

Extreme Poverty in the Time of COVID-19

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Introduction

The short term economic and wellbeing costs of COVID-19 have been severe. Though we hope the pandemic will be a temporary shock, in the interim it has pushed many vulnerable households living at the margins back into poverty. Due to lockdowns and social distancing measures, people have lost jobs and livelihoods, leaving them unable to pay for housing and food. Schools have been closed and some children may not return, shutting off one of the main pathways out of poverty for low-income children. Women and girls have been especially impacted by these school closures. Mothers at all socio-economic levels have dropped out of the labor force to supervise online learning and care for children and older relatives, and many will not reenter. Even before the pandemic, women and girls of reproductive age were overrepresented among the poor, making these setbacks all the more concerning.¹

We likely will not know the full impacts of COVID-19 on poverty for a few years, as most poverty data comes from household surveys, which have been difficult to carry out during the last year. However, we do know that economic growth is the largest driver of poverty reduction. Conversely, economic recessions drive a rise in poverty, other things being equal. In 2020, however, other things were not equal; national and local governments were able to mitigate the impact of COVID-19 on their poorest people to varying degrees and assessing the economy-wide impact of these measures cannot yet be done systematically. What can be done at this juncture is to use new estimates for economic growth through 2030 to capture the potential impact of COVID-19 on poverty in the long-run.

For example, some countries, like India, saw a substantial fall in economic activity in 2020, but are expected to see a strong economic recovery in 2021, despite the recent fresh wave of infections. India, in our view, will soon return to its pre-COVID poverty trends. Other countries, like Nigeria and the Democratic Republic of the Congo, will likely be slow to recover, and could experience low growth for the next decade. As a result, they may see higher poverty headcounts in 2030 than 2019.

While these facts are sobering, this long-term poverty stagnation is not inevitable. Countries have responded to the pandemic with a number of social protection measures to try and protect the most vulnerable. There has been a proliferation of mobile cash transfer programs, taking advantage of big data and machine learning to better target those in need. The needs are great, but not insurmountable; the amount needed to lift people out of extreme poverty is less than the current annual ODA budget. Eliminating extreme poverty will increasingly depend on better targeting as well as greater resource mobilization. We believe that geographic targeting of specific people in specific places offers considerable potential.

Global trends

Global poverty had been declining before COVID-19. By our calculations, extreme poverty, defined as those living in households spending less than \$1.90 per person per day in 2011 PPP terms, had fallen from 1.9 billion people in 1990 to 648 million in 2019, and was on pace to reach 537 million by 2030. As Figure 1 shows, COVID-19 interrupted this trend. The absolute number of people living in extreme poverty rose for the first time since 1997. The economic contraction and job layoffs due to lockdown

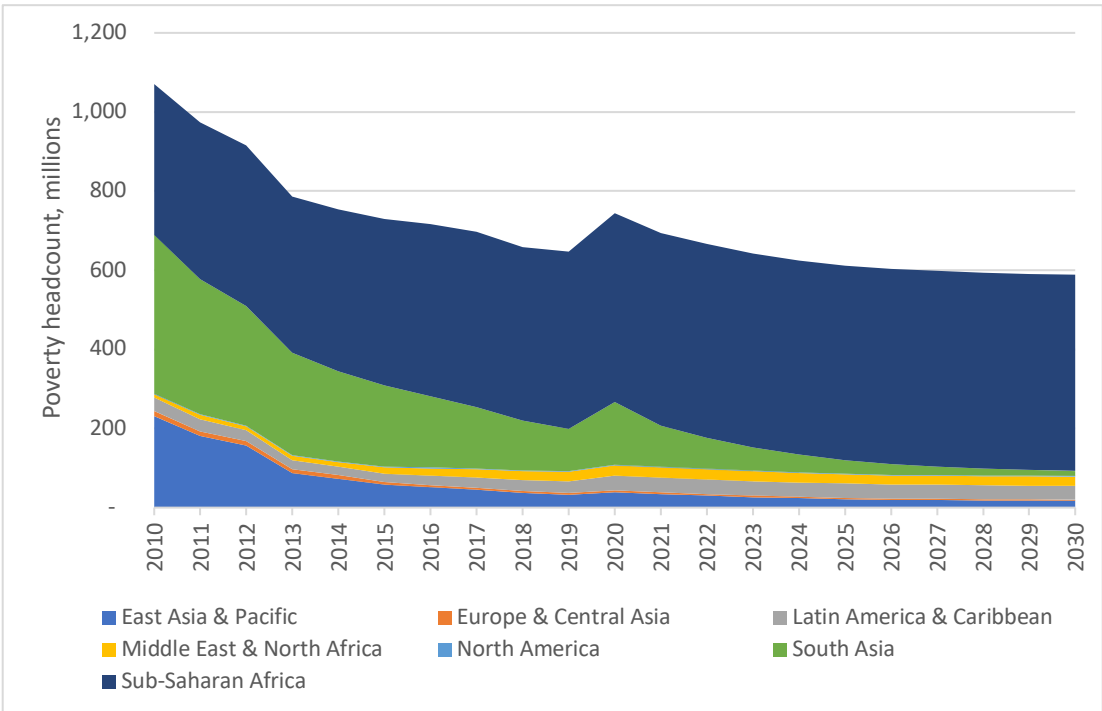
¹ Munoz Boudet et al. (2018). "[Gender Differences in Poverty and Household Composition through the Life-Cycle: A Global Perspective.](#)" World Bank Policy Research Working Paper No. 8360.

measures in many countries would have caused poverty to rise by almost 100 million in 2020 to 745 million without offsetting measures.

The global recession in 2020 was less severe than had been feared in September 2020, so the potential poverty impacts are not as high they might have been.² However, we do not expect global poverty headcounts to fall below 2019 levels until 2023; COVID-19 set back poverty reduction by an average of 4 years. In some countries, the impacts will last far longer. Even before COVID-19, the rate of decline of global extreme poverty had slowed compared to the rapid reductions recorded in 2010-13. As a result of scarring caused by COVID-19, we estimate that by 2030, 588 million people could still live in extreme poverty, an additional 50 million people compared with pre-COVID estimates.

The face of global poverty is likewise changing. In 2020, 64% of the poor lived in sub-Saharan Africa and 21% lived in South Asia (see Figure 1). By 2030, however, South Asia could have largely ended extreme poverty. Meanwhile, due to continued population growth and low economic growth, sub-Saharan Africa could be home to 84% of the world’s poor. Poverty is becoming increasingly concentrated in middle-income, fragile and conflict affected, and sub-Saharan African states.

Figure 1: Global poverty headcount (<\$1.90 per person per day, 2011 PPP terms) by region, 2010-2030



Source: Author’s calculations, based on methodology in Crespo Cuaresma et al. (2018). Estimates based on PovCal March 2021 update and IMF World Economic Outlook April 2021 update.

Country level impacts

While COVID-19 has been felt worldwide, the poverty impacts have been particularly severe in a handful of countries.

² Homi Kharas (2020). [“The impact of COVID-19 on global extreme poverty.”](#) Brookings Future Development Blog.

India experienced the largest COVID-19 related jump in potential poverty in 2020 (see Table 1). We use the term “potential poverty” to denote the impact of COVID-19 before accounting for mitigating social transfer payments from governments whose impact we cannot yet observe. Poverty had fallen to 78 million in India in 2019 after many years of steady decline caused by strong economic growth. It had even lost its title as the country with the largest poverty headcount in the world to Nigeria. However, India’s severe economic contraction, combined with the fact that many people had only recently escaped poverty and lived just above the poverty line, led potential poverty to rise by 46 million in 2020. Our estimates currently show that poverty will fall back to 72 million in 2021, below the 2019 level. However, the current surge in COVID-19 cases in India may make the economic rebound in 2021 smaller than predicted, prolonging the COVID-19 induced poverty increase.

Nigeria was also severely impacted. Nigeria had 84 million people living in extreme poverty in 2019; this figure rose to potentially 92 million in 2020. Due to high population growth and economic stagnation, poverty is set to rise further in 2021 to 94 million. Nigeria was home to the largest number of the extreme poor in 2019, and on current trends it will hold this title through 2030. Nigeria represents the new face of extreme poverty – middle income, fragile and conflict affected, and located in sub-Saharan Africa.

In the middle of these two extremes of a rapid and slow recovery is Pakistan. Pakistan had a poverty headcount of 8.7 million in 2019, with the poverty rate hovering around 4% for the last 5 years. Potential poverty jumped to 10.3 million in 2020 in response to the pandemic and is predicted to rise again slightly in 2021 due to a slow recovery. However, poverty is set to drop back to 8 million in 2023 as GDP per capita returns to 2019 levels.

Table 1: Top 10 countries by change in potential poverty headcount 2019-2020 (millions)

Country	Change 2019-20
India	46.0
Nigeria	7.4
Venezuela	3.8
Philippines	3.7
DRC	3.3
Indonesia	2.1
Afghanistan	2.1
Uganda	1.9
Yemen	1.8
Pakistan	1.7
World	97.1

Source: Author’s calculations, based on methodology in Crespo Cuaresma et al. (2018)³. Estimates based on PovCal March 2021 update and IMF World Economic Outlook April 2021 update.

³ Jesús Crespo Cuaresma, Wolfgang Fengler, Homi Kharas, Karim Bekhtiar, Michael Brottrager and Martin Hofer (2018). “[Will the Sustainable Development Goals be fulfilled? Assessing present and future global poverty.](#)” Nature Palgrave Communications 4, no. 29.

Long-term COVID-19 impacts

COVID-19 will act as a short-term shock in most countries, temporarily setting back progress on poverty reduction and other development indicators before growth rebounds in 2021 and 2022. Countries like India, the Philippines, and Indonesia on the list above fall into this category. While households need support to weather the next year or so, in the long run, continued economic growth will lift vulnerable households out of poverty. The international development community has less to worry about in this sub-set of countries.

In other countries, however, the economic impacts of COVID-19 will linger. According to the latest IMF growth projections, 33 developing countries will still have 2026 per capita income levels (in 2017 PPP terms) below their 2019 levels. 15 are in sub-Saharan Africa and 9 are small island developing states. In these countries, long term economic stagnation complicates poverty reduction efforts. High population growth also hinders progress in some countries, with more people being born into poverty than are escaping it. When we compare 2030 poverty headcount estimates before and after COVID-19, we find the longest lasting impacts in a handful of sub-Saharan African countries and conflict affected states (see Table 2). For example, before COVID, we predicted poverty in Nigeria would reach 96 million by 2030. We now predict that poverty will reach 112 million by 2030, an increase of 16 million. Concerted international action will be required to reverse this trend.

COVID-19 will accentuate the concentration of poverty in Africa. By 2030, the nine countries with the largest numbers of extreme poverty will be in Africa, with Burundi and North Korea in equal tenth place.

Table 2: Top 10 countries by change in poverty headcount in 2030, pre/post COVID-19 (millions)

Country	Change in 2030 poverty headcount
Nigeria	16.5
DRC	11.1
Tanzania	6.1
South Sudan	4.3
Venezuela	3.9
Mali	3.8
Angola	2.8
Uganda	2.4
Burkina Faso	2.3
Kenya	2.1
World	51.6

Source: Author's calculations, based on methodology in Crespo Cuaresma et al. (2018). Estimates based on PovCal March 2021 update and IMF World Economic Outlook April 2021 update.

Using data for better targeting

Unless general economic growth accelerates in Africa, the prospects for poverty reduction are dim without specific poverty targeting programs being put in place. One silver lining of the COVID-19 pandemic has been the attention that has been given to improving and extending social protection programs. The World Bank estimates that in March 2020, there were 103 active social protection

programs in 45 countries.⁴ This number jumped to 1,414 programs in 215 countries by December 2020. All around the world, countries launched social protection and safety net programs to help those at the bottom of the income distribution weather the COVID-19 pandemic. While many of these programs may be temporary, there is some hope that with the infrastructure now in place, these programs can continue to provide assistance for the poor and help them move out of poverty.

A good example is Togo's Novissi program. In response to COVID-19, the government of Togo worked with researchers to use satellite data on population density and mobile phone usage data from Facebook to target cash transfers to the poor.⁵ Thus far, the Novissi program has delivered \$5 million across 30,000 people. The lessons learned, on targeting, verification, enrolment, and payments processing are being absorbed by other countries with limited capacity.

Identifying who the poor are in these countries can be a particular challenge. Thankfully, advances in big data and machine learning, along with new non-traditional data sources, are helping to solve this problem. The international community has traditionally targeted aid at poor countries. Yet even in low-income countries, there are corridors of prosperity, often around the capital city, trade centers, or port hubs. The poor live in more remote areas. At the same time, there are persistent pockets of poverty in middle-income countries, who receive less aid due to their per capita income levels. In both cases, as poverty becomes concentrated in lagging, often hard to reach, places, aid targeting will likewise need to move from the national level to the sub-national level.

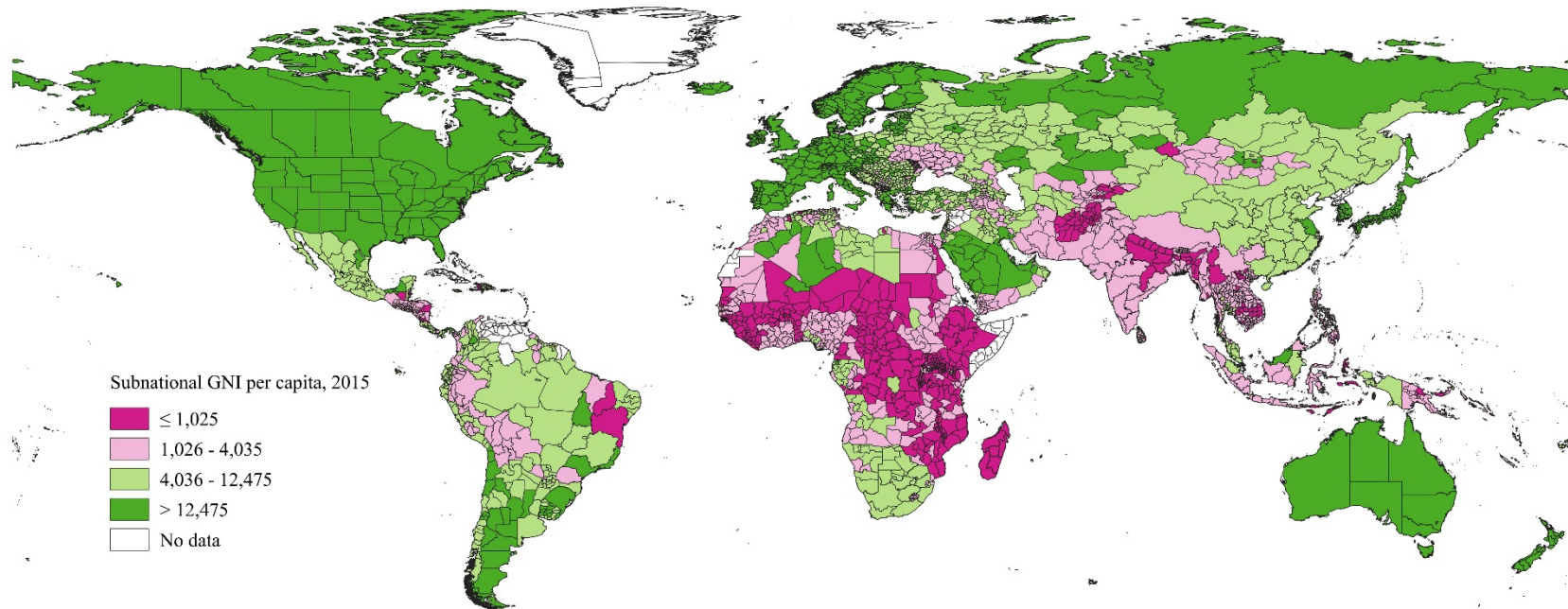
In past work, we identified 538 sub-national (GADM1) poverty hotspots, home to 1.1 billion people in 2015 across 77 countries, where the majority of poor people likely live.⁶ With higher population growth and lower economic growth than their non-poor counterparts, these hotspots are likely to be home to even more people by 2030. While many of these pockets are in low-income countries in central and eastern Africa, Figure 2 also shows clusters of poverty in north-east India, Afghanistan, Myanmar, Laos, the lower Mekong region, north-east Brazil and Central America. Even if these countries do not have large absolute numbers of poor people, those left behind still deserve assistance from the global community.

⁴ Ugo Gentilini, Mohamed Almenfi, Ian Orton and Pamela Dale (2020). [Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures](#). December 11 updated. Washington, DC: World Bank.

⁵ Talib Visram (2020). ["How GiveDirectly is finding the poorest people in the world – and sending them cash."](#) Fast Company, December 11.

⁶ Raj Desai, Homi Kharas and Selen Ozdogan (2020). ["Poverty Hotspots and the correlates of subnational development."](#) Brookings Global Working Paper 149.

Figure 2: Poverty Hotspots in 2015, based on sub-national GNI per capita (current USD, Atlas method)

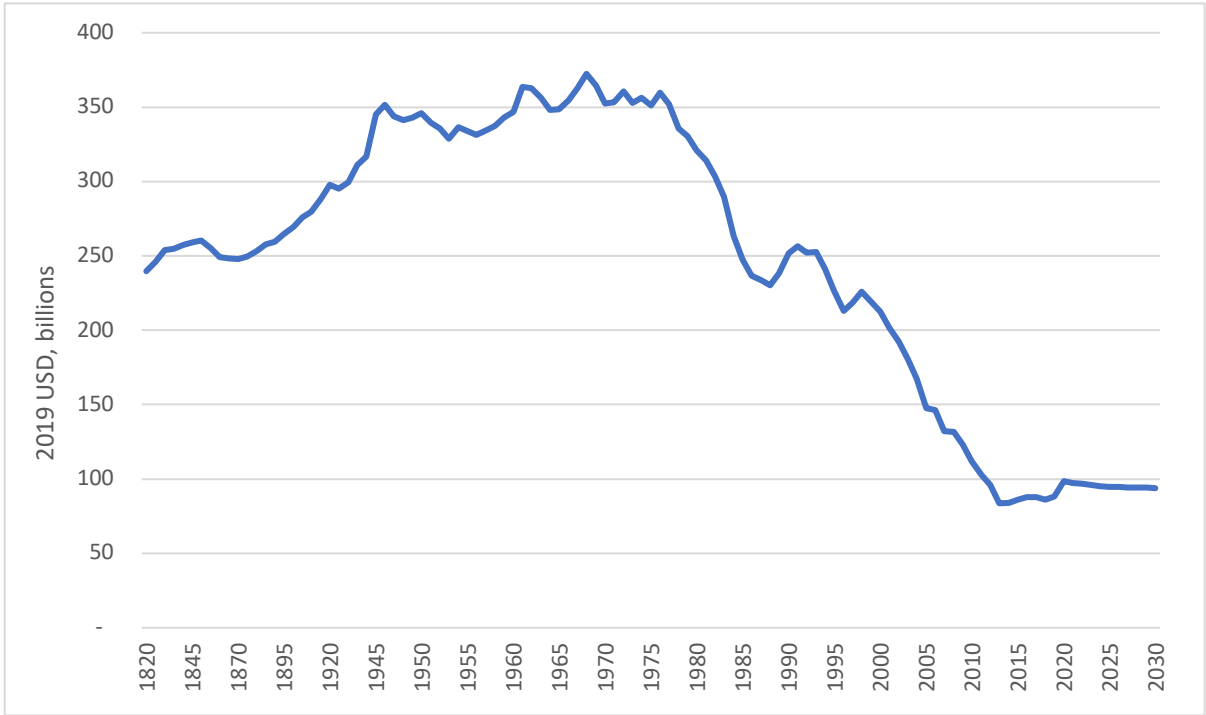


Source: Desai, Kharas and Ozdogan (2020). Calculations based on Kummu, Taka and Guillaume (2020), CIESIN (2018) and World Bank income classifications in 2015.

Conclusion

While the poverty setbacks caused by COVID-19 have been severe, they are reversible. The global poverty gap, the amount of money it would take to hypothetically bring everyone in the world above the extreme poverty line if there were zero transaction costs, is around \$100 billion and is set to stay at this level out to 2030 (see Figure 3). To put this in a comparative context, net bilateral DAC and multilateral ODA flows for 2020 amounted to \$161 billion;⁷ an incremental \$70 billion in private philanthropy is also being allocated to tackle poverty.⁸ Of course there are many dimensions to poverty other than income poverty, but the order of magnitude suggests that mobilizing more aid should be complemented by a renewed focus on targeting aid flows to the right places. 2021 represents an opportunity for the international community to double down on the “no one left behind” value of the Sustainable Development Goals, and to support investments in the cash transfer, social protection, and livelihoods interventions needed to end poverty by 2030.

Figure 3: Poverty Gap estimate, 1820-2030



Source: Author’s calculations, based on methodology in Crespo Cuaresma et al. (2018). Estimates based on PovCal March 2021 update and IMF World Economic Outlook April 2021 update.

⁷ OECD (2021). “[COVID-19 spending helped to lift foreign aid to an all-time high in 2020 but more effort needed.](#)” Press Release, Apr. 13.

⁸ Una Osili, Xiaonan Kou, Cathie Carrigan, Jon Bergdoll, Kinga Horvath, Carol Adelman and Charles Sellen (2020). “[Global Philanthropy Tracker 2020.](#)” Indiana University Lilly Family School of Philanthropy.