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EXPLORING MULTIDIMENSIONAL POVERTY ACROSS IsDB MEMBER COUNTRIES IN ASIA USING THE GLOBAL MPI

Islamic Development Bank Institute Oxford Poverty and Human Development Initiative



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Exploring multidimensional poverty across IsDB Member Countries in Asia using the global MPI

IsDBI–OPHI Brief No. 4 October 2021

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FOREWORD

The COVID-19 pandemic has reversed the gains made in the fight against poverty, battering both lives and livelihoods, and leading to millions of people across the world falling back into poverty. Lockdowns and other interventions have brought about a global economic standstill, resulting in job and income losses, particularly among people living in poverty, many of whom are informally employed in vulnerable sectors. As economic activities recover, we face a widening inequality gap in a post-COVID-19 world.

Given that one in three people in Islamic Development Bank (IsDB) Member Countries tend to live in multidimensional poverty, fighting poverty has been and will always be at the core of the strategies and policies of IsDB.

The COVID-19 pandemic has further compelled us as a development institution to strengthen our efforts to ensure a more inclusive recovery in our Member Countries. At IsDB, we believe it is imperative that nobody is left behind. Our emphasis on inclusive growth is embedded in our response to COVID-19, the IsDB Group Strategic Preparedness and Response Programme (SPRP), which focuses on '3 Rs' - Respond, Restore, and Restart. The SPRP has been developed in line with the IsDB's President's Five-year Program (P5P), which aims to make us more proactively engage with Member Countries through 'better understanding their unique development challenges, stimulating the private sector, and making markets work for development' to provide the much-needed impetus to foster sustainable and inclusive growth.

The path towards post-pandemic inclusive recovery must start with an understanding of the lived experiences of poor people. Together with the Oxford Poverty and Human Development Initiative (OPHI), we are publishing a series of briefs that go beyond assessing poverty through a monetary lens to offer a more comprehensive story of the different deprivations of people living in poverty in our Member Countries. By providing datadriven evidence, these briefs can contribute towards the formulation of well-targeted interventions and efficient mobilization of resources to have a larger impact on the lives of poor people.



We have less than a decade to achieve the Sustainable Development Goals (SDGs), but economic recovery remains mired with uncertainties. At this crossroads, we have an opportunity to make a difference in the trajectory of poverty reduction and help end poverty in all its forms and dimensions. Further reversals in the global fight against poverty can be prevented through evidencebased, innovative solutions centred on creating an equal society for all. We can forge a new path and create a better world.

Let us act collectively and be relentless in our pursuit of uplifting the everyday lives of poor people.

Dr Bandar M.H. Hajjar Chairman, Islamic Development Bank Group

PREFACE

Poverty is conventionally measured in terms of income, with people often considered poor if their incomes fall below a certain monetary threshold. However, poverty comes in many forms. People living in poverty are often deprived in various non-monetary dimensions, from health, education, access to basic utilities, ownership of assets, to housing.

Therefore, uplifting the lives of poor people in our Member Countries while protecting them from current and future crises requires a more holistic perspective of poverty – one that addresses the different deprivations that people can face. Such an undertaking will enhance poverty-related interventions by multilateral institutions, including the Islamic Development Bank (IsDB) Group.

It is with this in mind that the IsDB Institute rekindled its partnership with the Oxford Poverty and Human Development Initiative (OPHI). IsDB and OPHI have collaborated since 2013 in a number of areas, most recently in 2016 on the Multidimensional Poverty Assessment in IsDB Sub-Saharan African Member Countries. We are building on the success of our previous collaborations to help strengthen IsDB Group's evidencebased policies and interventions in our Member Countries.

As part of this collaboration, the IsDB Institute and OPHI are publishing a series of briefs exploring different dimensions related to multidimensional poverty in IsDB

Dr Sami Al-Suwailem

Acting Director General, IsDB Institute and Chief Economist, IsDB Group

Member Countries. This brief, focusing on the Asia region, moves away from standard income poverty assessments and explores multidimensional poverty in seven IsDB Member Countries for which data are available. It brings to light multidimensional poverty as experienced at the national and subnational levels, providing a basis by which IsDB country programmes and government policies can be crafted. The brief highlights the nuances of countries' multidimensional poverty situations through a systematic analytical framework, bringing out, for example, variations across sub-regions, between urban and rural populations, and across age groups.

This brief also tracks and highlights success stories, such as in Bangladesh, which made exemplary progress in reducing multidimensional poverty. Doing so serves as a motivation for policymakers and development institutions that reducing poverty remains possible, despite high initial levels of poverty and other challenges.

We hope that this brief provides insights into how and where we, in the development community, should focus our efforts towards achieving a more inclusive and balanced post-COVID-19 world.

Together, we can build a better future.

Dr Sabina Alkire

Director, Oxford Poverty and Human Development Initiative (OPHI)

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INTRODUCTION

The ongoing COVID-19 pandemic has changed people's lives in diverse and unexpected ways. The global progress in poverty reduction delivered in the last two decades must be reassessed now that the COVID-19 crisis has put many of these gains at stake. To salvage these gains, policymakers must invest in targeted, evidence-driven interventions to build back better. This brief analyses the most recent and up-to-date trends in multidimensional poverty among the Member Countries of the Islamic Development Bank (IsDB) in the Asia region prior to the pandemic, which is essential for both understanding the progress made in the past and for use as a benchmark for the future.

The global Multidimensional Poverty Index (MPI) is a measure co-designed by OPHI and UNDP that reflects the multiple deprivations of those unable to reach minimum standards in the dimensions of health, education, and living standards. It measures acute poverty (Alkire, Kanagaratnam, and Suppa, 2020) using 10 indicators grouped into the three equally weighted dimensions (Figure 1).

The global MPI has been estimated annually for over 100 countries in developing regions since its launch in 2010. For 2020, the global MPI covers 107 countries worldwide (Alkire, Kanagaratnam, and Suppa, 2020), including 7 of the 10 IsDB Member Countries in the Asia region. The data come from international surveys such as the Multiple Indicator Cluster Surveys (MICS) and the Demographic and Health Surveys (DHS). In 2020, trends in the global MPI over time were launched for 80 countries with a combined population of five billion people, using two rounds of recent, comparable cross-sectional data (Alkire, Kovesdi, et al., 2020). Trends are available for six of the seven Asia IsDB Member Countries with global MPI 2020 data. For the intertemporal trends, the first year of analysis ranges between 2006 to 2014, while the second year ranges from 2014 to 2019, with an average difference between periods of around 6 years.

Figure 1. The global MPI structure



© Oxford Poverty and Human Development Initiative Source: OPHI 2018.

A BRIEF INTRODUCTION TO THE ALKIRE-FOSTER METHOD

The MPI conveys information regarding both the incidence and the intensity of poverty. The incidence of poverty is the proportion of people who are identified as poor. This is the proportion of the population experiencing multiple and simultaneous deprivations and is denoted by H, which stands for headcount ratio. The intensity of poverty is the average proportion of (weighted) deprivations poor people experience and is denoted by A. The MPI is the product of both and can be simply obtained by the interaction of the incidence of poverty and the intensity of poverty: MPI = H x A.

Source: Alkire and Foster (2011).

1. KEY FINDINGS ON MULTIDIMENSIONAL POVERTY

The analysis in this section is based on the global MPI 2020 data (Alkire, Kanagaratnam and Suppa, 2020).¹ It provides multidimensional poverty data for seven IsDB Member Countries in the Asia region,² using household surveys between 2015 and 2019. These countries, using 2018 population data (UNDESA, 2019), are home to almost 469 million people.

Analysis across these Member Countries shows the following key findings:

- Around 50 million people (10.7% of the total) are living in multidimensional poverty.
- One in four people in Bangladesh are poor.
- In four of the seven countries, less than 1% of the population are living in multidimensional poverty.
- Bangladesh (39 million) has the largest number of people who are poor, followed by Indonesia (9 million) and Tajikistan (678,000).
- In 2 of the 78 subnational regions, both in Bangladesh, over one-third of the population are multidimensionally poor, whereas in seven subnational regions, in Kazakhstan and Kyrgyzstan, no multidimensional poverty is reported at all.
- Eighty-five per cent of people who are poor live in rural areas.
- Children under the age of 18 make up one-third (34%) of the total population, and a greater share (40%) of those who are poor.
- Over 10% of the total number of multidimensionally poor people living in IsDB Member Countries live in these seven countries in Asia, with Bangladesh housing nearly 8 out of every 10 poor people in the IsDB Asia region.
- All six countries for which we have trend analyses reduced their global MPI significantly in absolute terms.
- Even with population growth recorded for all countries across the time periods, all six countries reduced the number of poor people.

 Multidimensional poverty trends do not match monetary poverty trends in US\$1.90 a day headcount trends and GNI per capita growth, suggesting different drivers.

1.1 COUNTRY PERFORMANCES: KEY NATIONAL STATISTICS

Three key statistics are used in analysing multidimensional poverty. The first is the incidence or headcount ratio of poverty (known as H), which is the percentage of people who are multidimensionally poor. The second is the intensity of poverty (known as A), which reflects the average share of weighted deprivations that poor people experience. Lastly, the MPI or adjusted headcount ratio (calculated as a product of H and A) reflects the deprivations experienced by poor people as a percentage of the total deprivations that would be experienced if all people were deprived in all indicators. Table 1 provides these statistics for the 15 IsDB Member Countries.

The levels and patterns of multidimensional poverty vary markedly among the Asia region. Bangladesh has the highest MPI, headcount ratio, and average intensity, with 24.6% of its 161 million population living in multidimensional poverty, experiencing, on average, 42.2% of the weighted deprivations. Tajikistan follows, with 7.4% of its 9 million population living in multidimensional poverty, then Indonesia, with 3.6% of its population of 267 million. Bangladesh and Indonesia together account for over 49 million multidimensionally poor people, over 98% of all poor people in the IsDB Asia Member Countries. Maldives accounts for less than 0.001%, with only 4,000 people identified as MPI poor. In four (Kazakhstan, Kyrgyzstan, Maldives, and Turkmenistan) of the seven countries, less than 1% of the population are MPI poor, compared with nearly one-quarter of Bangladesh's population.

Looking at the censored headcount ratios, which measure the percentage of people who are poor and deprived in each of the given indicators of the global MPI,³ Figure 2 shows that the Bangladeshi population sees the greatest deprivations in 8 of the 10 indicators – with 9.5% poor

Table 1. Multidimensional poverty in IsDB Asia Member Countries

Country	MPI da	ta source		Mu	ltidimensional	poverty		Populati	on 2018
			N (MPI	1PI = H*A)	F	ł	A	Total population ^a	Number of MPI-poor people ^b
	Survey	Year	Range 0 to 1	Standard error	% population	Standard error	Average % of weighted deprivations	Thousands	Thousands
Bangladesh	MICS	2019	0.104	0.002	24.64	0.32	42.23	161,377	39,764
Indonesia	DHS	2017	0.014	0.001	3.62	0.15	38.71	267,671	9,687
Kazakhstan	MICS	2015	0.002	0.001	0.45	0.14	35.56	18,320	83
Kyrgyzstan	MICS	2018	0.001	0.001	0.39	0.15	36.28	6,304	25
Maldives	DHS	2016/17	0.003	0.001	0.77	0.18	34.38	516	4
Tajikistan	DHS	2017	0.029	0.002	7.44	0.51	38.96	9,101	678
Turkmenistan	MICS	2015/16	0.001	0	0.4	0.12	36.08	5,851	24

Notes: MPI Multidimensional Poverty Index.

- H Headcount ratio: population in multidimensional poverty.
- A Intensity of deprivation among poor people.
- a UNDESA (2019). Data accessed 28 April 2020.
- **b** Own calculations based on the MPI results and population projection from the year of 2018. This was computed by multiplying the headcount by the population of 2018, and rounding to the nearest thousand.

Source: Alkire, Kanagaratnam, and Suppa (2020).







Figure 3. Percentage contributions by MPI indicator for IsDB Asia Member Countries

and deprived in nutrition, 16.7% in years of schooling, 6.8% in school attendance, 23.3% in cooking fuel, 15.6% in sanitation, 4.6% in electricity, 23.3% in housing, and 16.1% in assets. Tajikistan's population sees the greatest deprivations in the remaining two indicators: 2.1% in child mortality and 3.6% in drinking water.

The levels of poverty within the countries differ greatly by indicator, as well as among the countries overall. In Bangladesh, while 23.3% of its population are MPI poor and deprived in cooking fuel, only 1.3% are MPI poor and deprived in child mortality. Similarly, 0.5% of Kazakhstan's population are MPI poor and deprived in nutrition, but none are MPI poor and deprived in sanitation. Figure 3 presents the percentage contributions of each of the indicators for the seven countries. The indicators driving poverty are years of schooling in Bangladesh, child mortality in Indonesia, and malnutrition in Kazakhstan, Kyrgyzstan, Maldives, Tajikistan, and Turkmenistan. The contributions of different weighted indicators vary widely across the countries, although overall, the health dimension contributes the most to the MPI for Kazakhstan, Kyrgyzstan, Maldives, Tajikistan, and Turkmenistan, while the living standards dimension contributes the most to the MPI in Bangladesh and Indonesia.



Figure 4. Uncensored headcount ratios of MPI indicators in IsDB Asia Member Countries

The variation among the countries is also evident in the uncensored headcount ratios, the percentage of the population who are deprived in each of the 10 indicators,⁴ shown in Figure 4. Bangladesh sees the greatest deprivation deprived in years of schooling, 81.4% in cooking fuel, 35.7% in sanitation, 7.8% in electricity, 70.3% in housing, and 29.5% in assets. Kyrgyzstan's population sees the greatest deprivation in nutrition (29.7%), whereas Kazakhstan's population sees the greatest deprivations in child mortality (6.3%). Tajikistan's population sees the greatest deprivations in the remaining two indicators: 11.4% in school attendance and 25.9% in drinking water.

These uncensored headcount ratios are important because even countries with low MPI scores – such as Kyrgyzstan (with an MPI of only 0.001) – record nearly one-third of people deprived in nutrition. Similarly, Maldives also reports a low overall MPI (0.003), but over a quarter of its population are deprived in cooking fuel.

1.2 COUNTRY PERFORMANCES: SUBNATIONAL STATISTICS

A key feature of the MPI is that it can be broken down and analysed by a number of variables, in order to inform policy directed at poverty reduction or eradication. One such variable is subnational region. Global MPI data at the regional level exists for six of the seven IsDB Asia Member Countries, excluding Maldives. Of the 78 subnational regions in the six countries, two – Mymensingh and Sylhet in Bangladesh – report over one-third of their population as MPI poor, and Barishal, also in Bangladesh, reports over one-quarter of its population as MPI poor. Eleven regions have an incidence of poverty above 10%. Four of Kazakhstan's sixteen regions report no multidimensionally poor people (Astana City, East Kazakhstan, Karaganda, and West Kazakhstan), as do three of Kyrgyzstan's nine regions (Bishkek, Chui, and Naryn).



Figure 5. MPI in Tajikistan's subnational regions

The ability to break down where the multidimensionally poor live within each country has obvious policy relevance for targeting poverty eradication policies, programme delivery, evidence-based interventions, and impact optimisation. By way of example, Figures 5, 6, and 7 focus on the three IsDB Asia Member Countries with the greatest variation in multidimensional poverty patterns among their subnational regions.

Figure 5 depicts the MPI of Tajikistan's five subnational regions – DRS, Dushanbe, Gbao, Khatlon, and Sughd – compared with the national MPI. Khatlon has the highest MPI (0.042) among the regions, surpassing the national MPI (0.029), whereas Dushanbe, which encompasses the capital of Tajikistan, has the lowest MPI (0.008). Khatlon also has the largest share of the population of the country – 37.3% (3.4 million people) live there – so its higher rate of multidimensional poverty is reason for concern.





Figure 6 compares the incidence of multidimensional poverty among Indonesia's subnational regions to each other and to the national value. Of the 34 regions in Indonesia, 18 report a higher incidence of multidimensional poverty than the national average (3.6%), most notably in Papua (17.9%), East Nusa Tenggara (16.1%), West Papua (9.6%), and Gorontalo (8.9%). Jambi, Jakarta, and the Riau Islands all record incidence of multidimensional poverty below 2% (1.8%, 1.5%, and 1.4%, respectively). In Papua, multidimensionally poor people experience deprivations, on average, in 46.2% of the weighted indicators, far higher than the average person at the national level (38.7%).

The final example concerns the incidence of multidimensional poverty among the subnational regions of Bangladesh (Figure 7). Of the eight regions in Bangladesh, five report a higher incidence of multidimensional poverty than the national average (24.6%): Mymensingh (37.7%), Sylhet, (35.7%), Barishal (29.5%), Rangpur (26.0%), and Chattogram (25.8%). Dhaka and Khulna both record incidence of multidimensional poverty below 20% (19.0% and 15.9%, respectively). In both Sylhet and Chattogram, multidimensionally poor people experience deprivations, on average, in almost half of the weighted indicators (44.9% and 44.1%, respectively) compared to the national average of 42.2%.

One clear story among these three countries is that urban capitals tend to be less poor than the rest of the country. Dushanbe is the least-poor region in Tajikistan, and Jakarta and Dhaka are the second-least poor regions in Indonesia and Bangladesh. This observation matters for policymakers who are intent on ensuring that no one is left behind, and the disaggregation available in the MPI allows for the specificity required to craft poverty eradication measures that are both pro-poor and reflective of the population's needs.

1.3 COUNTRY PERFORMANCES: URBAN-RURAL STATISTICS

The global MPI can also be broken down to compare multidimensional poverty across rural and urban areas As of 2018, of the 50.3 million people identified as MPI poor in the seven IsDB Asia countries, 84.5% live in rural areas. Given that over half of the population lives in rural areas in all the countries (except Kazakhstan), policymakers should take into account that those in acute poverty are mostly concentrated in rural locations.



Figure 7. Headcount ratio in Bangladesh's subnational regions

Note: Error bars represent 95% confidence intervals. Source: Alkire, Kanagaratnam and Suppa (2020).

Country	Populatic (%	in share (MF (decin	lc (lem	+ (% of pol	H oulation)	A (average % ed depri	ر of weight- vations)	Number of (thous	poor people sands)
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Bangladesh (MICS 2018)	21.57	78.43	0.060 (.003)	0.116 (.002)	14.5 (0.6)	27.4 (0.4)	41.6	42.3	5,054	34,710
Indonesia (DHS 2017)	49.63	50.37	0.007 (.000)	0.021 (.001)	2.0 (0.1)	5.3 (0.3)	36.4	39.5	2,603	7,084
Kazakhstan (MICS 2015)	53.19	46.81	0.001 (.000)	0.003 (.001)	0.2 (0.1)	0.8 (0.3)	33.6	36.1	1	65
Kyrgyzstan (MICS 2018)	36.12	63.88	0.000 (.000)	0.002 (.001)	0.1 (0.0)	0.6 (0.2)	36.1	33.3	,	24
Maldives (DHS 2016/17)	36.55	63.45	0.002 (.001)	0.003 (.001)	0.5 (0.4)	0.9 (0.2)	34.7	36.3	. 	n
Tajikistan (DHS 2017)	24.43	75.57	0.013 (.002)	0.034 (.003)	3.6 (0.5)	8.7 (0.7)	36.3	39.3	81	597
Turkmenistan (MICS 2015/16)	38.6	61.4	0.001 (.001)	0.002 (.001)	0.3 (0.2)	0.4 (0.2)	37	35.7	ω	16

Note: Figures in parentheses represent standard error. Source: Alkire, Kanagaratnam and Suppa (2020).

Table 2. Multidimensional poverty in IsDB Asia Member Countries, by urban and rural areas

Table 2 shows the MPI, incidence, and intensity of poverty for each country's urban and rural areas. Across the board, rural populations see higher rates of poverty according to both their MPIs and incidence, but the intensity figures tell a curious story. Although rural populations record a higher intensity, on average, in Bangladesh, Indonesia, Kazakhstan, Maldives, and Tajikistan, in Kyrgyzstan and Turkmenistan, poor urban populations are deprived in a greater number of weighted deprivations than their rural peers. In Kyrgyzstan, multidimensionally poor people in urban areas are deprived, on average, in 36.1% of the weighted indicators, compared with 33.3% for rural people, while in Turkmenistan, these figures are 37.0% and 35.7%, respectively. This granular perspective on poverty provides questions for policymakers on what interventions and strategies are necessary to reduce poverty, and how policies and programmes should be tailored to the needs of individuals and households in different parts of their country.

Rural populations in all seven countries observe higher rates of multidimensional poverty than their urban counterparts, although the differences vary by country. In Turkmenistan, for example, the difference in poverty incidence between urban and rural populations is only 0.10 percentage points, whereas in Bangladesh, the difference is 12.9 percentage points. Again, we see the importance of breaking down the MPI and its constituent parts to understand the complexities and diversity of the everyday lives of multidimensionally poor people.

We can unpack the patterns of multidimensional poverty further by looking at the percentage contributions of each indicator for the rural areas of the IsDB Asia Member Countries (Figure 8). The indicators driving poverty in each country's rural population are years of schooling in Bangladesh, child mortality in Indonesia, and malnutrition in Kazakhstan, Kyrgyzstan, Maldives, Tajikistan, and Turkmenistan. The contributions of different weighted indicators vary widely among the countries, although overall, the health dimension contributes the most to the MPI for the rural populations of Kazakhstan, Kyrgyzstan, Maldives, Tajikistan, and Turkmenistan. In Bangladesh and Indonesia, the living standards dimension contributes the most to rural poverty.

While these rural patterns broadly mirror the national percentage contributions, there are differences. In Indonesia, for example, the child mortality indicator contributes 34.7% to the MPI of the overall population, and only 23.9% to the MPI of the rural population. This is largely because of increased contributions in the living standards indicators and years of schooling indicator, suggesting that these matter more for the character of poverty in rural areas of Indonesia than the national average. Furthermore, in Maldives, the child mortality indicator



Figure 8. Percentage contributions of indicators to MPI for rural areas of IsDB Asia Member Countries

Note: The MPI for Indonesia excludes the nutrition indicator as data were not available (Alkire, Kanagaratnam, and Suppa, 2020). Source: Alkire, Kanagaratnam and Suppa (2020). contributes 34.4% to the MPI of the overall population, and only 29.6% to the MPI of the rural population. This is largely due to the increased contributions in the years of schooling and school attendance indicators, suggesting that these matter more for the character of poverty in rural areas of Maldives than the national average.





Notes: Error bars represent 95% confidence intervals. **Source:** Alkire, Kanagaratnam and Suppa (2020).



Figure 10. Percentage contributions of indicators to MPI for age groups in Bangladesh

1.4 COUNTRY PERFORMANCES: AGE GROUP STATISTICS

The MPI and its associated statistics can also be disaggregated by age group. Figure 9 shows the headcount ratio for each country by two age groups – children under the age of 18, and adults 18 years and older. The difference between the age groups is only statistically significant in Bangladesh. More than one in four (28.3%) children under the age of 18 are multidimensionally poor in Bangladesh compared with 22.6% of adults aged 18 and above. Multidimensional poverty among people of different ages follows a less consistent pattern than that by area. However, age matters for policy and programming delivery, as the types of deprivations faced by different age groups will reflect the unique experience of people living in poverty.

With this in mind, we turn to the percentage contributions to the MPI in Bangladesh, one of the poorest IsDB Asia Member Countries, across four age groups: children aged 0 to 9 years old; children aged 10 to 17; adults aged 18 to 59; and adults aged 60 and above. Figure 10 indicates that across all age groups in Bangladesh, years of schooling contributes the largest amount to multidimensional poverty, although the size of contribution varies by age group: 24.7% for children aged 0-9; 23.9% for children aged 10-17; 27.2% for adults aged 18-59; and 34.6% for adults aged 60 and above. For children aged 0 to 9, nutrition was the second-largest contributor (21.0%), while for children aged 10 to 17, it was school attendance (19.8%). For adults aged 18 to 64, the second-largest contributor was nutrition (15.0%), whereas this was cooking fuel (13.6%) for adults aged 60 and above. Clearly, the age of individuals reflects the diverse realities of people living in poverty, and any evidence-based targeting for development policy needs to account for this range of experiences.

2. MULTIDIMENSIONAL POVERTY REDUCTION OVER TIME

In terms of the intertemporal trends among the IsDB Asia Member Countries, data ranges differ by country, with an average difference between the two time periods of 6.25 years. We include data for six of the seven countries, excluding Maldives, for which trend data were not available.⁵

We report changes in multidimensional poverty over time in the harmonised global MPI (MPI₊) and its components – the headcount ratio (H_{τ}) , the percentage of people identified as multidimensionally poor, and intensity (A₋) or the average percentage of deprivations that poor people experience simultaneously - as well as for the 10 indicators of the index. These global MPI, estimates follow a strict harmonisation methodology using the same information from both the older and newer datasets to ensure that any differences in poverty are due to changes in the conditions of the country rather than changes in the questionnaire.⁶ All indicator definitions, weights, and poverty cutoffs used in the survey comparisons follow the same structure within countries. Such analysis allows us to infer broad poverty alleviation trends over time, to investigate the contributions and levels of poverty by each indicator, and to focus on poverty reduction broken down by province, urban and rural areas, and age groups. We further interrogate which of the indicators drove progress and analyse where population growth competes with this progress. We also compare reductions in multidimensional poverty with trends in income poverty and economic growth.

2.1 COUNTRY PERFORMANCES: POVERTY REDUCTIONS

All six countries observed a statistically significant reduction in the MPI_T between their two time periods.⁷ Bangladesh had the greatest reduction per year (at a rate of -0.015 per year for 2014 to 2019), followed by Tajikistan (-0.004) and Indonesia (-0.003), both from 2012 to 2017. Kazakhstan, which had the slowest absolute reduction per year in multidimensional poverty, nonetheless had the greatest reduction in the region relative to its initial poverty levels (at -13.9% per year for 2010/11 to 2015), followed by Indonesia (-12.9%, from 2012 to 2017) and Turkmenistan (-12.4%, from 2006 to 2015/16). Figure 11 plots the starting level of the MPI_T poverty on the horizontal axis, with the poorest country, Bangladesh, furthest to the right. The vertical axis is the pace of reduction of MPI^T, with the lower bubbles showing fastest absolute poverty reduction. Figure 11 shows a pro-poor reduction among the Asia Member Countries, with the poorer countries, such as Bangladesh, having faster rates of MPI₋ reduction.⁸ This pro-poor reduction – spanning countries in East Asia and the Pacific (Indonesia), Europe and Central Asia (Kazakhstan, Kyrgyzstan, and Tajikistan), and South Asia (Bangladesh) - reflects the progress in the Asia region observed by other measures of social development, including shared economic prosperity (World Bank, 2020). According to the World Bank's measure of shared prosperity, which focuses on the poorest 40% of a population ('the bottom 40') and is defined as the annualised growth rate of their mean household per capita income or consumption, shared prosperity was positive for all economies where it could be measured in both East Asia and Pacific, and in South Asia. Moreover, Bangladesh, one of the top aid-receiving countries in the region, has made impressive gains in human and social development - funding educational stipends, community clinics, and infrastructure projects in rural areas (focused on clean water access and transport access), among others - that have contributed to its noteworthy reduction in multidimensional poverty (World Bank, 2018).

Of the 53 subnational regions in these countries for which we have data,⁹ 38 experienced statistically significant reduction in their MPI_T. Among these 38 regions, we find reduction across all seven regions of Bangladesh,¹⁰ 22 of the 33 regions in Indonesia, and six of the eight regions in Kyrgyzstan. Figure 12 plots the starting level of MPI_T poverty on the horizontal axis, with Sylhet, the poorest subnational region of Bangladesh, furthest to the right. Figure 12 clearly shows the pro-poor reduction among Bangladesh's subnational regions, as Sylhet, by far the poorest region, managed the greatest reduction in poverty between 2014 and 2019. A pro-poor reduction was also seen in Kyrgyzstan, where of the six subnation.



Figure 11. Annualised absolute reductions in the MPI,

Note: The size of the bubbles is a proportional representation of the total number of MPI poor in each country in the initial year. **Source:** Alkire, Kovesdi, Mitchell et al. (2020).





Note: The size of the bubbles is a proportional representation of the total number of MPI poor in each region in the initial year. **Source:** Alkire, Kovesdi, Mitchell et al. (2020).

al regions with significant reductions, Batken, the poorest region in the initial year (with an MPI_{T} of 0.098), had the greatest reduction per year (at a rate of -0.007 per year between 2005/06 and 2014).

We can also break down the reductions in the MPI_{τ} by age group. Looking at three demographic categories children aged 0-17; adults aged 18-64; and adults aged 65 and above - we observe plenty of variation among the age of the population who are living in multidimensionally poor households. Figure 13 shows the reductions in the MPI_{τ} for each country's disaggregated age groups, with the age group that has the greatest significant reduction singled out. Bangladesh, Kazakhstan, Tajikistan, and Turkmenistan see children with the largest gains in poverty reduction, whereas Indonesia and Kyrgyzstan see adults aged 65 and above with the greatest change. All the MPI_{τ} age group reductions were significant, with the exception of adults aged 65 and above in Kazakhstan. This demographic disaggregation reaffirms the move towards poverty eradication among almost all ages, but also highlights the different lived experiences within and between countries, through their initial levels of poverty, their relative share of the population, and their relative capability in pursuing lives they have reason to value.

2.2 COUNTRY PERFORMANCES: REDUCTIONS IN INCIDENCE AND INTENSITY

As Tables 3A and 3B show, all of the six IsDB Asia countries for which we have data on multidimensional poverty trends reduced both the MPI_T and the percentage of people identified as multidimensionally poor (incidence, H_T) significantly.' However, only three – Bangladesh, Indonesia, and Turkmenistan – significantly reduced the average percentage of deprivations that these poor people experience simultaneously (intensity, A_T). Reductions in intensity were strongest in Bangladesh. With these two additional statistics in mind, Indonesia stands out as a top-performing country, being a top-three reducer in the MPI_T, H_T , and A_T in both absolute and relative terms. Between 2012 and 2017, over 7.5 million people left multidimensional poverty in Indonesia. As the largest economy in Southeast Asia and the world's tenth-largest



Figure 13. Annualised absolute reductions in the MPI, by age group

Note: The size of the bubbles is a proportional representation of the total number of MPI poor in each country. **Source:** Alkire, Kovesdi, Mitchell, et al. (2020).

Country	H _T ((%)	Annualised	changeª		Number of (thous	poor people sands)
	Y1	Y2	Absolute (p.p.)	Relative (%)		Y1	Y2
Bangladesh (2014–19)	37.6	24.1	-2.7	-8.5	***	58,036	39,236
Indonesia (2012–17)	6.9	3.6	-0.7 -12.2		***	17,076	9,514
Kazakhstan (2010/11-15)	0.9	0.5	-0.1	-13.5	**	146	81
Kyrgyzstan (2005/06–14)	9.3	3.4	-0.7	-11.2	***	475	198
Tajikistan (2012–17)	12.2	7.4	-1	-9.5	***	960	658
Turkmenistan (2006–15/16)	3.4	1	-0.2	-11.5	***	162	59

Table 3A. Annualised change in $\rm H_{T}$ for IsDB Asia Member Countries

Notes: a) Where the survey was conducted over two years, the average of the years was used to compute the annualised changes. *** statistically significant at α =0.01, ** statistically significant at α =0.05, * statistically significant at α =0.10. **Source:** Alkire, Kovesdi, Mitchell, et al. (2020).

Table 3B. Annualised change in A_r for IsDB Asia Member Countries

Country	A _T	(%)	Annualised	changeª		Number of (thous	poor people sands)
	Y1	Y2	Absolute (p.p.)	Relative (%)		Y1	Y2
Bangladesh (2014–19)	46.5	42	-0.9	-2	***	58,036	39,236
Indonesia (2012–17)	40.3	38.7	-0.3	-0.8	***	17,076	9,514
Kazakhstan (2010/11–15)	36.2	35.5	-0.2	-0.4		146	81
Kyrgyzstan (2005/06–14)	37.8	37.2	-0.1	-0.2		475	198
Tajikistan (2012–17)	40.4	39	-0.3	-0.7	*	960	658
Turkmenistan (2006–15/16)	38	34.8	-0.3	-0.9	***	162	59

Notes: a) Where the survey was conducted over two years, the average of the years was used to compute the annualised changes. *** statistically significant at α =0.01, ** statistically significant at α =0.05, * statistically significant at α =0.10. **Source:** Alkire, Kovesdi, Mitchell, et al. (2020).

economy in terms of purchasing power parity, the impact of Indonesia's progress on global poverty cannot be understated, and its example offers meaningful lessons for other countries.

It is also worth noting that despite half the countries observing no change in the intensity of poverty, all six countries significantly reduced their populations vulnerable to multidimensional poverty. Here, we define vulnerability to multidimensional poverty as those who experience a 20-33.32% intensity of deprivations. Kazakhstan again had the great reductions, cutting the population vulnerable to poverty by 21.8% per year relative to its starting level, followed by Indonesia (by 12.3% per year). These trends signify progress throughout the population on the three dimensions that constitute the index – health, education, and living standards – and warrant further investigation into which indicators are driving change within the countries.



Figure 14. Incidence of poverty over time by urban and rural areas

Furthermore, we see great variation in the reduction of poverty incidence - the percentage of the population who are multidimensionally poor - among the urban and rural areas of the six IsDB Asia Member Countries (Figure 14). The incidence of poverty was reduced significantly in the rural areas of all countries except Kazakhstan, whereas the incidence of poverty was reduced significantly only in the urban areas of Bangladesh, Indonesia, and Kyrgyzstan. While to some extent, this disaggregation again compliments the Asia region for its propoor reductions,¹¹ it also reveals the inequalities faced by urban and rural populations. Clearly, multidimensional poverty among the Asia Member Countries is more frequently experienced by their rural inhabitants. This reality must be considered to ensure that, when focused on ending poverty in all its forms and dimensions, no one is left behind.

2.3 COUNTRY PERFORMANCES: REDUCTIONS BY INDICATOR

Figure 15 presents the yearly reductions in the percentage of people who are poor and deprived in each of the 10 indicators. Four of the ten indicators saw significant yearly reductions in all six countries: nutrition, drinking water, housing, and assets.¹² Bangladesh reduced the percentage of people who are poor and deprived in nutrition the fastest, at 1.6% per year, Tajikistan the fastest in drinking water conditions at 0.8% per year, and Bangladesh again the fastest in housing at 2.6% per year, and assets at 2.1% per year. The years of schooling and electricity indicators had significant reductions only in Bangladesh (a rate of 1.7 and 3.9 percentage points, respectively) and Indonesia (0.3 and 0.2 percentage points, respectively). Bangladesh and Indonesia were also the only countries who saw significant reductions for all indicators.





Source: Alkire, Kovesdi, Mitchell, et al. (2020).



Figure 16. Population growth versus number of poor people in the Asia region

Figure 17. Annualised absolute change in incidence of $\rm H_{T}$ and US\$1.90 a day



Source: Alkire, Kovesdi, Mitchell, et al. (2020).

2.4 POPULATION GROWTH AND THE NUMBER OF PEOPLE LIVING IN POVERTY

In order to eradicate poverty, the speed of reduction in the multidimensional headcount ratio (H_T) must outpace population growth. All of these six IsDB Asian countries that reduced the MPI_T significantly also observed overall population growth between the two time periods (Figure 16). Even with population growth taken into account, all six countries reduced the number of people living in poverty across the periods. In Bangladesh, the number of poor people declined by nearly a third (from just over 58 million to around 39 million), and in Kyrgyzstan and Turkmenistan, the number more than halved between the two years (from around 475,000 to 198,000 and 162,000 to 59,000, respectively). That exponential population growth did not overshadow the progress in poverty reduction within these countries is a victory worth celebrating.

2.5 COMPARING MULTIDIMENSIONAL AND MONETARY POVERTY

Multidimensional poverty incidence was larger than income poverty at the beginning of the comparison period in three of the five countries for which we have monetary poverty data: Bangladesh, Kazakhstan, and Tajikistan.¹³ The gap between the initial multidimensional and income poverty incidence varies from slight differences in Kazakhstan (0.9% and 0.05%), to dramatic differences in Bangladesh (37.6% and 19.6%). Figure 17 depicts the annualised absolute rates of change in the incidence of HT and US\$1.90/day poverty for the five countries. Four countries had a reduction in poverty according to both measures, with multidimensional poverty declining faster in Bangladesh and Kazakhstan, whereas monetary poverty declined faster in Indonesia and Kyrgyzstan. In Tajikistan, multidimensional poverty incidence was reduced while incidence of monetary poverty increased.

If income and multidimensional poverty measures were perfectly correlated, and if they both identified the same people as poor, there would be no need for two separate measures. Instead, we observe important variations between both rates and, at times, the direction of change of these two poverty measures. This suggests that multidimensional poverty trends are not tracking with monetary poverty trends, and we must look at both 'sister' measures to understand the character of poverty around the world.

Country	Multidime	ensional poverty	GNI per	capitaª
	MPI _T Year 1	Reduction per year, relative to initial poverty levels (%)	GNI per capita in Year 1, Atlas method (current US\$)	Average GNI per capita growth (annual %) ^b
Bangladesh (2014–19)	0.175	-10.4	1,110	6.6
Indonesia (2012–17)	0.028	-12.9	3,580	5.2
Kazakhstan (2010/11–15)	0.003	-13.9	7,860	6.1
Kyrgyzstan (2005/06–14)	0.035	-11.4	3,395	4.4
Tajikistan (2012–17)	0.049	-10.2	1,150	7.9
Turkmenistan (2006–2015/16)	0.013	-12.4	1,890	-

Table 4. Relative change in the MPI_T and GNI per capita growth

Notes: a) GNI figures from the World Development Indicators (World Bank, 2021). Where the survey was conducted over two years, the average of the years was used to compute the GNI statistic.

b) The average is computed using the annual values between the first and second time periods. Tajikistan only had data on 2012 and 2013, so the statistic provided is the average of those two years. Turkmenistan did not have available data on GNI per capita growth (annual %).

Source: Alkire, Kovesdi, Mitchell, et al. (2020).

2.6 GROWTH IN GNI PER CAPITA AND POVERTY REDUCTION

The level of success in translating the gains of economic growth into poverty reduction varies across countries and, sometimes, across periods (Table 4). For instance, in the periods under analysis, Bangladesh and Kazakhstan registered similar rates of growth in GNI per capita, while Bangladesh led the countries in annualised absolute poverty reduction and Kazakhstan led in annualised relative poverty reductions. On the other hand, between 2012 and 2017, although Indonesia grew nearly half as slowly as Tajikistan - which far outpaced the others in GNI per capita growth – the former reduced the MPI_{τ} far faster, despite a lower starting level of multidimensional poverty. Like the comparison with income poverty, the juxtaposition of multidimensional poverty trends and GNI per capita growth trends reveals the importance of both measures for capturing the experience of global poverty. While governments may pursue lightning-quick economic growth rates, without proper attention to the human development on the ground, they will struggle to meet both the needs of their citizens and their target of ending poverty in all its forms and dimensions by 2030.

3. COVID-19 AND MULTIDIMENSIONAL POVERTY

The global MPI 2020 data (Alkire, Kanagaratnam and Suppa, 2020) uses household surveys between 2009 and 2019, before the onset of the COVID-19 pandemic that has shaken the world. Few countries have been spared the devastation caused by the pandemic, which has had an impact not only on health systems but also on the world's economic and social systems. Widespread data are not yet available to gauge the full impact of the pandemic, especially its impact on levels of multidimensional poverty, but insights can be gleaned on the risk that the pandemic poses for poor people across IsDB Member Countries. This section briefly examines the risk profile of IsDB Asia Member Countries, the data available on deaths to date, and some of the strategies and responses that countries have adopted to try and mitigate the risk of COVID-19 and its consequences.

3.1 THE RISK PROFILE OF ASIA MEMBER COUNTRIES

The global MPI can be used to identify populations at higher risk of COVID-19, using three of the indicators that lead to increased risk.¹⁴ Alkire, Dirksen, et al. (2020a) outline the reasons behind the selection of these indicators – nutrition is selected because 'undernutrition is strongly associated with weakened immune systems, morbidity, and mortality', drinking water is selected because 'unsafe drinking water is associated with much of the global disease burden and weakened immune systems', and

cooking fuel is selected because 'deprivation in clean cooking fuel is associated with indoor air pollution and acute respiratory infections'. The analysis profiles those individuals within a country who are at risk – defined as those deprived in at least one of the indicators – and those who are at high risk as they are deprived in all three indicators at the same time.

Table 5 details the proportion of the total population of a country who are at risk and at high risk.¹⁵ Bangladesh has the highest at-risk population, as more than 8 out of 10 people (83.9%) are deprived in at least one of the indicators. More than one out of two (53.6%) people in Tajikistan are at risk, as are one out of three in Kyrgyzstan (34.4%) and Maldives (31.4%). A quarter (26.3%) of the population in Turkmenistan are at risk while only 1 in 10 (10.0%) in Kazakhstan are at risk. The proportion of the population that is at high risk – that is, they are deprived in all three indicators of nutrition, drinking water and cooking fuel – is very low across all Member Countries in the Asia region, with the highest proportion in Tajikistan at only 2.0%.

Table 5 also allows for a comparison between the population at risk and the population that are both MPI poor and at risk. In Bangladesh, 83.9% of the population are at risk while less than a quarter (24.0%) of the population are MPI poor and at risk. In Tajikistan, more than half of

Country	At risk (%)	At high risk (%)	MPI poor and at risk (%)	MPI poor and at high risk (%)
Bangladesh	83.9	0.5	24	0.5
Kazakhstan	10.0	0.0	0.5	0.0
Kyrgyzstan	34.4	0.6	0.4	0.1
Maldives	31.4	0.0	0.7	0.0
Tajikistan	53.6	2.0	7.2	1.7
Turkmenistan	26.3	0.0	0.4	0.0

Table 5. MPI and COVID-19 risk in IsDB Asia Member Countries

Source: Alkire, Dirksen, et al. (2020c).

the population are at risk, but only 7.2% are MPI poor and at risk, while 1.7% were MPI poor and at high risk.

With the global death toll from the COVID-19 pandemic at approximately 3 million people, there have been over 55,000 recorded deaths due to COVID-19 across the Member Countries in the Asia region. Indonesia, Bangladesh, and Kazakhstan have reported the highest number of such deaths (Worldometer, 2021).

Responses to the pandemic have also varied from country to country. During the course of 2020, Gentilini et al. (2020) tracked governments' responses across a range of different social protection measures and jobs responses, according to three different categories: social assistance (including cash-based transfers, public works programmes, and in-kind support); social insurance (including unemployment, pension and disability benefits) and labour markets (such as wage subsidies and training support).

There are 24 measures recorded across the seven Member Countries in Asia for which there are data.¹⁶ Table 6 details how social assistance transfers are the most widely used class of measure (accounting for approximately two-thirds of all measures, or 16 types). These are followed by five measures in social insurance and only three labour market-related measures. Cash transfer measures are the most widely used safety net intervention by governments, used in six of the seven countries.

		SOCIAI	L ASSISTANCE			SOCIAL II	NSURANCE			LABOUR I	MARKETS	
Country	Cash-based transfers	Public works	In-kind (in-kind/school feeding)	Utility and financial support	Paid leave / unemployment	Health insurance support	Pensions and disability benefits	Social security contributions (waiver/ subsidy)	Wage subsidy	Activation (training)	Labour regulation adjustment	Reduced work time subsidy
Bangladesh	~		~						~			
Indonesia	~	~	~	~		~		~		~		
Kazakhstan	~		~	~		~						
Kyrgyzstan	~		~	~				~				
Maldives				~	~				~			
Tajikistan	7			~								
Turkmenistan	~											

Table 6. Social protection and jobs responses to COVID-19 in the IsDB Asia Member Countries

Source: Gentilini et al. (2020).

Exploring multidimensional poverty across IsDB Member Countries in Asia using the global MPI

4. CONCLUDING REMARKS

The first quarter of 2021 continues to reveal the devasting and multifaceted nature of the global COVID-19 pandemic. Without proper attention to the impacts of this public health crisis and the varied conditions among people living in poverty, governments risk jeopardising the last two decades' progress towards eradicating poverty. Governments and policymakers need more information to cope with the multidimensional effects of the pandemic, to act against its adverse consequences, and to protect and improve the lives of the most deprived. To this end, this brief has synthesised information on where the IsDB Asia Member Countries stand in terms of poverty levels and trends, so as to better understand the way ahead.

The case of Bangladesh is a good closing example for several reasons. On the one hand, nearly a quarter of Bangladesh's population was living in multidimensional poverty according to the most recent information from 2019. Bangladesh also has stark differences in the incidence of poverty between its urban and rural populations (14.5% and 27.4%, respectively), and the MPI among its subnational regions varies from as little as 0.063 in Khulna to 0.163 in Mymensingh. On the other hand, Bangladesh illustrates the progress possible in turning the tide of poverty dynamics. Between 2014 and 2019, Bangladesh's reduction in its MPI was the largest in the region (an annualised absolute rate of -0.015 per year), as well as in incidence (an annualised absolute rate of -2.7 per year) and intensity (an annualised absolute rate of -2.0 per year). Despite its inequalities and its status of by far the poorest country in the region in its initial year, Bangladesh led the Asia region in poverty reductions, illustrating that progress is feasible despite high and generalised initial levels of poverty. Bangladesh's smart development policies targeted towards rural development, paired with their high levels of aid in the last few decades, are paying off (World Bank, 2018).

These findings reveal a very heterogeneous experience of acute multidimensional poverty in the region. The brief shows that as the COVID-19 pandemic risks reversing hard-won advances in poverty reduction, better data can improve decision-making in a context of limited fiscal resources. For example, information on overlapped deprivations analysed in this brief may help to set some principles for identifying those who are most prone to the severest adverse effects of the pandemic. This information, in line with Sustainable Development Goal Target 1.5, could serve as a guide for countries to create tailored policies at subnational levels. For instance, as in the case of Bangladesh, 83.9% of the population are at risk (without either appropriate nutrition, drinking water, and cooking fuel), even as only 24.0% of that figure are also MPI poor. To build back better in the wake of the COVID-19 pandemic, evidence-driven policymaking must centre the diverse and multidimensional realities of poor people globally or else risk losing the gains established in the first two decades of the twenty-first century.

ENDNOTES

- 1 For details on the global MPI, see also the accompanying data tables in Alkire, Kanagaratnam, and Suppa (2020); and UNDP and OPHI (2020).
- 2 Bangladesh, Indonesia, Kazakhstan, Kyrgyzstan, Maldives, Tajikistan, and Turkmenistan.
- 3 The MPI for Indonesia is calculated using 9 of the 10 indicators, as data on nutrition were not available in the survey (Alkire, Kanagaratnam, and Suppa 2020).
- 4 Indonesia's MPI is computed using 9 of the 10 indicators, excluding nutrition, with the child mortality indicator re-weighted to take on one-third of the weight to ensure equally weighted dimensions (Alkire, Kanagaratnam, and Suppa, 2020).
- 5 Like the global MPI, we do not have trend data on the other IsDB Member Countries in Asia (Brunei, Malaysia, and Uzbekistan). While datasets exist for Maldives over time, the sample size does not allow for intertemporal analysis. For more information, see Alkire, Kovesdi, Mitchell, et al. (2020).
- 6 The harmonisation process is treated in greater detail in Alkire, Kovesdi, Mitchell, et al. (2020, sec.3).
- 7 All statistical significance is evaluated at the level of α =0.01, except for Kazakhstan, at α =0.05.
- 8 Absolute changes are easy to compare across countries and are key comparisons to make, but for countries with lower initial poverty levels, large absolute reductions are far more difficult to achieve (Figure 11). The annualised absolute rate of change is the difference in the relevant point estimate (e.g., MPl_T) between two periods, divided by the difference in the two time periods, whereas the annualised relative rate of change is the compound rate of reduction in the point estimate per year between the initial and the final periods. We can also look at annualised relative reductions to understand the changes in poverty for countries with low absolute poverty levels.
- 9 Neither Kazakhstan nor Turkmenistan could be disaggregated by subnational region, as the national MPI_T estimate and poverty headcount ratio were not large enough (>0.005 and >1.5%, respectively) to enable disaggregation at the subnational level with meaningful estimates (Alkire, Kovesdi, Mitchell, et al., 2020).
- 10 There are only seven subnational regions in this section as the regions of Dhaka and Mymensingh were aggregated to recreate the Dhaka region presented in the DHS 2014 survey. See Alkire, Kovesdi, Mitchell, et al. (2020)
- 11 In all countries, rural areas started out poorer than their urban counterparts, and significant poverty reduction was more consistently achieved in those rural areas.
- 12 Indonesia's MPI_τ is computed using 9 of the 10 indicators, excluding nutrition, with the child mortality indicator re-weighted to take on one-third of the weight to ensure equally weighted dimensions (Alkire, Kovesdi, Mitchell, et al., 2020).
- 13 Turkmenistan does not have recent data on U\$1.90 a day incidence, with the most recent available data point from 1998, and is therefore excluded from this analysis.
- 14 See Alkire, Dirksen, et al. (2020a, 2020b, 2020c, 2020d) for more detail on the method and the analysis possible.
- 15 Indonesia has been excluded from this analysis as the survey did not gather information on nutrition (Alkire, Kanagaratnam, and Suppa, 2020).
- 16 A measure, such as a cash-based transfer, could be made up of a number of different interventions or programmes.

REFERENCES

- Alkire, S., Dirksen, J., Nogales, R., and Oldiges, C. (2020a). 'Multidimensional Poverty and COVID-19 Risk Factors: A Rapid Overview of Interlinked Deprivations Across 5.7 Billion People', OPHI Briefing 53, Oxford Poverty and Human Development Initiative.
- Alkire, S., Dirksen, J., Nogales, R. and Oldiges, C. (2020b). 'Multidimensional Poverty and Vulnerability to COVID-19: A Rapid Overview of Disaggregated and Interlinked Vulnerabilities in Sub-Saharan Africa', OPHI Briefing 54, Oxford Poverty and Human Development Initiative.
- Alkire, S., Dirksen, J., Nogales, R. and Oldiges, C. (2020c). 'Multidimensional Poverty and COVID-19 Risk Factors: A Rapid Overview of Interlinked Deprivations Across 5.8 Billion People', OPHI Briefing 53a, Oxford Poverty and Human Development Initiative.
- Alkire, S., Dirksen, J., Nogales, R. and Oldiges, C. (2020d). 'Multidimensional Poverty and Vulnerability to COVID-19: A Rapid Overview of Disaggregated and Interlinked Vulnerabilities in Sub-Saharan Africa', OPHI Briefing 54a, Oxford Poverty and Human Development Initiative.
- Alkire, S., Kanagaratnam, U. and Suppa, N. (2020). 'The Global Multidimensional Poverty Index (MPI) 2020', OPHI MPI Methodological Note 49, Oxford Poverty and Human Development Initiative.
- Alkire, S., Kovesdi, F., Mitchell, C., Pinilla-Roncancio, M. and Scharlin-Pettee, S. (2020). 'Changes over Time in the Global Multidimensional Poverty Index', OPHI MPI Methodological Note 50, Oxford Poverty and Human Development Initiative.
- Alkire, S., Kovesdi, F., Scharlin-Pettee, S. and Pinilla-Roncancio, M. (2020). 'Changes over time in the global Multidimensional Poverty Index and other measures: Towards national poverty reports', OPHI Research in Progress 57a, Oxford Poverty and Human Development Initiative.
- Alkire, S. and Foster, J. (2011). 'Counting and Multidimensional Poverty Measurement', *Journal of Public Economics*, vol. 95(7–8), pp. 476–87.
- Gentilini, U., Almenfi, M., and Dale, P. (2020). 'Global Database on Social Protection and Jobs Responses to COVID-19 [database], version 14 (December 11, 2020) (last accessed: 15 April 2021).
- Oxford Poverty and Human Development Initiative (OPHI). (2018). *Global Multidimensional Poverty Index 2018: The Most Detailed Picture to Date of the World's Poorest People*, Oxford Poverty and Human Development Initiative.
- UN Department of Economic and Social Affairs (UNDESA), Population Division. (2019). *World Population Prospects 2019: Highlights (ST/ESA/SER.A/423), Online Edition. Rev. 1* [database]. New York: United Nations (last accessed: 28 April 2020).
- UN Development Programme (UNDP) and Oxford Poverty and Human Development Initiative (OPHI). (2020). *Charting Pathways Out of Multidimensional Poverty: Achieving the SDGs*, New York: United Nations.
- World Bank. (2021). 'World Development Indicators', (last accessed: 21 January 2021).
- World Bank. (2020). Poverty and Shared Prosperity 2020: Reversals of Fortune, Washington, DC: World Bank.
- World Bank. (2018). <u>'Bangladesh: Reducing Poverty and Sharing Prosperity'</u>, Results Briefs, World Bank, (last accessed: 4 June 2021).
- Worldometer. (2021). 'COVID-19 Coronavirus Pandemic', (last accessed: 15 April 2021).

