Emerging analysis and ideas

From pandemics to poverty

Hotspots of vulnerability in times of crisis

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Key messages

- In the international response to Covid-19, the furthest behind must be supported to limit transmission and mitigate negative impacts on welfare. The focus should be on countries facing multiple vulnerabilities, with weak healthcare systems and limited coping capacities, as well as people in poverty or at risk of falling into poverty.
- For rural populations in low-income countries, advice around regular handwashing may simply be impossible to follow, potentially rendering these people at heightened risk.
- Constraints on livelihoods, for instance if informal modes of work are limited in an effort to ensure social distance or migration is curtailed due to border closures, can over time restrict pathways out of poverty and contribute to re-impoverishment, food insecurity and destitution in the absence of adequate safety nets.
- There is a need to maintain and even expand existing pro-poor interventions across a range of sectors, including food production and food assistance, social protection and education.

About this article

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Introduction

As governments rush to respond to coronavirus, there is an urgent need to ensure that the measures they take are sensitive to the needs of their poorest and most vulnerable people. Analysis of past disease outbreaks such as SARS and Ebola suggests that income poverty is an important factor in disease transmission (Fallah et al., 2015; Bucchianeri, 2010). Given the nature of Covid-19 and its transmission, containment and mitigation policies need to cover everyone, while also recognising that poorer people may be at greater risk of contracting Covid-19. Governments must also be sensitive to the short- and longer-term welfare impacts. Long-term poverty risks may be exacerbated through a vicious cycle of disease, destitution and death, whereby poverty contributes to disease transmission, and contagion fuels poverty. There may also be a trade-off between public health measures and the likely heavy economic and food security impacts. Poor and vulnerable people may not be able to cope with these second-order effects.

This brief outlines countries, sub-national areas and populations in or near poverty that need to be explicitly prioritised in the response to coronavirus. The analysis focuses on developing countries with $1.90 poverty rates above 3% (based on a 2015–2018 average), unless stated otherwise. To help capture the multidimensional nature of poverty, we also include deprivations at the country and individual level, such as weak public health systems and coping capacities, high DALY counts and limited access to water, sanitation and health (WASH) services. Although the areas and populations highlighted are by no means an exhaustive sample, the brief is written with the aim of informing policy responses to consider the needs of groups that may otherwise be overlooked in government and international responses to Covid-19.

Countries with multiple sources of risk and vulnerability

Internationally, given the global dimensions of the crisis, a focus on countries with multiple sources of disadvantage (e.g. weak institutions, poor disaster risk management, fragile governance), which often which intersects with $1.90 poverty rates, can help pre-empt the worst effects of Covid-19.

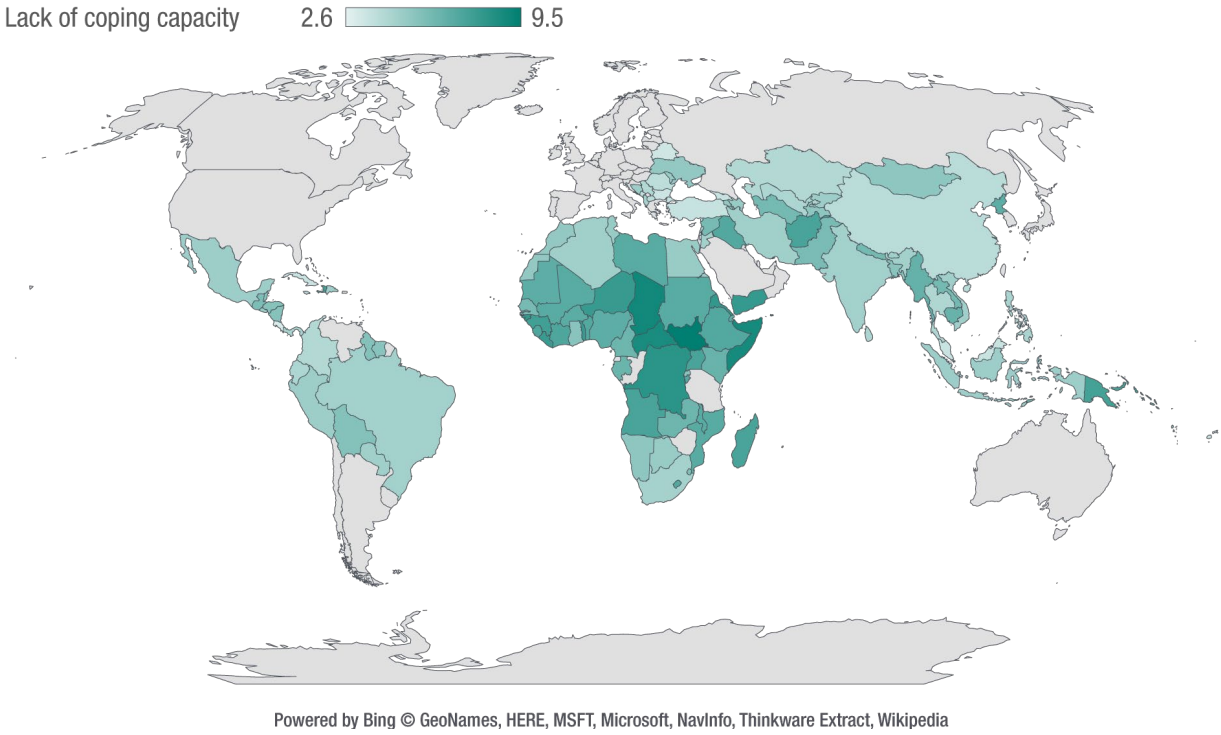
Inadequate coping capacities

Countries with high poverty rates and weak governance and institutions are especially vulnerable to negative short- and long-term socio-economic impacts from Covid-19. Countries with weak governance may find it particularly difficult to provide healthcare and other basic services, and during crises these fragile systems can deteriorate or collapse.

The INFORM risk model and database of 191 countries identifies those at risk of humanitarian crises and disasters, including pandemics. Some of the indicators used to develop these risk profiles are related to countries' coping capacities – as measured in the strength of institutions (disaster risk reduction and governance) and infrastructure (physical, e.g. access to improved

water and sanitation; communications, e.g. electricity and mobile phone and internet access; and access to healthcare). Together, these determine national-level coping capacities. Coping capacity is shown in Figure 1 for the subset of developing countries with available data.

Figure 1 Lack of coping capacities across developing countries



Source: Visual representation of INFORM (2020) data.

There is a strong correlation coefficient (0.73) between the $1.90 poverty rate and lack of coping capacities in developing countries. The five countries with the weakest coping capacities are all in sub-Saharan Africa (the Central African Republic, Chad, the Democratic Republic of Congo, Somalia and South Sudan). With limited access to healthcare and weak governance, the pace of transmission of Covid-19 will easily exceed the ability of these high-risk countries to cope, contributing to high death rates, impoverishment and destitution.

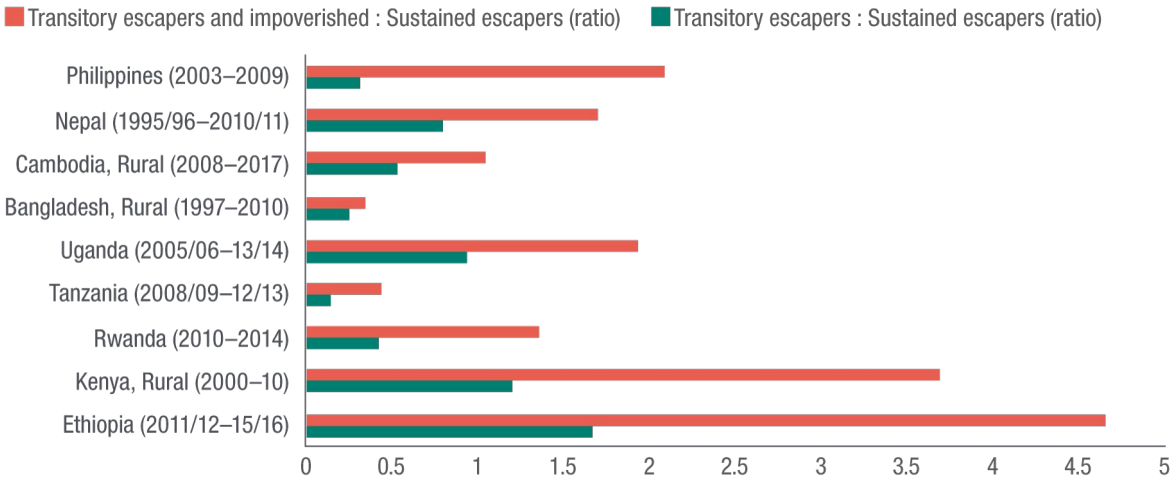
Negative impoverishment ratios

Inadequate coping capacities at national level put people living at or near the poverty line at risk of new or deepened poverty. They are generally less able to adopt household-level containment strategies, may be more likely to be in ill-health, may have less access to information and testing and cannot always afford medical care, particularly in contexts without universal health coverage. Being in poverty may accentuate the risk of becoming infected with Covid-19, and being infected in turn could accentuate the risk of falling into poverty.

Together, national and household-level capacities can influence the rate at which people escape from and remain out of poverty over time, and their resilience to shocks. These rates of sustained poverty escapes may be less than the rates of households falling into poverty, or escaping but then falling back. Figure 2 compares these shares. Values greater than 1 indicate that negative poverty dynamics (of transitory escapes and impoverishment) outpace sustained escapes, as is the case in almost all the countries in Figure 2. More generally, negative ratios of

impoverishment to sustained poverty escapes reflect the diverse risk environment in which people near poverty live in different contexts.

Figure 2 Household-level poverty descents vs escapes



Source: Author's analysis of panel datasets.

Coronavirus is a threat multiplier. Its impacts, coupled with the impacts of public health-related policy responses, may have multiple and interlocking consequences. Covid-19 can also compound other existing shocks and stressors, further impoverishing households near the poverty line. However, Covid-19 and other sources of ill-health are far from the only shocks or stressors in these contexts. Drought, floods or other hazards, price volatility, theft (affecting especially women and older heads of households), the impoverishment of women-headed households upon separation, divorce or widowhood, and in some countries conflict between pastoralists and farmers are just a few of the other common sources of impoverishment (Diwakar and Shepherd, 2018). The likelihood of falling into poverty or living in chronic poverty may also be higher in crises or conflict-affected contexts (Diwakar et al., 2017). Addressing these issues alongside the response to Covid-19 is critical to tackling the range of risk factors that affect poor people's wellbeing.

Countries with weak public health provision and high poverty levels

In the response to the pandemic, the international focus should be on countries with the weakest health systems and highest rates of ill-health, in order to contain the outbreak and ensure that poverty does not deepen in these countries.

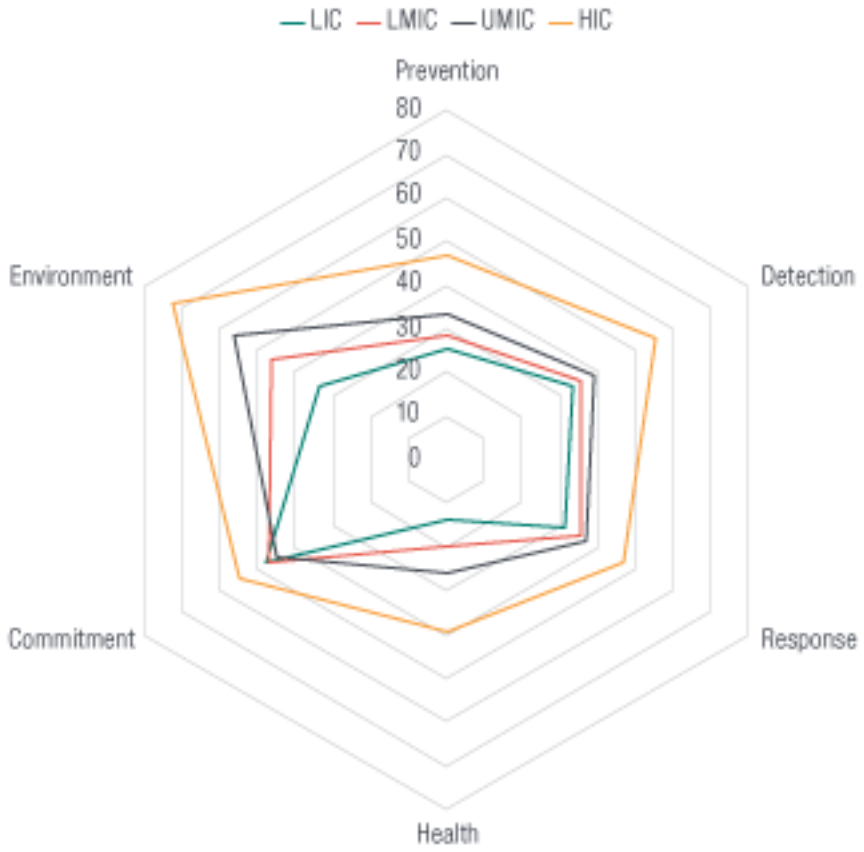
Health system capacities and spending and the burden of disease

Countries with weak health systems may find it particularly difficult to contain the spread of Covid-19. The Global Health Security Index (GHSI)[1] provides an indication of countries' capacities to manage biological threats, including pandemics. The index measures a country's risk environment as a composite of 'political and security risk; socioeconomic resilience; infrastructure adequacy; environmental risks; and public health vulnerabilities that may affect

1 The GHSI is comparable to the INFORM country coping capacity measures, though it specifically relates to the management of health risks.

the ability of a country to prevent, detect, or respond to an epidemic or pandemic' (NTI and JHS, 2019: 36). Figure 3 averages GHSI scores by country income status, including high-income countries for a comparative perspective.

Figure 3 Health security by country income status

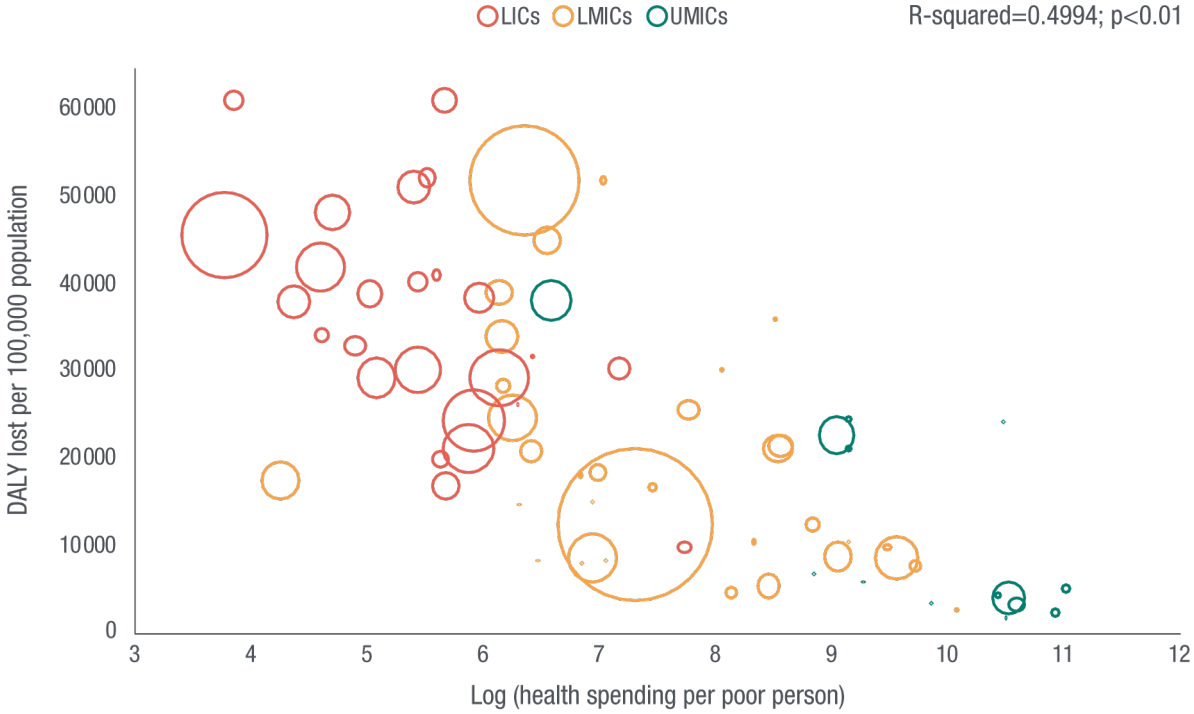


Source: Author's analysis of GHS (2019) data.

Investing in good-quality healthcare for poor and near-poor populations is critical in the Covid-19 response, to ensure that containment strategies are effective and to treat people who are affected (by Covid-19 or other health conditions). This will almost certainly require increased public spending on healthcare. However, plotting government expenditures on health per poor person against the national DALY[2] burden of disease for communicable diseases indicates that LICs largely fall in the top left quadrant, meaning that they have the worst DALY counts and the lowest government health spending per poor person (see Figure 4). Some LMICs, such as Cameroon, Côte d'Ivoire, Nigeria and Zambia, also have high DALY counts and low government spending per poor person.

2 Disability-Adjusted Life Year (DALY). 'One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability' (WHO, 2020).

Figure 4 Health spending and DALY



Note: Data points are weighted in size by the absolute numbers of people under the $1.90 poverty line (2015–2018 average).

Source: Author's analysis of WHO (2016), WDI and PovcalNet (2015–2018 average) data.

Together, Figures 3 and 4 suggest that LICs not only have high poverty rates and low institutional capacity, but also suffer from weak health systems and low coping capacity (Sterck et al., 2017). At the same time, LMICs such as Nigeria, Yemen and Zambia have large numbers of people in poverty, high DALY counts and weak healthcare systems, as scored by the GHSI. These factors put LICs and certain LMICs at particular risk of worse health outcomes during Covid-19.

Impoverishment related to ill-health

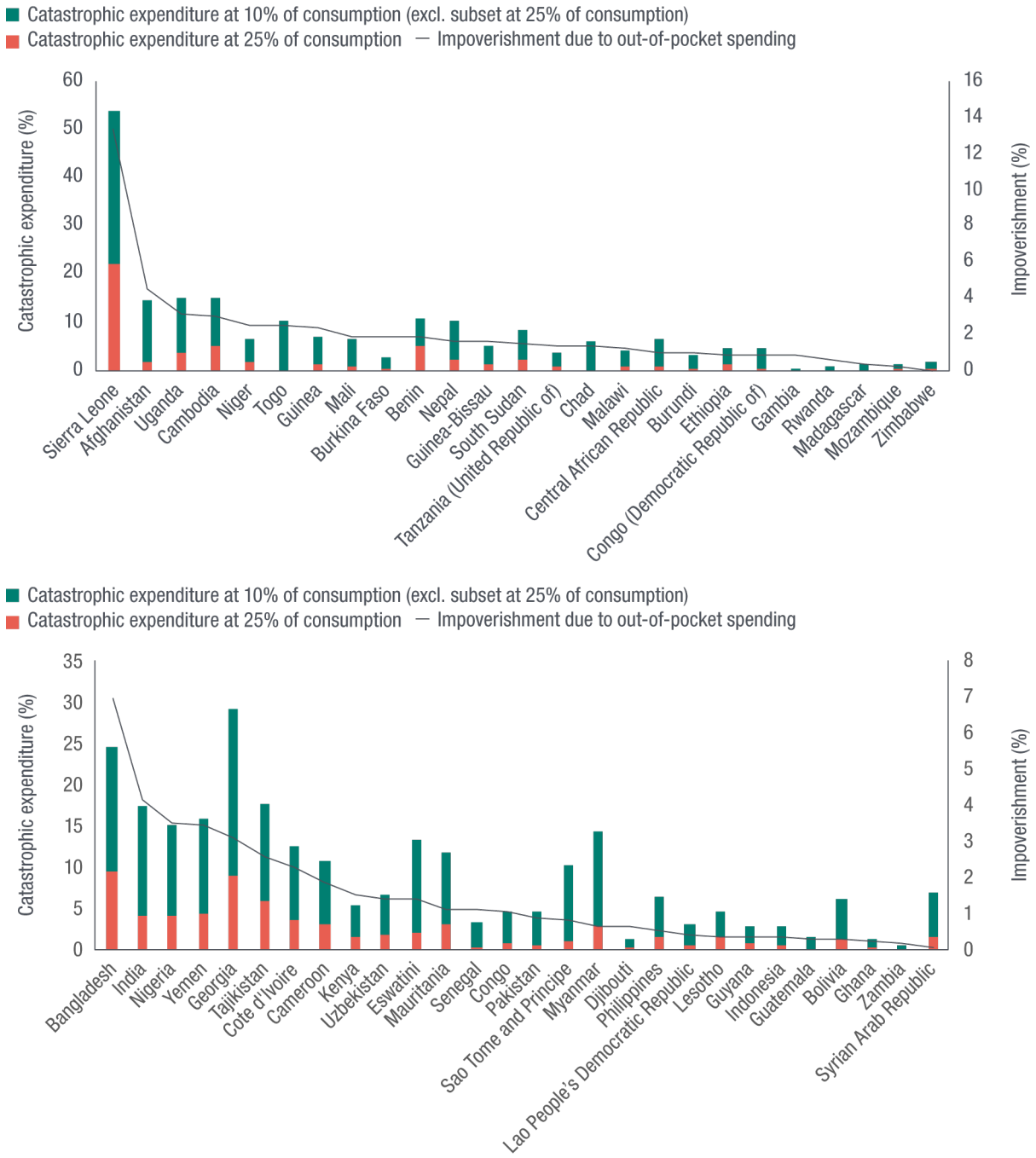
Weak health systems can contribute to impoverishment. Analysis of 11 countries (Figure 2, plus Malawi and Niger) reveals that a health shock is the most common source of household impoverishment (Diwakar and Shepherd, 2018). Outliers were Rwanda and to an extent Malawi. In the former, strong public investment in health insurance coverage with a degree of compulsion for enrolment, coupled with quality healthcare (in terms of facilities, number of doctors and technical support) and referral systems has helped stave off health-related impoverishment. Malawi spends the most on healthcare per poor person among countries at its income level.

In the absence of high levels of public health expenditure or insurance coverage, many households in or vulnerable to poverty might opt for healthcare only in response to emergencies, rather than as a preventative measure. They then engage in distress coping strategies, such as selling assets, taking out loans or liquidating savings, all of which can also lead to impoverishment (Diwakar and Shepherd, 2018).

For LICs and LMICs where data is available, Figure 5 plots the shares of households that have catastrophic health spending equivalent to 10% or 25% of total household consumption,

respectively, and the share of impoverishment due to out-of-pocket health spending at the $1.90 line. In LMICs, Bangladesh, India and Nigeria have high rates of impoverishment due to out-of-pocket health spending. In line with the poverty dynamics analysis noted above (Diwakar and Shepherd, 2018), Rwanda is near the bottom of the list of LICs with catastrophic health expenditures, while the share of catastrophic expenditure is also low in Malawi relative to the LIC-wide average.

Figure 5 Catastrophic health expenditures and impoverishment in LICs (top) and LMICs (bottom), latest survey year



Source: Author's analysis based on WHO (2019) data.

Subnational areas within countries

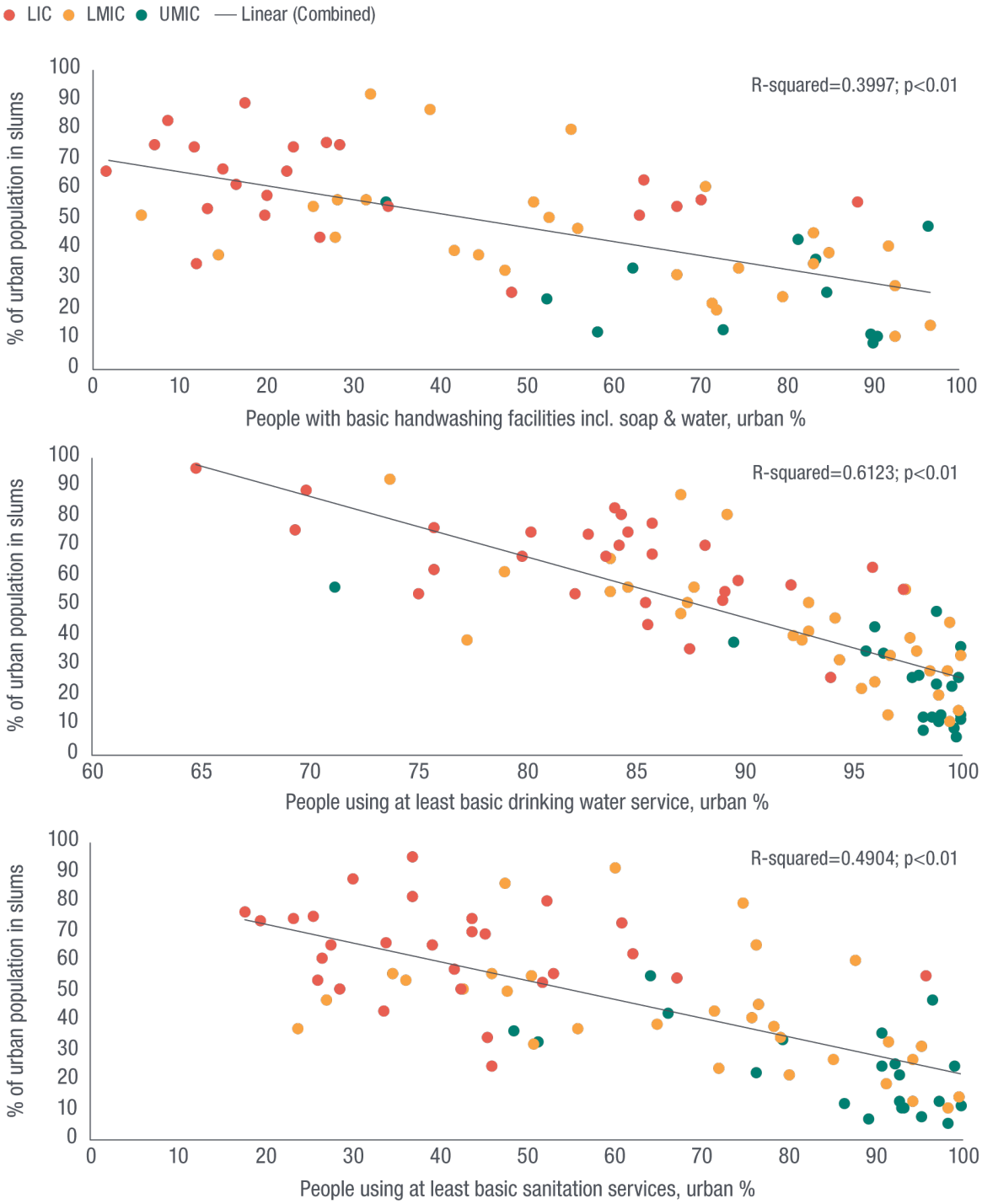
The country-level risk profiles outlined above are also partly reflected in in-country socio-economic disparities. This section highlights some sub-national areas within countries that require particular attention if the aim is to reach the poorest areas and populations in responses to international health crises.

Slums and informal settlements

People living in slums and informal settlements have limited access to basic services. There are other risk factors as well, such as not being able to give up work, and a reliance on off-farm livelihoods with precarious access to food. Population density in these areas makes it difficult if not impossible to practice the social distancing advised during Covid-19. Even where water supply does permit handwashing, this may be irregular and water shortages can be common. Informal settlements typically have few public toilets or water points (Brieman et al., 2011).

Exploring three sets of indicators – basic handwashing, availability of drinking water and sanitation facilities – in urban areas and plotting these against the share of the urban population living in slums for countries with available data indicates strong correlations for the water and sanitation variables, and a moderate (0.64) correlation for the handwashing variable (Figure 6). These correlations give some indication of the lack of basic water and sanitation in slums. Finally, while the analysis here focuses on slums, many other high-density urban contexts in low-income countries are also likely to have inadequate WASH and other service shortages.

Figure 6 Slum populations and access to basic water and sanitation

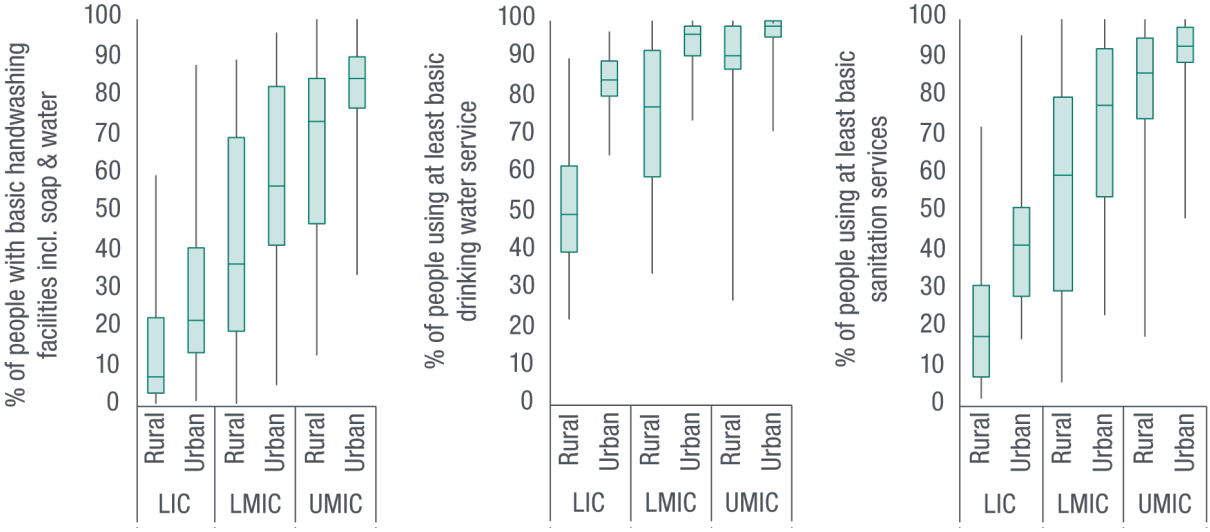


Source: Author's analysis based on WDI data on slums (2014) and on WASH (2017).

Rural areas with limited access to water, sanitation and healthcare

People living in rural areas may have limited access to water, sanitation and healthcare. They may have to travel long distances to reach medical facilities, incurring high transport costs. They may lack health insurance, their health literacy may be poor, and there may be social stigma around seeking healthcare for some conditions. There may also be workforce shortages. All can result in lower health outcomes (Noor et al., 2006; Brinkerhoff et al., 2017). The share of people with basic handwashing facilities or using basic drinking water or sanitation services is much lower on average in rural than in urban areas, particularly in low-income countries (see Figure 7). For rural populations in LICs, regular handwashing may simply be impossible, increasing the risk of transmission.

Figure 7 Access to basic handwashing facilities, drinking water and sanitation services



Source: Author's analysis based on WDI data on WASH (2017).

People in chronic poverty or vulnerable to falling into poverty across the lifecycle

While the analysis so far has focused on geographic areas where poverty levels or the likelihood of falling into poverty may be high, there are also specific population groups that need to be explicitly addressed in an equitable Covid-19 response.

People in chronic poverty

People and population groups in chronic poverty (see Box 1) suffer from high levels of food insecurity and low access to services. This is one example of the policy trade-offs between public health measures and the economic and food security impacts on poor and near-poor households. People in chronic poverty experience structural forms of discrimination, social and political exclusion or adverse inclusion in institutions and development processes. These may be heightened for people in chronic poverty facing intersecting inequalities on the basis of economic disadvantages and additional discrimination and exclusion based on identity and location (Arauco et al., 2014). One study of persistently poor women with disabilities in rural Bangladesh (Diwakar, 2017) found that they had a reduced likelihood of receiving social transfers and lower education outcomes compared to persistently poor men with disabilities. Investments in

containing the pandemic need to be sensitive to the particular needs of chronically poor women and men, and ensure that responses do not deepen multidimensional poverty.

Box 1 Additional risks to poor children and older people: two ends of the spectrum

Children

- School closures disrupt learning for poor children unable to use distance learning tools, or whose schools lack the capacity to offer them.
- Around 300 million children may miss school meals due to closures in response to Covid-19 (AFP, 2020). This could increase food insecurity, contributing in turn to increased rates of stunting (FAO et al., 2019).

Older people

- Older people are at increased risk of developing severe illness if they contract Covid-19, but also other sources of ill-health due to weaker immune systems and heightened risk of impoverishment.
- Lifecycle effects on poverty in some countries (Diwakar and Shepherd, 2018) can mean that there are more older people in poverty, with increased susceptibility to ill-health including Covid-19.

People vulnerable to falling into poverty

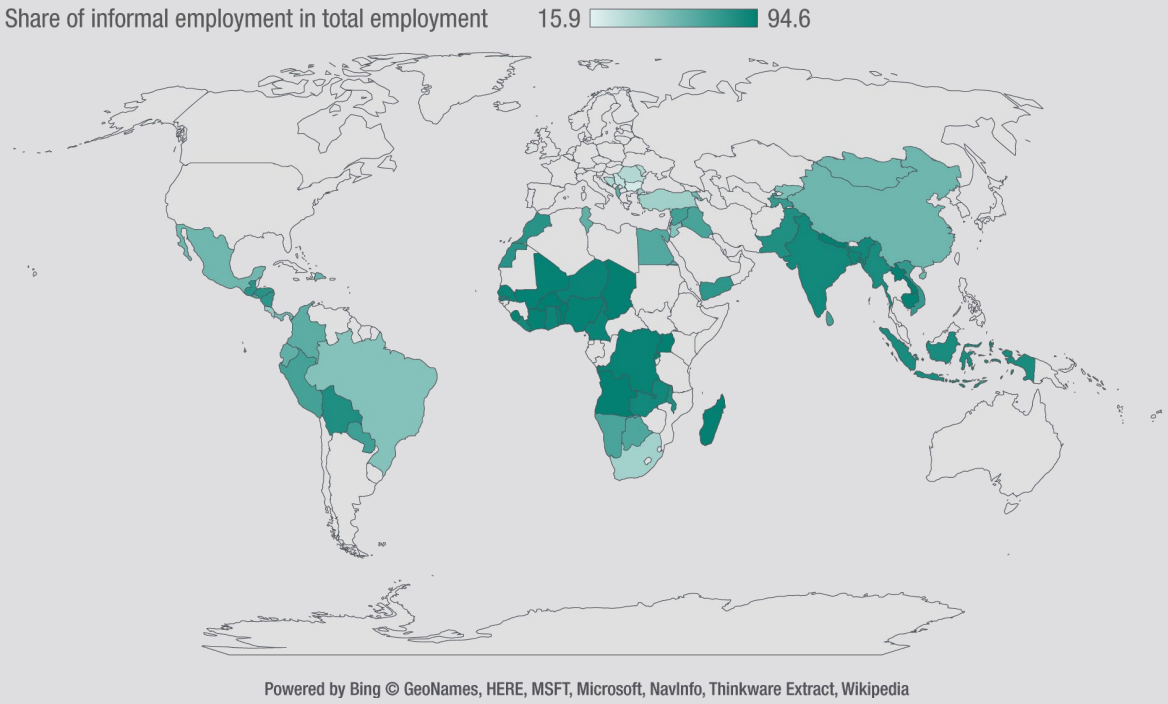
In addition to a focus on chronic poverty, there should also be a focus on people marginally above the poverty line, but who are vulnerable to falling into poverty in the face of shocks and stressors including those arising from Covid-19. In many developing countries, the share of near-poor can be substantial (Diwakar et al., 2019). In Kenya, for example, while under 40% of the population lives below the national poverty line, this figure reaches close to 80% when including households that have a per capita expenditure at a level below two times the poverty line (Diwakar and Shepherd, 2019).

The increased risks from Covid-19 make a focus on near-poor populations especially important. Constraints on livelihoods in the short term, for example if informal modes of work are limited in an effort to enforce social distancing or migration is curtailed due to border closures, can impact the ability of households to escape from and remain out of poverty. It can also contribute to re-impoverishment over time in the absence of adequate safety nets.

International and national responses should also consider the differential impacts on and needs of women compared to men, of people in different sectors (e.g. see Box 2), and of people not consistently captured by household surveys (Box 3).

Box 2 Vulnerability of workers in the informal economy

Workers in the informal economy, including workers who are not in the informal sector but still working informally and hence typically not covered by contributory social protection systems, are another group at risk of deepening poverty or impoverishment. Informal employment as a share of total employment is high in developing countries with high poverty rates (Figure 8). Many informal sector workers are required to be mobile, and may not want to stop working or travelling when the alternative could mean bankruptcy and severe hunger. The fact of being informal means that – with the exception of a few countries with more progressive laws – these workers are largely exempt from social protection and labour rights.



Source: Visual representation of ILO (2018) data.

Box 2 Groups not consistently captured by household surveys

The analysis so far does not cover groups not consistently captured in household survey instruments. This includes older people, some persons with disabilities, people suffering from mental ill-health, some migrants and some displaced and refugee populations. The analysis also does not capture those outside households, such as people experiencing homelessness and prison populations. A failure to reach these groups will compromise containment efforts more broadly, and have welfare implications over time. Special efforts are needed to ensure that services reach these populations, particularly in case existing resources may be diverted to focus on national systems during the pandemic.

Pandemics and international crises can result in the burden of childcare falling even more disproportionately on women given school closures, travel restrictions affecting female foreign domestic workers, health resources being diverted away from reproductive health towards the emergency response, increased domestic violence as a result of confinement at home, and increases in adolescent pregnancies partly as a result of the closure of schools (Wenham et al., 2020; Bandiera et al., 2018). Many of these effects have precedents in other pandemics, including the Ebola outbreak in West Africa (Korkoya and Wreh, 2015; Sochas et al., 2017). All of these factors could result in impoverishment and limit the economic inclusion of women beyond the crisis period. This has multiplier effects, given that the economic inclusion of women has been found to contribute to social inclusion outcomes for children (Diwakar, 2019). The intergenerational transmission of poverty beyond the crisis period risks being perpetuated if governments do not consider a gendered, lifecycle response to the current pandemic.

Across the groups and areas discussed, there is a range of second-order effects of Covid-19 (e.g. see Rohwerder, 2020). In 2018, 820 million people around the world were experiencing chronic hunger, of which 113 million were suffering acute severe food insecurity, where 'urgent humanitarian actions were needed to save lives and livelihoods' (FAO et al., 2019). Quarantines, lockdowns and disruptions in supply chains in the pandemic response could widen and exacerbate food insecurity for people already vulnerable to poverty. This in turn could increase the risk of morbidity and mortality during Covid-19 as malnourishment weakens immune systems.

More generally, weaker growth, restricted movement of people and aid supplies given border closures and the potential diversion of pro-poor development resources to combat the virus are just some examples of how Covid-19 may limit the ability of households to lift themselves out of poverty, while contributing to further impoverishment.

A way forward for poverty eradication in times of crises

The aim of this briefing note is to draw attention to geographic hotspots of poverty risk and populations vulnerable to poverty who may be particularly hard hit over the short to long term, both by Covid-19 and by any risk management actions. The main recommendation is that there needs to be explicit consideration of these groups in policy and programming responses. High-level, schematic short-, medium- and long-term responses are outlined in Table 1. These are offered as initial suggestions for ensuring that international and national responses adopt a pro-poor focus.

Table 1 Schematic pro-poor responses

Short-term (response)	Medium-term (recovery)	Long-term (applications of 'build back better')
Ensure assistance is sensitive to the needs of the poorest people		
Many countries will require significant international assistance in their response, particularly high-risk countries with weak coping capacities. Current logistics bottlenecks should be resolved to improve delivery of assistance. Among groups likely to be badly affected by Covid-19 and the policy measures taken to combat it, there is a need to check that people in poverty receive adequate support. Rapid data collection should support response efforts and improve in-context assessments.	Additional stimulus packages for governments, with greater focus on promoting inclusion and sustainability. Ongoing survey data collection to reflect Covid-19-related risks and impacts.	Improve monitoring of and assistance for populations not adequately captured in existing household survey instruments (Chavez and Samman, 2015). Adjust data collection instruments to measure poverty and vulnerability in an agile way, including for populations with intersecting inequalities.
Strengthen health systems and increase access for people in or near poverty		
Inequalities (e.g. by location and identity) can limit access to healthcare, food and WASH services. Shock-responsive social protection efforts are slowly countering some of these deficits in the short term (Gentilini et al., 2020), but more effective health systems are also needed. Provision of basic handwashing necessities and water (e.g. in slums and other poverty hotspots) can help reduce the rate of transmission. Separate treatment centres for Covid-19 as in the Ebola crisis may be helpful (Sirleaf and Panjabi, 2020), but measures will be needed to limit potential stigmatisation.	Strengthen insurance and public expenditure on aspects of health systems, e.g. family planning, maternal health, referral systems, supply-side reforms (more medicines and diagnostic tools, remove user fees) (Yates, 2020).	Invest in healthcare and WASH to improve availability, access and quality of services in rural areas and other hotspots of poverty, including conflict-affected areas. Improve urban planning and infrastructure in high-density, high-poverty areas such as slums and informal settlements.
Maintain continuity of and expand pro-poor development interventions		
Given multiple pathways of impoverishment, there is a need at the very least to maintain the continuity of existing pro-poor interventions across a range of sectors. Areas of emphasis include: 1) food production, especially of smallholders; 2) expanded social protection, with a shift away from public works to direct payments, including for workers in the informal economy, MSMEs and near-poor populations; and 3) continuity of learning, e.g. distance learning through technology (and distribute the technology, e.g. mobile phones, to reach chronically poor households). Alongside, stimulus packages and debt relief.	Macroeconomic stimulus and debt relief in the short and medium term. Food price inflation management. Improve infrastructure to ensure benefits from expanded technology (e.g. through improved internet connectivity).	Improve risk-informed development[3] strategies to acknowledge multiple shocks and stressors, and the two-way causality between fragility and poverty. The approach should include a range of measures to help tackle chronic poverty, prevent impoverishment and sustain poverty escapes (see Shepherd et al., 2014).

3 Risk-informed development is a 'risk-based decision process that enables development to become more sustainable and resilient' (Opitz-Stapleton et al., 2019: 13). It 'pushes development decision-makers to understand and acknowledge that all development choices involve trade-offs', with the creation of uncertain risks, as well as opportunities (ibid.: 9).

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