Implementation of the Third United Nations Decade for the Eradication of Poverty (2018-2027)

"Accelerating Global Actions for a World without Poverty"

Progress in eradicating multidimensional poverty: Evidence from the global MPI

Introduction

At the World Summit for Social Development in 1995, governments declared their commitment to the "goal of eradicating poverty in the world, through decisive national actions and international cooperation, as an ethical, social, political and economic imperative of humankind." The acknowledgment of the crucial role of the United Nations (UN) for ending poverty incited the First United Nations Decade for the Eradication of Poverty which established the end of poverty as one of the principle goals across the UN system.[1] In 2018, the Third United Nations Decade commenced calling for " 'Accelerating Global Actions for a World without Poverty', in line with the 2030 Agenda for Sustainable Development," and put forward "an inter-agency, system-wide plan of action for poverty eradication" for ensuring effectiveness and coordination of UN efforts to achieve progress in eradicating poverty in all its forms and dimensions.[2]

With the start of the COVID pandemic 2019, aspirations and efforts to accelerate progress have been undercut around the globe. Many countries experience a reversal of advancements made towards a world without poverty. These setbacks represent major challenges. However, the most difficult times can also represent inflection points – an opportunity to reset and fortify efforts towards a world without poverty. Amartya Sen observed that during World War II, Britain faced food shortages and a general decline in food availability but was able to create an historic *increase* in life expectancy due to judicious rationing and proactive policies. Well-coordinated inter-agency action to produce integrated and pro-active policies is vital in times of these. And ever more so important is what has already been stated in 2018: "[t]he timely collection and analysis of relevant data are vital for accelerating global actions for a world without poverty."[3]

The global Multidimensional Poverty Index (MPI) was included for the first time as a tool to support and monitor the Third UN Decade agenda – in three ways: First, in line with the Sustainability Development Goals (SDGs), the Third UN Decade agenda's pledge to end poverty in *all its forms* recognises poverty as multidimensional and seeks to assess reductions in both monetary and multidimensional poverty: "Ending poverty is not just about people's income but also their access to basic needs, such as quality education and health care, clean water and sanitation, decent housing and security."[4] The global MPI aligns with this emphasis, for example it supports the Third UN Decade's thematic policy action area focused on human capability development. [5] The MPI reflects acute joint deprivations of central basic human capabilities in ten indicators related to health, education, and living standards. The MPI trends reflect progress in reducing any deprived indicator of any poor person.[6] This allows for rich, accurate, and robust impact evaluation of poverty efforts.

Secondly, the Third UN Decade agenda reiterates the SDG pledge *to leave no one behind* and identifies 'reducing inequality' as one of its policy areas.[7] Citing the number of people and of children who are poor according to the global MPI, the document observes that "the poorest of the poor are subject to overlapping dimensions of poverty and inequalities." Because the global MPI is extensively disaggregated, inequality becomes visible not only across countries but also between rural-urban areas, subnational regions, age, and gender – as well as by disability status, ethnicity, and so on. This provides crucial information to assess and address the different manifestations of inequality, as called for in the Third UN Decade. Data

[1] United Nations 1997, 2
[2] United Nations 2018, 2
[3] United Nations 2018, 3
[4] United Nations 2018, 13–14
[5] United Nations 2018, 13–14
[6] See

Appendix I: About the MPI for more information on the MPI
[7] United Nations 2018, 15

on MPI trends over time is also a powerful tool for this because it shows whether reduction among the poorest groups were faster than average – hence they are catching up, rather than being left behind.[8]

Thirdly, the implementation of the Third UN Decade calls for an inter-agency approach and *integrated, multisectoral policies*. As it writes in point 47, "The overarching objective regarding non-income dimensions of poverty is to promote integrated approaches and policy frameworks to address multidimensional poverty. Several United Nations development system organizations have specialized mandates." Next to national government and institutions, the mandate to address and eradicate nonmonetary poverty spreads across the UN systems from UNICEF, UNESCO to UN-Women and UN-Water, to mention a few. The plan of action for the Third Decade seeks to ensure and facilitate cooperation and collaboration for interagency action and support for strengthening member states to implement the Agenda 2030.[9] The MPI represents a single headline figure to evaluate and make visible the impact evaluation of a diverse and broad range of integrated programmes and policies and the multiple actors involved, on key deprivations that batter poor people's lives together. The MPI is based on empirical evidence of direct interlinkages of deprivations related to SDGs 1, 2, 3, 4, 6, 7, and 11. This means the global MPI is able to track progress in, and the impact of, efforts oriented towards several SDGs goals jointly, to diagnose interlinkages of these deprivations and to support the development of integrated and well-targeted policies that address jointly commonly occurring deprivation bundles.

The Third UN Decade sets out to accelerate global actions for a world without poverty. The MPI and the international monetary poverty measures are used together to assess and evaluate poverty and inequality and to bring together multiple actors for an integrated approach. This background paper will focus on multidimensional poverty. It provides an overview of the most recent multidimensional poverty levels and trends to show how and how people are poor, what progress been made towards a world without poverty and how such data should inform action. Furthermore, the Third UN Decade action plan is ever more crucial in this time of crisis which the world faces in light of COVID-19. Hence this background paper will also discuss recent analyses of the impact of COVID-19 on multidimensional poverty and possible recovery strategies so that countries can – like UK in the 1940s – against all odds, but using straightforward policies with determination, accelerate progress among the poorest.

Part I: The Levels, Trends, and Projections of the global MPI prior to COVID-19

The global MPI levels, trends, and projection allow us to take stock, analyse dynamics, and evaluate what progress has been made towards a world without poverty and what further progress may be possible. The discussion in this section is based on the 2020 global MPI data and report.[10] That data only included trends for 5 countries that end in 2018 or 2019. However, it illustrates what we find in these trends, and a subsequent section undertakes projections given measured trends to 2030. Furthermore, the 2021 release of global MPI trends will included dozens more up to date trends. Hence this paper, drawing on 2020 MPI results (all pre-pandemic) are still useful to give an indication of how multidimensional poverty trends can monitor the 3rd decade, and show, using projections and covid simulations, some indication of where we are likely to be.

Multidimensional Poverty Levels across 107 countries

The global MPI 2020 report includes poverty levels for 107 developing countries in total. 1.3 billion – 22% – are identified as multidimensionally poor. 84.3% of all multidimensional poor live in Sub-Saharan Africa and South Asia combined – 580 million and 530 million, respectively. [11]

Among the poor, children under the age of 18 are proportionately more affected by multidimensional poverty than any other age group. 1 in 3 children are poor, whereas 1 in 6 for adults experiences poverty. Overall, about half the multidimensionally poor, 644 million, are under the age of 18. These figures are even more distressing in light of COVID-19. Another age group particularly affected by COVID-19 are the 107 million multidimensionally poor aged 60 or older. [12]

[8] United Nations 2018, 15
[9] United Nations 2018, 9–11
[10] UNDP and OPHI 2020; Alkire, Kanagaratnam, and Suppa 2020; Alkire, Kovesdi, et al. 2020
[11] UNDP and OPHI 2020, 3
[12] UNDP and OPHI 2020, 3

Taking a close look at regional difference, a profound rural/urban divide can be detected among the MPI poor with 84.2 % of the multidimensionally poor living in rural areas, "where they are more vulnerable to environmental shocks." [13] Furthermore, global MPI data is also available for 1,279 subnational regions illuminated subnational inequality within countries.

When it comes to the joint deprivations people face, a staggering 82.3% of the MPI poor are deprived in at least five indicators simultaneously, and 98.8% of the MPI poor are deprived in at least three. Deprivations in education are particularly prevalent among the MPI poor in Sub-Saharan African countries, where the highest percentages of the MPI poor deprived in schooling can be found in Niger, Burkina Faso, South Sudan, Chad, and Ethiopia, and in school attendance in South Sudan, Burkina Faso, Niger, Chad, and Mali. Overall, with 20.4% of all the MPI poor affected, deprivations in access to clean cooking fuel "require urgent attention." [14]

How has Multidimensional Poverty Reduced across five billion people?

For 75 countries which are home to roughly 5 billion people across all developing regions, poverty trends are available.[15] For each country, two survey years spanning over a period from 2000 to 2019 were used to calculate the reduction of multidimensional poverty.

The first two decades of the 21st century saw positive developments in many countries included in the global MPI 2020. 65 out of those 75 countries experienced a statistically significant reduction of their MPI value in absolute terms.[16] This is particularly positive as 96% of the total population included in the study lived in these 65 countries. Overall, four countries with very different initial MPI

Figure 1: MPI changes per country

Source: UNDP and OPHI 2020.
Note: The 2020 estimates are based on 47 Demographic and Health Surveys (DHS), 47 Multiple Indicator Cluster Surveys (MICS), 3 Pan Arab Population and Family Health Surveys and 10 national surveys.

[13] UNDP and OPHI 2020, 19
[14] UNDP and OPHI 2020, 19
[15] Please see Alkire, Kovesdi, et al. 2020
[16] Unless otherwise indicated, all discussions of changes refer to statistically significant changes, which can be considered to have occurred with 95% confidence.

values halved their MPI value in 5.5. to 10.5 years – including India.[17] This demonstrates that a substantial reduction is possible for all countries. [18]

Furthermore, even though Sub-Saharan Africa is home to countries with the highest levels of poverty and some of the dreariest progress as they face various struggles on several fronts, some of the poorest countries achieved the fastest reductions. The fastest reduction overall took place in Sierra Leone (2013-2017) during the Ebola epidemic. This is encouraging evidence indicating that despite the current challenges posed by the COVID-19 pandemic, progress may be possible. Sierra Leone's progress was followed by fast poverty reductions in Mauritania and Liberia, as well as Timor-Leste, Guinea, and Rwanda. [19]

How did the number of multidimensionally poor change? The greatest number of multidimensionally poor people – over 270 million in total – left poverty in India over a time frame of ten years. In total, 50 of the 65 countries achieved reductions in the number of multidimensionally poor. This also includes populous countries such as China where 70 million people moved out of poverty over four years, or Bangladesh with 19 million people exiting poverty in five years, as well as smaller countries with remarkable reduction numbers, such as 4 million in Nepal and more than 3 million in Kenya over five years. However, in 14 Sub-Saharan African countries that were able to reduce their MPI, the number of poor people increased due to population growth. For example, "In Niger, the country with the highest MPI value, the population grew by a quarter in six years, and the number of multidimensionally poor people increased by 21.7 percent, despite reductions in both the incidence and the intensity of multidimensional poverty."[20]

Reduction of Incidence of MPI. 62 of the 65 countries with significant MPI reduction were also able to significantly reduce their headcount ratio. "In 23 of those countries, more than 2 percent of the population moved out of poverty every year during the included period— rising to nearly 4 percent a year in Sierra Leone."[21] Two countries, Nicaragua and North Macedonia, were able to cut their headcount ratio by half.

Where did children reduce MPI fastest? India (2005/2006–2015/2016) not only halved their MPI value nationally but also among children. Nicaragua (2001-2011/2012) was also able to half its MPI value for children. Some other countries, such as Mauritania, Sierra Leone, Timor-Leste, Liberia, and Rwanda, experienced pro-poor trend reducing children poverty the fastest. These are great achievements considering that with nearly half of the poor people being children under the age of 18, children are proportionally more affected by multidimensional poverty than any other age group. But unfortunately, other reduction patterns were less positive: "in nearly a third of these countries, either there was no reduction in multidimensional poverty for children (ages 0–17), or the MPI value fell more slowly for children than for adults (ages 18–64)."[22] This is particularly worrying as children may be hit harder by the repercussion of the pandemic. Action is necessary to avoid that the generations of tomorrow live through their childhood in poverty.

Did the poorest regions reduce MPI fastest? On the subnational level, "Of the 625 subnational regions included in the analysis, 398 – home to over three-quarters of multidimensionally poor people in both periods – had statistically significant decreases in their MPIT value. Fourteen countries reduced multidimensional poverty in all their subnational regions."[23] [24] Another important positive development is a pro-poor analysis on a subnational level which explores whether the poorest subnational regions reduced their MPI faster. For example, in Asia and the Pacific, a pro-poor trend on the subnational level took place across most countries included in the analysis. This includes China, Bangladesh, Indonesia, and the Philippines, where the poorest subnational regions also achieved the greatest reduction.

What indicator changes drove progress? The indicator breakdown analysis of trends is particularly helpful to understand in more detail how poverty has been reduced and to get more specific information of the impact of poverty efforts on the individual deprivations that the MPI poor face. 20 of the 75 countries were

[17] Armenia (2010–2015/2016), India (2005/2006–2015/2016), Nicaragua (2001–2011/2012) and North Macedonia (2005/2006–2011)
[18] UNDP and OPHI 2020, 3,7
[19] UNDP and OPHI 2020, 3,7
[20] UNDP and OPHI 2020, 9
[21] UNDP and OPHI 2020, 6
[22] UNDP and OPHI 2020, 7
[23] Bangladesh, Bolivia, the Kingdom of Eswatini, Gabon, Gambia, Guyana, India, Liberia, Mali, Mozambique, Niger, Nicaragua, Nepal, and Rwanda
[24] UNDP and OPHI 2020, 9

able to achieve reductions in all 10 indicators.[25] 11 of these 20 countries are located in Sub-Saharan Africa. However, only 45 of the 625 subnational regions had reductions in all indicators which indicates that reduction patterns vary greatly within countries.[26]

Do Multidimensional and Monetary Poverty Trends Match? A key finding in the global MPI 2020 report is that multidimensional poverty and monetary trends ($1.90 a day) do not match. This validates their complementarity, highlights the importance of measuring multidimensional poverty separately, and suggests different drivers for progress. A comparison of headcount ratios shows that "[i]n 52 out of 71 countries with both multidimensional and monetary poverty, the incidence of multidimensional poverty fell faster than monetary poverty."[27] In the Arab States, monetary poverty did either reduce slower than multidimensional poverty or even increased. In 19 countries, it was the reverse and monetary poverty reduced faster. This included some of the poorest countries, such as Niger and Chad. However, it must be noted that headcount ratios do not tell the full story, as they do not reflect the intensity of poverty. For example, "Niger had the fourth fastest absolute reduction in the intensity of poverty and reduced deprivations in all 10 indicators."[28]

Projections: Before the pandemic, were countries on track to halve global MPI 2015-2030?

Data on trends indicate what progress has taken place, and they can be used to evaluate whether or not countries are on track to achieve the SDG target of at least halving the proportion of people living in poverty in all its dimensions by 2030. The results presented in this section are based on observed trends and do not include the impact of the COVID-19 pandemic. Three models (linear, proportional, and logistic) were used to produce projections.[29]

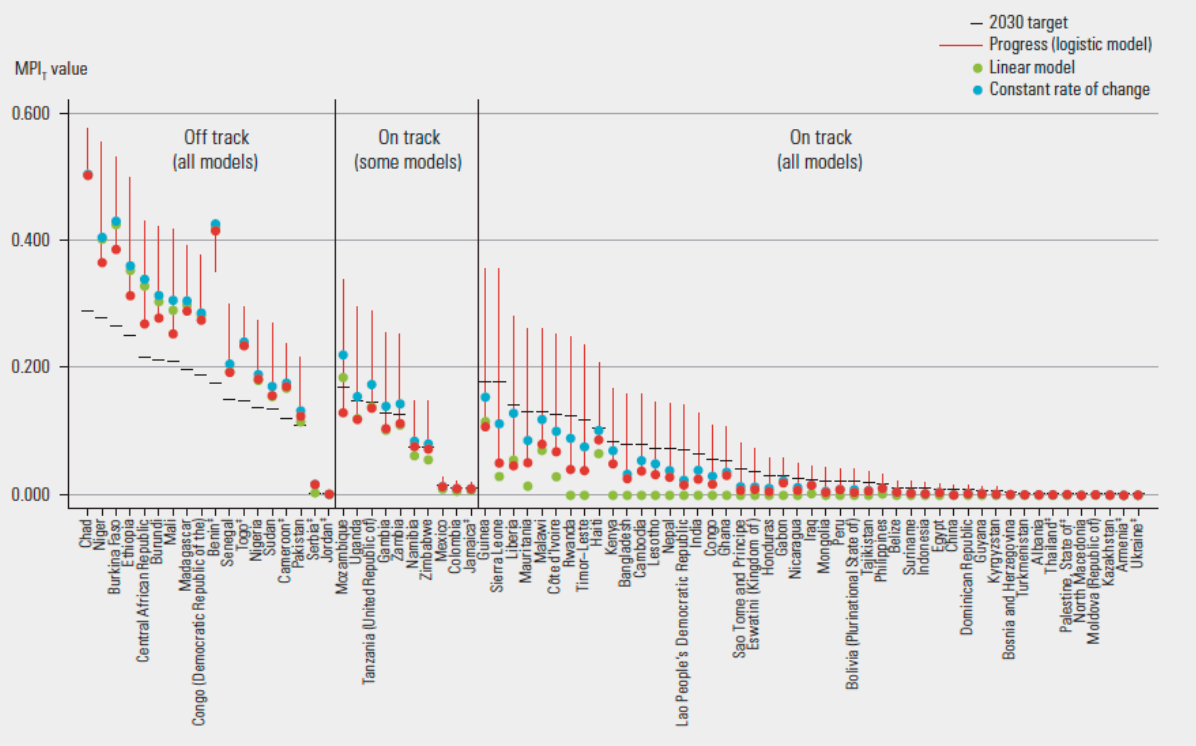
As visible in *Figure 2*, "[b]efore the COVID-19 pandemic, 47 of the 75 countries were on track", whilst "18 were off track."[30] "Of the 18 countries that were off track, 14 were in Sub-Saharan Africa and were among the poorest." [31] In these countries in particular, there is a need for an increase of resources and action to ensure that these countries can succeed in halving their MPI. For the remaining 10 countries, projections varied depending on the model used. In the linear model, 9 of these were on track.

However, due to the consequences of the pandemic, in many cases, these projections are unlikely to remain true, as will be discussed in the next section.

[25] Bangladesh, Bolivia, the Kingdom of Eswatini, Ethiopia, Gabon, Guinea, Honduras, India, Indonesia, Lao People's Democratic Republic, Malawi, Mauritania, Mozambique, Nicaragua, Niger, Sao Tome and Principe, Sierra Leone, Suriname, Timor-Leste, and Zambia.
[26] UNDP and OPHI 2020, 9
[27] UNDP and OPHI 2020, 13
[28] UNDP and OPHI 2020, 11
[29] "linear (continuation of recent absolute changes), proportional (continuation of recent relative changes) and logistic (continuation of changes adjusted for poverty levels). Linear models may overstate progress, and proportional models may understate it. The logistic model reflects the empirical observation that ordinarily MPI falls more slowly in the poorest countries because most reduction is in intensity rather than incidence. Reduction tends to accelerate greatly in medium-poor countries, where both incidence and intensity fall. It slows in low-poverty countries, perhaps due to familiar challenges in going "the last mile."" (UNDP and OPHI 2020, 36)
[30] UNDP and OPHI 2020, 12
[31] UNDP and OPHI 2020, 12

Figure 2: Global MPI projections 2020

Forty-seven countries are on track to halve multidimensional poverty by 2030, and eighteen are off track if observed trends continue



‡ indicates that the underlying change is not significant at $p < .05$.
Note: The top of the red line is the projected starting MPI$_T$ value in 2015, the dots are the projected MPI$_T$ value in 2030 and the black line is the MPI$_T$ value that would reflect multidimensional poverty being halved between 2015 and 2030. If all three dots are below the black line, a country is on track regardless of model.
Source: Alkire, Nogales and others 2020.

Source: UNDP and OPHI 2020, p.16

Part II: COVID Impact and Recovery

As the COVID-19 pandemic continues to unfold, recent progress and promising projections for some countries have been jeopardized. The impact on multidimensionally poor people is anticipated to be particularly severe and more people are expected to be pushed into poverty. This section presents, on the one hand, early impact simulation which sought to estimate the impact of Covid-19 on multidimensional poverty levels. On the other, we discuss possible paths to recovery and the role of the MPI to support countries to build back better as countries go through the pandemic and recover.

How may COVID-19 have affected the number of MPI poor people globally?

The impact of COVID-19 is manifold, including dangerous shortages of food and water, school closures, rising unemployment, or issues in social benefits delivery due to physical distancing requirements. Negative impact is expected to be visible in particular in two MPI indicators: nutrition and children's school attendance. Many school children had to stay at home during prolonged local and national lockdowns. At the height of developments in April 2020, over 91% of world's learner were estimated to be out of school.[32] At the same time, the pandemic has disrupted livelihood and food supply chains, pushing around 130 million people across 55 countries into acute food security.[33] By simulating possible changes in these indicators (see *Table 1*), an analysis, including 70 countries with 4.8 billion people, was conducted to evaluate the extent of the effects of COVID-19 on poverty.

Table 1: COVID-19 global MPI simulations

COVID-19 scenarios, projected global Multidimensional Poverty Index values, increases in the number of multidimensionally poor people, and length of setback

COVID-19 scenario		Projection for 2020		
Share of people who are poor or vulnerable[a] and become deprived in	Share of primary school–age children who experience interruption to school attendance	Multidimensional Poverty Index	Increase in the number of multidimensionally poor people	Setback
Nutrition	School attendance			
(%)		value	(million)	(years)
10	na	0.112	131	3.1
25	na	0.125	237	5.2
50	na	0.134	310	6.4
10	50	0.144	413	7.8
25	50	0.156	490	9.1
50	50	0.164	547	9.9

na is not applicable.
a. See definition of vulnerable to multidimensional poverty in statistical table 1.
Note: Pre-COVID-19 estimates are 0.095 for MPI value and 941 million for the number of people in multidimensional poverty. The analysis covers 70 of the 75 countries with trend data; Colombia, Dominican Republic, Indonesia, Philippines and Ukraine are excluded because of missing data for the nutrition indicator.
Source: Alkire, Nogales and others 2020.

Source: UNDP and OPHI 2020, p.17

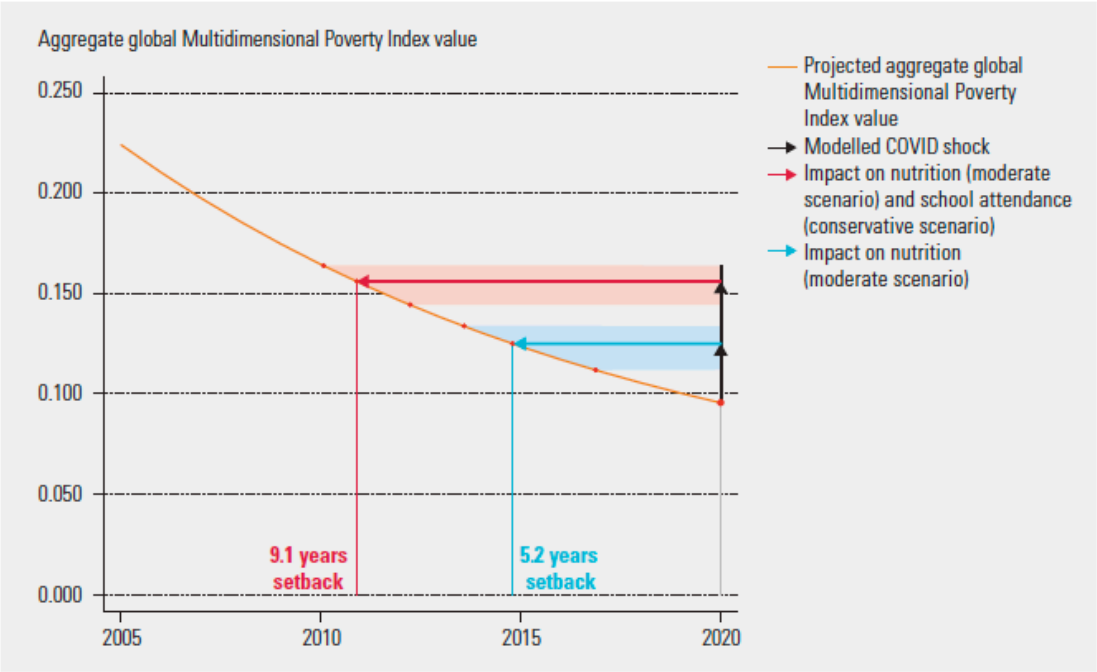
In the worst-case scenario, where 50% who are poor or vulnerable become deprived in nutrition and 50% of primary school children experience an interruption in school attendance, the number of poor people would increase by almost 550 million, reversing poverty levels to what they were almost 10 years ago. The conservative scenario where only 25% would become deprived in nutrition would still equal a setback of more than 9 years, with an increase of 490 million. Considering that school deprivations may not persist for too long into the post-COVID era, poverty levels would still revert to a value as around 2015, and 237

[32] UNDP and OPHI 2020, 36 - Based on data from https://en.unesco.org/covid19/educationresponse, accessed 2 July 2020. See also UNESCO 2020.
[33] World Food Programme 2020

million people would fall into multidimensional poverty. Overall, Covid-19 may set progress back 3-10 years.[34] These analyses were conducted at the early stage of the pandemic and do not reflect recent development, nor newly gained knowledge about the impact of the pandemic. Thus, they need to be considered cautiously, and a reassessment would be beneficial to better estimate the impact of COVID-19.

Figure 3: COVID-19 global MPI simulations

Under a conservative scenario of the impact of COVID-19 on school attendance and a moderate scenario of the impact on nutrition, simulations indicate that the increase in deprivations because of COVID-19 may set poverty levels back by 9.1 years, with an additional 490 million people falling into multidimensional poverty



Note: Aggregate global Multidimensional Poverty Index projection, with simulations of setbacks in poverty reduction due to the impact of the COVID-19 pandemic. Simulated (conservative) impact on school attendance: 50 percent of primary school–age children attending school stop attending. Simulated (moderate) impact on nutrition: 25 percent of people who were poor or vulnerable but not undernourished become undernourished. Upper (lower) scenarios: 50 percent (10 percent) of people who were poor or vulnerable but not undernourished become undernourished. The analysis covers 70 of the 75 countries with trends data; Colombia, Dominican Republic, Indonesia, Philippines and Ukraine were excluded because analysis is not feasible due to missing information on the nutrition indicator.
Source: Alkire, Nogales and others 2020.

Source: UNDP and OPHI 2020, p.17

While the availability of global MPI data is largely restricted to period prior to COVID-19, MPI simulations are an important first step to gain information on possible future developments. The most recent monetary poverty simulations based on the 1.90$ a day poverty line predict a much lower increase of 115 million in contrast to the MPI predictions of up to 550 million people.[35] Policies based on only these predictions could run risk at missing to consider several millions of people.

In additional to global MPI simulations, national MPI simulations offer opportunity to produce timelier and country-specific evidence on the possible impact of the pandemic to inform reactions and recovery efforts. For example, several countries including Afghanistan, Dominican Republic, and Angola, conducted simulations of possible impacts of COVID-19. Mexico analysed the potential impact of COVID-19 on social development progress and the most vulnerable populations. A similar study took place in Iraq with the support of OPHI, UNDP, and World Bank.[36] Honduras, Colombia and others used an MPI based on census or registry data to target emergency response.

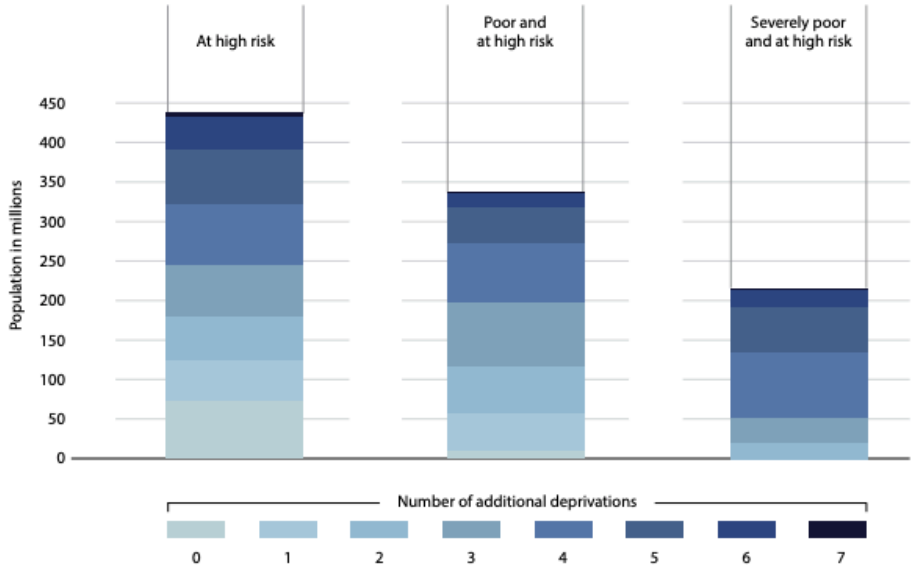
[34] UNDP and OPHI 2020, 1
[35] World Bank 2020
[36] UNICEF 2021

Reaction and Recovery

Devising appropriate and effective policy for the 3rd Decade on Poverty in this situation of uncertainty is a unique challenge – technically as well as in terms of policy. Many governments have attempted to address immediate effects of the Covid-19 pandemic as well as long-term issues that are still developing. However, they are faced with several challenges in this endeavour. One of them is a lack of data and knowledge: "many critical pieces of objective evidence to inform efficient policymaking are still missing, including real-time data on trends in multidimensional and monetary poverty and their underlying components, details of transmission mechanisms of SARS-CoV2, the hierarchy of factors impeding or accelerating its spread, the cause behind the profoundly different disease courses COVID-19 can take, immunity cycles, and even possible long-term effects for survivors."[37] Additionally, conventional survey data collection is difficult under distancing requirements, impeding the gathering and production of new evidence to fill the existing knowledge gaps. However, as Alkire et al. state "policy action needs to take place amid such adverse context for effective planning."[38] Identifying those at high risk from COVID-19 is another approach that can be useful for devising appropriate policy programmes. This can be done by either focusing on MPI indicators which represent COVID-19 risk factors or by incorporating new COVID-related variables such as "informal employment, intergenerational homes, overcrowding, handwashing facilities, … and sharing and caring roles within the household."[39]

For example, the 10 global MPI indicators reflect several COVID-19 risk factors, such as nutrition, water, and cooking fuel. "Unsafe drinking water and undernutrition are strongly associated with weakened immune systems and morbidity – implying an increased risk of severe or fatal disease courses. Deprivation in clean cooking fuel is associated with indoor air pollution and acute respiratory infections – implying an increased risk from COVID-19, which attacks the lungs."[40] Taking a closer look at these indicators can help to identify those particularly vulnerable to COVID-19. Analyses show that 62% or 3.6 billion of the 5.8 billion people in the 103 developing countries included in the analysis are deprived in at least one of three COVID-19 risk indicators indicating that they are at risk.[41] 435 million people in the developing world are at high risk, as they face deprivations in all three COVID-19 risk factors simultaneously. [42] Among the MPI poor, "336 million people are at high risk."[43]

Figure 4: People at high risk (in millions) and their additional deprivations



Note: Population figures are based on 2018 UN DESA population estimates.

Source: Alkire, Nogales, and Oldiges 2020

[37] Alkire et al. 2021, 17–18
[38] Alkire et al. 2021, 18
[39] Alkire and Pinilla-Roncancio 2020
[40] Alkire, Nogales, and Oldiges 2020
[41] Alkire, Dirksen, et al. 2020, 4
[42] Alkire, Dirksen, et al. 2020, 4
[43] Alkire, Dirksen, et al. 2020, 5

Furthermore, "[o]ver four out of ten MPI poor people who are at high risk (44%) are deprived in seven or more of the ten global indicators (including all three risk factors)." [44] Zoom in to look at the situation of different world regions, sub-Saharan Africa has the highest number and percentage of people at risk and at high risk. As *Table 2* shows almost 90% of its population – 899 million people – are at risk. 20.2% - more than 204 million – are at high risk.

Table 2: MPI and COVID-19 risk across world regions

	Population*	At risk	At high risk	MPI poor and at risk	MPI poor and at high risk	MPI severely poor and at risk	MPI severely poor and at high risk
Arab States	**335.432**	**112.101**	**12.586**	**48.053**	**11.873**	**23.079**	**9.319**
		33.4%	3.8%	14.3%	3.5%	6.9%	2.8%
East Asia and the Pacific	**2,057.124**	**1,117.873**	**114.423**	**105.493**	**32.749**	**20.443**	**7.584**
		54.3%	5.6%	5.1%	1.6%	1.0%	0.4%
Europe and Central Asia	**112.548**	**23.176**	**0.307**	**1.043**	**0.175**	**0.088**	**0.041**
		20.6%	0.3%	0.9%	0.2%	0.1%	0.0%
Latin America and the Caribbean	**520.707**	**138.093**	**13.319**	**34.186**	**7.608**	**9.232**	**3.385**
		26.5%	2.6%	6.6%	1.5%	1.8%	0.7%
South Asia	**1,792.785**	**1,317.264**	**89.756**	**520.829**	**81.843**	**186.498**	**37.407**
		73.5%	5.0%	29.1%	4.6%	10.4%	2.1%
Sub-Saharan Africa	**1,012.588**	**899.037**	**204.387**	**555.788**	**201.899**	**333.502**	**158.160**
		88.8%	20.2%	54.9%	19.9%	32.9%	15.6%
World	**5,831.185**	**3,607.544**	**434.777**	**1,265.391**	**336.146**	**572.843**	**215.896**
		61.9%	7.5%	21.7%	5.8%	9.8%	3.7%

* All population figures are presented in thousands and are based on 2018 UN DESA population estimates.
** Percentages show regional population shares across countries in the global MPI.

Source: Alkire, Nogales, and Oldiges 2020

Furthermore, national governments have pioneered different multidimensional vulnerability indices, using the MPI technology, to respond to COVID-19 consequences with appropriate and well-targeted policies. [45]For example, the Government of Honduras devised "a Multidimensional Vulnerability Index (MVI) to provide electronic vouchers for food, medicines and biosafety equipment targeted to independent workers and self-employed persons hit hardest by the COVID-19 pandemic."[46] Pakistan is also using a COVID-19 Multidimensional Vulnerability Index (MVI) for its immediate socio-economic response. [47] In Colombia, the recent Population and Housing Census from 2018 was used to update Colombia's national MPI and develop responses for poor and vulnerably people, including VAT refunds, solidarity income, additional cash transfers, and food packages.[48]

As mentioned, the effects of COVID-19 are diverse, and a measurement needs to be able to capture the specific challenges that a country may face. As Bhutan is strongly dependent on tourism. COVID-19 posed a particular challenge in this regard due to global travel restriction. However, Bhutan was quick to react: In order to analyse the exact impact of COVID-19, several government institutions, including the National Statistics Bureau (NSB) in collaboration with the Gross National Happiness Commission, Ministry of Labour and Human Resources, and Tourism Council of Bhutan, OPHI and with the support of UNDP conducted a study using a Multidimensional Vulnerability Index for Tourism (MVI-T) to assess the impact on the people of concern.[49]

[44] Alkire, Dirksen, et al. 2020, 5
[45] For further information, please see: OPHI 2021
[46] OPHI 2021
[47] For more information, please see: "COVID-19 Pakistan: Socio-Economic Framework" 2021
[48] Felipe 2020
[49] For more information, please see: National Statistics Bureau and United Nations Development Program Bhutan 2020

Thus, in light of the need for more updated data for the global MPI, global and national MPI simulations, national MPIs, and newly devised multidimensional vulnerability indices can represent critical tools for understanding the impact of COVID-19, identifying the vulnerable and poor, reacting to the immediate consequences, as well as devising long-term recovery strategies. In particular on the national level, the MPI has become crucial instrument for governance and crisis management.

Another important tool based on the MPI technology for the COVID-19 recovery is SOPHIA.[50] SOPHIA is a not-for-profit partner of OPHI which brings the MPI methodology to the private sector. With for example, more than 45 companies in Costa Rica, SOPHIA is helping to integrating and support the role of the private sector in the fight against poverty. Its newly launched Wise Responder Action Kit (WiRe) was designed to support companies "in Latin America and the Caribbean to tackle social challenges faced by their employees and their families in a COVID impacted world."[51] This work is key as action from the private sector and public-private partnership is invaluable in the COVID-19 recovery.

Conclusion

The consequences of COVID-19 are felt by people every day and the pandemic will still continue to impact people's lives around the globe, at least, in the near future. Nevertheless, we conclude that there is hope for a world without poverty. The current situation and the post-COVID tomorrow also offer opportunity to rebuild stronger and the replace outdated and violent structures with new ones that actively support more equitable progress toward a world without poverty. We hope that efforts in the 3rd Decade on Poverty Reduction will not give up in this dark time, when poverty has increased and is still increasing, but that poverty will rather have an even larger voice and presence in public discourse, calling for an inflection point on poverty, identifying and profiling good examples, calling for post-COVID surveys to gather core indicators of the MPI, and tracking change often and in a high-profile way using the MPI.

[50] For further information, please see: https://sophiaoxford.org/
[51] SOPHIA OXFORD 2021

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Appendix I: About the MPI

The global MPI is an internationally comparable measure of acute poverty, launched in 2010 by the Oxford Poverty Human Development Initiative at Oxford and the Human Development Report Office of the United Nations Development Programme for the flagship Human Development Reports. It was introduced as result of a growing understanding and recognition of the multidimensionality of poverty and that monetary measures are insufficient to reflect the reality and richness of people's experiences and the deprivations they face.

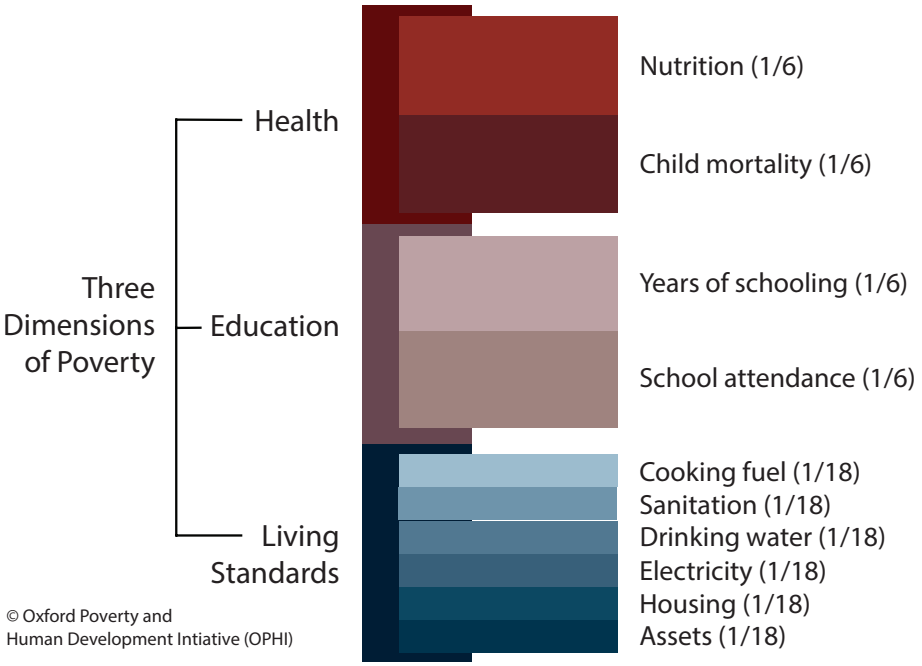
The MPI was revised in 2018 to better align with the SDGs. Standing as a complement to monetary poverty measures for the SDG 1, the global MPI and its linked information platform shows acute deprivations in the three dimensions of education, health, and living standards using ten core non-monetary deprivations. These ten indicators are related to SDGs 2, 3, 4, 6, 7, and 11. Therefore, the global MPI is tool that can be unfolded to evaluate the progress in individual aspects of people's lives, whilst also capturing joint deprivations and interlinkages.

The MPI is constructed using the Alkire-Foster method (2011) which is flexible in terms of dimensions, indicator, weights, and poverty cut-offs, and can be used for individual- or house-level data. The global MPI is based predominately on Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). As seen in Figure 3, the three dimensions are equally weighted and the indicators within the respective dimension as well. A person is identified as poor if he/she is deprived in at least one third of all weighted indicators. The MPI is computed by multiplying the headcount ratio and intensity of poverty and is, thus, able to reflect changes in both, the incidence of poverty as well as the average proportion of deprivations faced by people. The global MPI is extensively disaggregated, by subnational regions, rural/urban areas, and age cohort.

The MPI Glossary

MPI - Multidimensional Poverty Index	MPI = H*A The MPI is the product of incidence and intensity and ranges between 0 and 1, 0 indicating no one is MPI poor and 1 indicating that all people are deprived in all indicators.
H – Incidence (%)	Proportion of population in Multidimensional Poverty
A – Intensity (%)	Average proportion of weighted deprivations among the poor
MPI poor (thousands)	Number of people who are multidimensionally poor
Censored Headcount Ratio (%)	Proportion of people who are MPI poor and experience deprivations in the respective indicator
Absolute change (annualised)	The difference in a poverty measure between two years, divided by the number of years between surveys
Population change (thousands)	The total reduction number in MPI poor people between the two survey years.

Figure 5: The Structure of the MPI (Dimensions, Indicators and Weights)



Explanatory Note:[52]

Nutrition: Any person under 70 years of age for whom there is nutritional information is undernourished. Children under 5 years (60 months and younger) are considered undernourished if their z-score of either height-for-age (stunting) or weight-for-age (underweight) is below minus two standard deviations from the median of the reference population. Children 5-19 years (61-228 months) are identified as deprived if their age-specific BMI cutoff is below minus two standard deviations. Adults older than 19 to 70 years (229-840 months) are considered undernourished if their Body Mass Index (BMI) is below 18.5m/kg2.

Child mortality: A child under 18 has died in the household in the five-year period preceding the survey, based on birth history data provided by mothers aged 15 to 49.

Years of schooling: No eligible household member has completed six years of schooling.

School attendance: Any school-aged child is not attending school up to the age at which he or she would complete class 8.

Cooking fuel: A household cooks using solid fuel, such as dung, agricultural crop, shrubs, wood, charcoal, or coal. (If the survey report uses other definitions of solid fuel, these definitions are followed).

Sanitation: The household has unimproved or no sanitation facility or it is improved but shared with other households. A household is considered to have access to improved sanitation if it has some type of flush toilet or latrine, or ventilated improved pit or composting toilet, provided that they are not shared. If the survey report uses other definitions of adequate sanitation, these definitions are followed.

Drinking water: The household's source of drinking water is not safe or safe drinking water is a 30-minute or longer walk from home, roundtrip. A household has access to clean drinking water if the water sources is any of the following types: piped water, public tap, borehole, or pump, protected well, protected spring, or rainwater, and it is within a 30-minute walk, round trip. If the survey report uses other definitions, these definitions are followed.

Electricity: The household has no electricity.

Housing: The household has inadequate housing materials in any of the three components: floor, roof, or walls. Deprived if floor is made of natural materials or if dwelling has no roof or walls or if either the roof or walls are constructed using natural or rudimentary materials. The definition of natural rudimentary materials follows the classification used in country-specific DHS or MICS questionnaires.

Assets: The household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike, or refrigerator, and does not own a car or truck.

[52] Alkire, Kanagaratnam, and Suppa 2020, 8