lives, such as whether a child has died and whether anyone has five years of schooling.

- The MPI is calculated by multiplying the incidence of poverty by the intensity of poverty across the poor. It reflects both the share of people in poverty and the degree to which they are deprived.

- The MPI can be disaggregated by population subgroups to show the composition of poverty within and among groups. It can also be broken down to see which deprivations contribute more to poverty in different groups.

- This briefing disaggregates the global MPI and shows the level and composition of poverty for children under 18 years of age. A child is identified as poor if he or she lives in an MPI poor household. Children are compared to adults aged 18 and above.

Child-specific MPIs: Going further inside the household

The Alkire-Foster method, used in the global MPI, can also be used to define a Child MPI. In Child MPIs, each child is identified as poor or non-poor based on the age-specific overlapping deprivations he or she experiences personally[2]. For example, the education indicators could include cognitive development for children 0–2, preschool or stimulating activities for 3–5, school attendance for those 6–14, and not being in education, employment, or training for people aged 15 and above. Child MPIs are disaggregated by age and gender and are analyzed to see whether all children in a household are poor and whether poor children live in households that are poor according to the global MPI or a nationally defined MPI. They are broken down by indicator to shape policy responses. While many national Child MPIs are being designed, data are not available to compute a global Child MPI that can be compared across 100 countries.

South Asia and Sub-Saharan Africa are home to 84% of poor children

Most of the 689 million poor children – 87% of them – live in South Asia (44%) or Sub-Saharan Africa (43%). This is the result of two factors. First, these two regions are home to 57% of the children in our sample. Second and disturbingly, the incidence of poverty among children is about 66% in Sub-Saharan Africa and 50% in South Asia, much higher than in any other part of the globe. The region with the third highest incidence are the Arab States with 23% of children living in poverty.
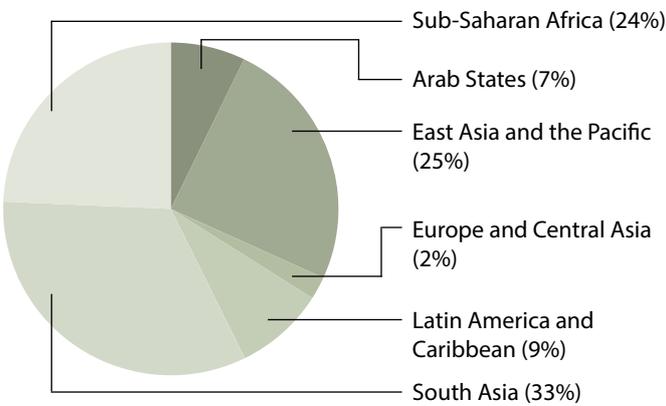
These findings contrast sharply with those of the World Bank, which found that poverty rates in South Asia were much less than half those of Sub-Saharan Africa. By the $1.90/day measure, 20% of children in South Asia are income poor as compared to 49% of children in Sub-Saharan Africa in their sample of 89 countries. While Sub-Saharan Africa has the highest share of income poor children, we find roughly the same share of multidimensionally poor children in South Asia too. So South Asia as well as Sub-Saharan Africa needs to be squarely the focus of proactive child poverty interventions.

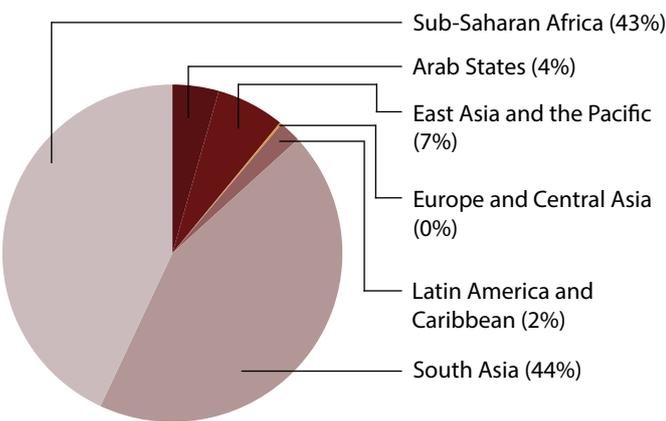### Nearly half of all poor people are children

If we focus on the number of poor people, nearly half – 48% – of all poor people are children.

Fig. 1. Distribution of child population and distribution of poor children across regions

DISTRIBUTION OF CHILDREN POPULATION

Sub-Saharan Africa (24%)
Arab States (7%)
East Asia and the Pacific (25%)
Europe and Central Asia (2%)
Latin America and Caribbean (9%)
South Asia (33%)

DISTRIBUTION OF POOR CHILDREN

Sub-Saharan Africa (43%)
Arab States (4%)
East Asia and the Pacific (7%)
Europe and Central Asia (0%)
Latin America and Caribbean (2%)
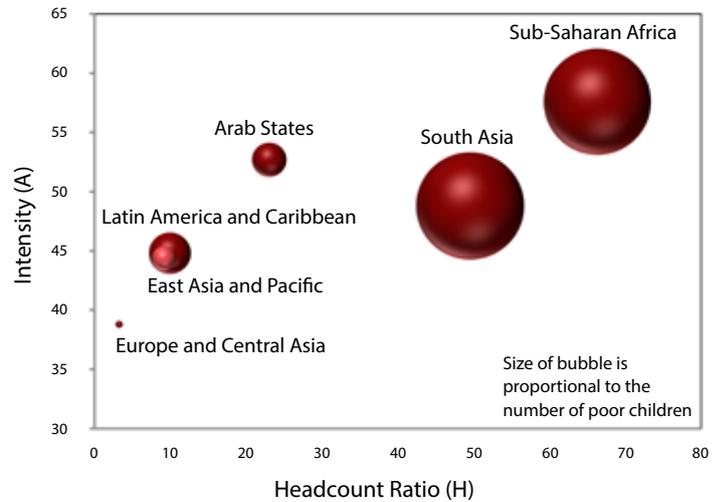South Asia (44%)

In terms of countries, fully 31% of the 689 million poor children live in India, followed by Nigeria (8%), Ethiopia (7%) and Pakistan (6%). Of these four countries, Ethiopia is especially over-represented since it is home to only 3% of children, but its share of poor children is more than twice that.

How poor are the children?

In our sample, poor children are on average deprived in 52% of the weighted indicators, as opposed to 48% of the indicators for adults.

The region with the highest level of intensity of poverty is Sub-Saharan Africa, where poor children are simultaneously deprived on average in 58% of the indicators. In Burkina Faso and Ethiopia, the intensity of poverty among children is 66% and 67%, the equivalent of two dimensions. Niger is the country where poor children on average experience the highest share of deprivations, 69%.

Fig. 2. Incidence and intensity of child poverty by region

The region with the second highest level of intensity of poverty are the Arab States (53%), driven by the situation of children in Somalia (65%) and Sudan (55%), followed by South Asia where children are on average deprived in 49% of the weighted indicators.

Half of poor children live in alert level fragile States

Fully 35 countries included in the global MPI are coded as 'alert', 'high alert', or 'very high alert' on the Index of Fragile States 2016.[3] And half (50%) of all 689 million MPI poor children live in these states. Furthermore, the level of child poverty rises across the categories of states from stable to warning to alert. For example, among alert and high alert states, around 54% of children are poor, but in high alert states – where one in ten MPI poor children live – it's 68%.

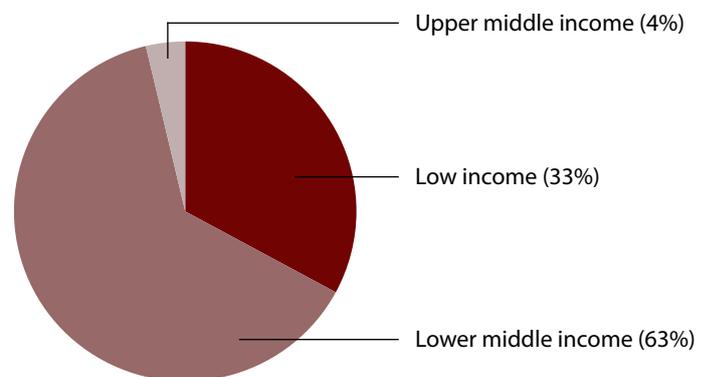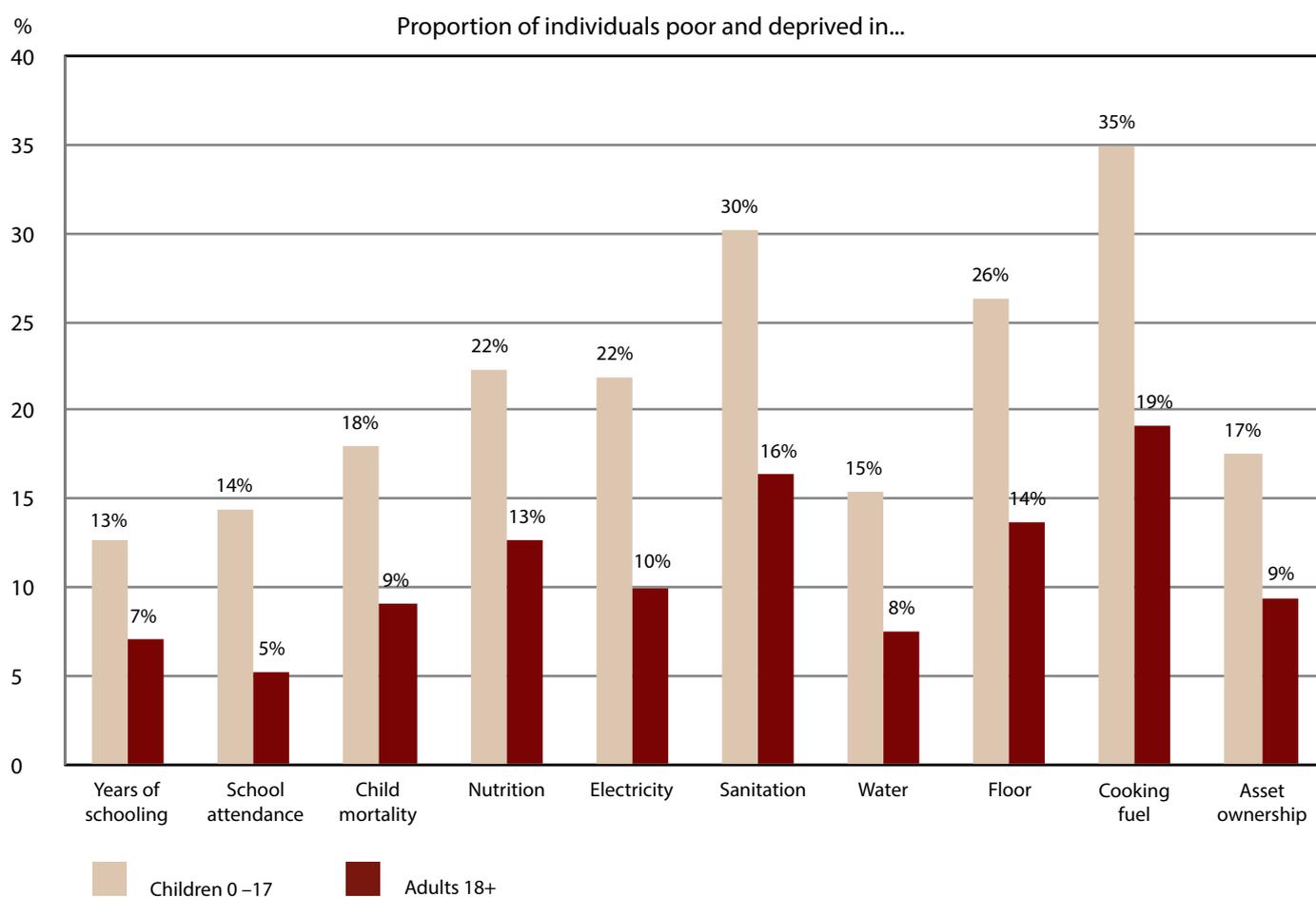## Fig. 3. Distribution of poor children by income category

Upper middle income (4%)
Low income (33%)
Lower middle income (63%)

Fig. 4. Percentage of children and adults who are poor and deprived in each MPI Indicator

Proportion of individuals poor and deprived in...

Children 0–17   Adults 18+

Over two-thirds of poor children live in middle income countries

Thirty-three percent of poor children live in low income countries, despite the fact that these countries are home to only 17% of the children in our sample, and the highest child poverty levels are in low income countries. Still, the majority of poor children – over two-thirds – pass their childhood in middle income countries.

Children's multidimensional poverty rates are two-thirds higher than adults'

Children are more afflicted by poverty, both in terms of incidence and intensity, than adults. Thirty-seven percent of children are MPI poor, compared to 21% of adults.

In all 103 countries analyzed, the MPI among children is higher than the MPI among adults, and the difference between the two figures is statistically significant in 82 countries.

In 19 out of our 103 countries, representing 41% of our sample, the estimated headcount ratio for children is at least 10 percentage points higher than the estimated headcount ratio for adults. The differences in the incidence of poverty are highest for Sudan, Djibouti and Laos.

As Figure 4 shows, a higher proportion of children are poor and deprived in each of the ten indicators than adults. For three indicators, more than 25% of the children in the 103 countries are poor and live in households deprived in the specific indicator. These are cooking fuel (35%), sanitation (30%) and flooring (26%).

One possible reason why multidimensional poverty is higher among children than adults might be because some indicators included in the global MPI reflect children's status. Households with no children are automatically non-deprived in school attendance (17% of the weighted indicators). Because

nutrition includes child and adult situations, data permitting, households with no children also have a lower probability of being deprived in nutrition (17% of the weighted indicators). Thus, households identified as poor are more likely to have children. However as we demonstrated earlier, the global MPI results are stable to different specifications and may reflect multidimensional poverty overall (Alkire and Santos, 2014).[4]

Higher Child poverty across all demographic structures

Children under 18 make up varying proportions of the national population - from 17% in the Ukraine to 61% in Niger. So to what extent are our child poverty findings driven by demographic patterns?

Across our countries, children constitute 34% of the total population – but 48% of the poor. So across varied demographic structures, children are over-represented among the poor. In general, countries with a higher incidence of poverty among children also tend to have a larger proportion of children in the population. Yet there is also a lot of variation. In at least 12 countries, children make up exactly half of the population. But MPI poverty rates in those countries vary from 14% to 71%. Similarly, when 40% of the population are children, between zero to 46% of children are poor.

Younger children are the poorest

Children aged between 0 and 9 years of age are poorest according to the MPI. This implies a need for policy action to fight the deprivations that set in when children are young, especially deprivations in nutrition and education that may affect them all their lives.

Fig. 5. Proportion of children in the population and level of multidimensional poverty
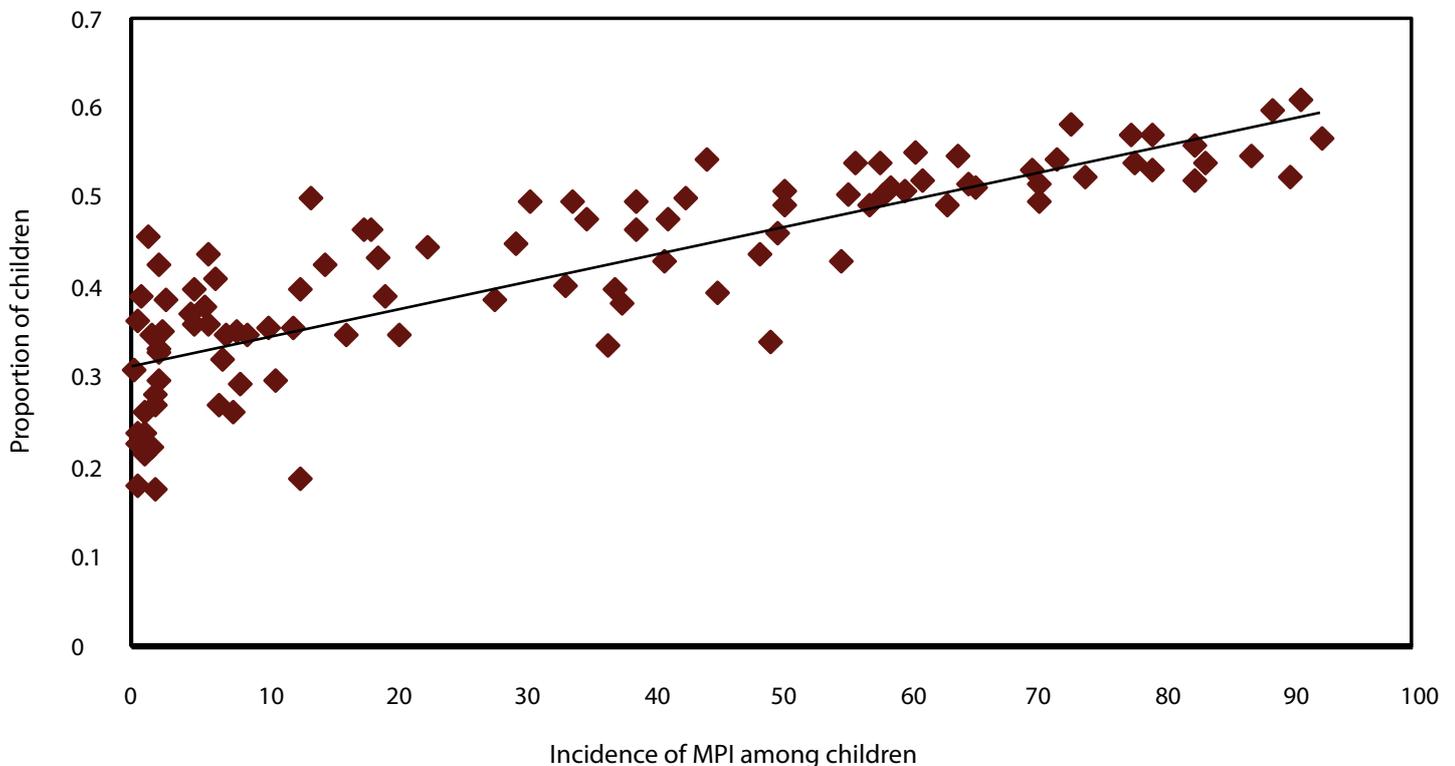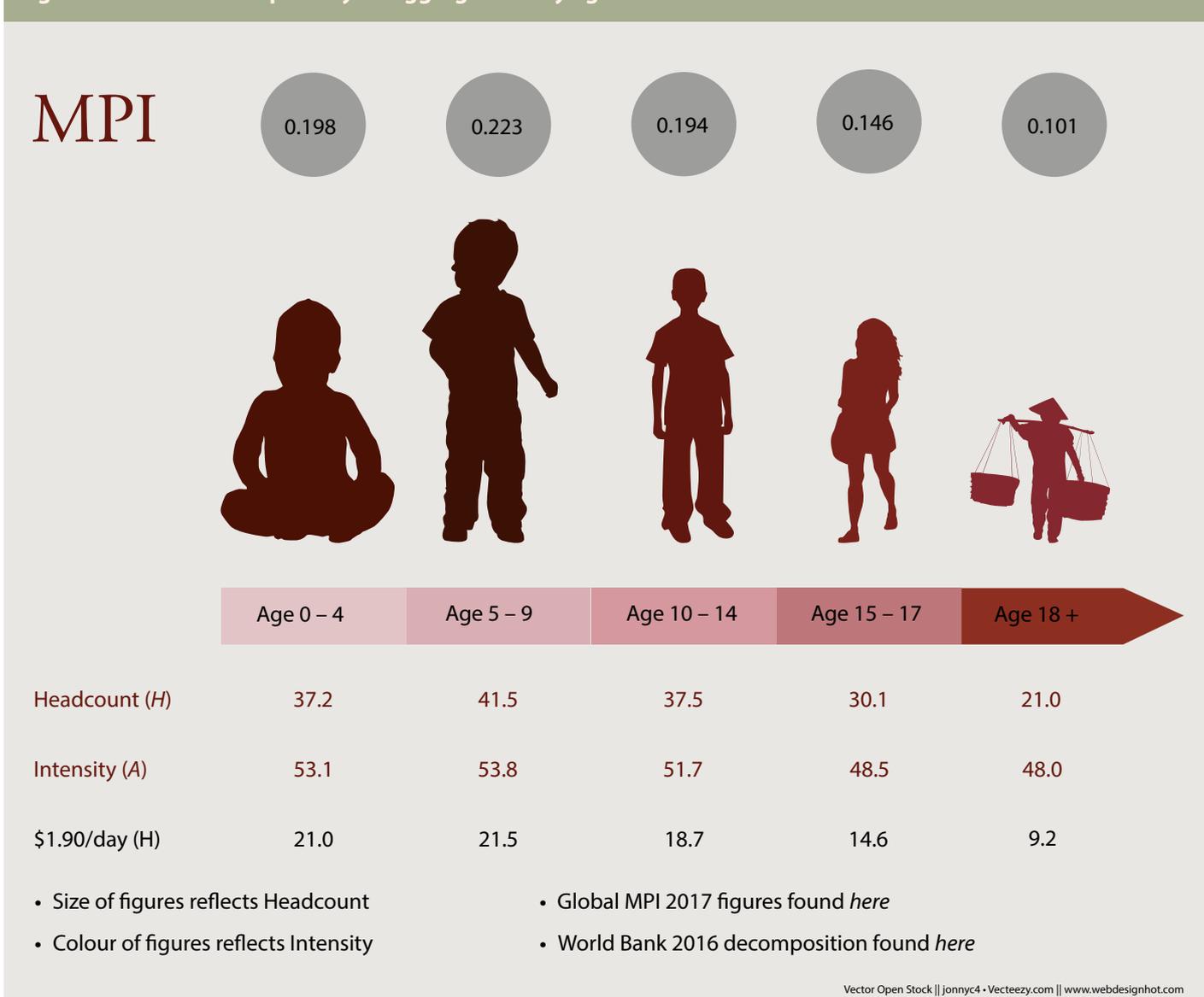
Fig. 6. MPI and income poverty disaggregations by age cohorts for children and adults

	Age 0 – 4	Age 5 – 9	Age 10 – 14	Age 15 – 17	Age 18 +
	0.198	0.223	0.194	0.146	0.101
Headcount (*H*)	37.2	41.5	37.5	30.1	21.0
Intensity (*A*)	53.1	53.8	51.7	48.5	48.0
$1.90/day (H)	21.0	21.5	18.7	14.6	9.2

- Size of figures reflects Headcount
- Colour of figures reflects Intensity
- Global MPI 2017 figures found *here*
- World Bank 2016 decomposition found *here*

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NOTES

[1] Tables available *here*. Figures in this briefing consistently refer to our MPI estimates conducted using the sample of 103 countries having data 2006–2016. The sample covers 5.4 billion persons or 76% of the world's population, and 92% of people living in low and middle income countries. Most of the populations are covered in East Asia and the Pacific (95% of the population), South Asia (94%) and Sub-Saharan Africa (96%). Population figures are aggregated using 2013 population data.

[2] See the Child MPI developed by Bhutan's National Statistics Bureau. Available *here*.

[3] The classification is based on the 2016 numbers of the Fragile State Index published by The Fund for Peace. *Link* (accessed on 08.05.2017).

[4] The DHS and MICS surveys used for the global MPI do not focus on women above 49 years of age or men above 59 years of age. So an MPI that reflects the distinctive characteristics of elder persons' poverty requires different datasets.

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Poverty profile: Mari, Ecuador

Mari lives with her family in a small town about a one hour drive on a dirt road west of Cañar, Ecuador.

Mari, aged 10, is one of five children, of which four survive. She has a little brother aged 4, and two older sisters aged 16 and 17. All children have gone to school, and Mari is in 5th grade at a bilingual school.

Her family cultivates the land around their house for food but do not produce enough to sell, as they do not own much land. Her parents both go out to find work on other farms. But this is highly irregular. When they do work, they make about US$10–US$15 a day. In good times they find work about one week every month. The best estimate of the family income is US$675 a year.

Water, from a hose on an outside patio, is a short walk away, and Mari often helps by bringing it in. Mari lives in a house made of block with a dirt floor. She is interested in cooking and watches her mother in an outside kitchen. They cook with wood in a small rudimentary fireplace, but smoke does get in her eyes sometimes. Health care for children like Mari is now free at a health clinic in Shuya.

Mari's house, like her life, is simple. It does not have a TV or radio or any electrical appliance. Naturally, they do not own a car or even a bicycle. The family is raising two head of cattle and two pigs for food although they are not in the best of health. She is especially fond of the family rooster and three hens. Mari is very quiet and shy, but from time to time a winning smile bursts through.

Mari is poor according to the global MPI. The non-coloured boxes in the graphic show the deprivations she and her family face.
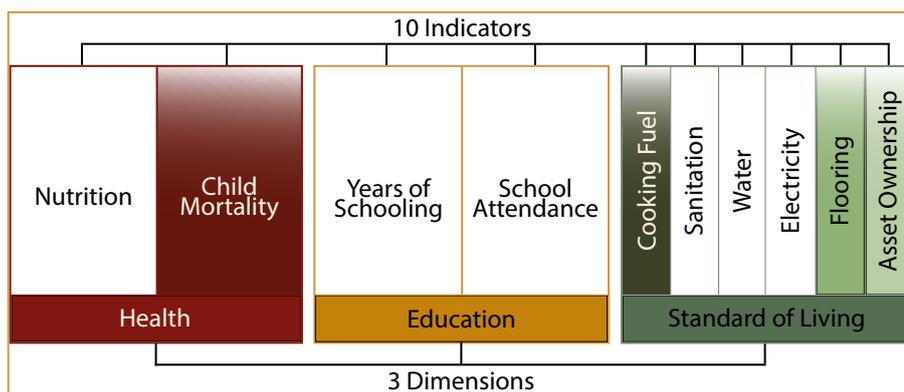
KEY FINDINGS FROM THE GLOBAL MPI 2017

- A total of 1.45 billion people from 103 countries are multidimensionally poor; about 26.5% of the people living in these countries.

- Forty-eight percent of the poor people live in South Asia, and 36% in Sub-Saharan Africa.

- Most Most MPI poor people – 72% – live in middle income countries.

- Nearly half of all MPI poor people are destitute – 706 million – and so experience extreme deprivations like severe malnutrition in at least one-third of the indicators.

- In Uganda, 22% of people live in a household where one member experiences severe disability, and MPI in these households is higher (76% vs 69%). Disability disaggregation will be common in the future as data will be available in DHS and MICS surveys.

- Disaggregated analysis of the MPI is available for 988 subnational regions. The poorest regions in the world are in Chad, Burkina Faso, Niger, Ethiopia, South Sudan, Nigeria, Uganda, and Afghanistan. Inside Afghanistan poverty rates vary from 25% in Kabul to 95% in Urozgan.

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