<ct>COVID-19 in Africa: Contextualizing Impacts, Responses, and Prospects</ct>

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It has become a truism that COVID-19 has impacted all countries and all people around the world, but in different ways. Yet this contextual diversity in the pandemic's impacts, the responses by governments and other actors, and the prospects for recovery are only beginning to be understood. This is especially so for Africa, where, on the whole, the pandemic had a late start compared to other regions, but where the complex interactions among the disease, local health systems, and preexisting vulnerabilities linked to poverty, inequality, and fragile governance make such understanding particularly important.

"Africa could become the next epicenter of the COVID-19 pandemic,"¹ though thankfully the rate of infections has slowed in most parts of the continent in August and September. Yet the risk of a second wave of infections remains high, and in any case, the effects of the global recession and of governments' lockdown regulations are layered upon a context of widespread poverty and constrained states, resulting in severe humanitarian, economic, and social impacts, with long-term implications for sustainable development on the continent. Setbacks to Africa's sustainable development agenda have global implications, and this is true for the pandemic also. As argued by the United Nations Secretary General, "Only victory in Africa can end the pandemic everywhere."²

In this article, we describe and analyze the pandemic's spread and its impacts, as well as governments' and other actors' responses. We focus on the four countries in which we are based—Kenya, Mauritius, Nigeria, and South Africa—but we also draw on experiences elsewhere on the continent. Our focal countries are prominent nations in eastern, southern and western parts of the continent, and they offer illustrative and diverse examples—for example, South Africa has been the epicenter of the pandemic, with about half of all reported infections on the continent (by September), whereas Mauritius has stemmed the spread to just a few hundred infections. Our analysis relies on interviews and conversations with diverse people in these countries from government, business, and civil society organizations, as well as reports by the media and local and international agencies, and some of the early scholarly papers.

We commence with an overview of the spread of the disease in Africa, explaining why the available data are not very reliable and why that is important. We then focus on the significant economic and social implications of governments' "lockdown" regulations, meant to stem the spread of the virus. We argue that both the public health efficacy and the socioeconomic consequences of such lockdown measures are crucially influenced by distinct and diverse African contexts. This is compounded by most African governments' limited fiscal and organizational resources to mitigate the socioeconomic impacts, even though there have been inspiring efforts by some civil society organizations and businesses to help fill such gaps. These three factors aggregate into two cross-cutting manifestations of the pandemic in Africa: the important role of the pandemic's particularly harsh impact on informal workers, and its compounding effect on preexisting inequalities across income, gender, and geography.

We thus identify five contextual features of the COVID-19 pandemic in Africa that need attention in ongoing efforts to limit the spread of the disease and to mitigate its impacts, and to learn from this crisis for the sake of "building back better" (see corresponding article in this issue). These contextual features also hold lessons for other parts of the world, where the pandemic is similarly foregrounding and exacerbating preexisting social fissures and inequalities, as well as governance challenges.³

<1>A Late But Rapid Spread and Recent Decline—With Blind Spots</1>

Africa has—at the time of writing, in mid-September—a relatively low number of infections relative to other regions. The total number of confirmed cases on the continent is currently at about 1.4 million, compared to, for example, 8.2 million in North America.⁴ Even when measured as a proportion of the total population, Africa is relatively less affected, with about 1,200 confirmed cases per million population, compared to about 14,000 in North America.⁵

Africa experienced a late onset of the pandemic, with infections spreading weeks or even months later than in other regions. This is probably at least in part because much of the continent is less connected to other parts of the world in terms of international travel. Within Africa, the countries with the earliest and steepest rise in cases—South Africa and Egypt—are those that have relatively stronger travel connections to early global "hotspots" in Asia and Europe.⁶ This pattern also manifests within countries, as large cities with international airports and large, dense populations have borne the early brunt of the disease. In South Africa, Cape Town experienced the strongest early surge in infections, while in Nigeria it was Lagos, and in Kenya, Nairobi (much like, for example, New York in the United States).

Because the virus came to Africa later than to other regions, African governments had more time to put in place diverse forms of "lockdown" regulations to slow the spread of the virus (which we discuss in the following), and some African governments also made good use of their prior experience with epidemics like HIV and Ebola. Together with the continent's lower population density and sparser transportation networks, this probably helped slow the initial spread of the disease within Africa.⁷ For example, in Kenya, the virus's spread has been as yet limited in most of the country's northern, sparsely populated regions. Other theories have been suggested for this relatively slow initial spread in Africa, including the role of a warmer climate or even Africans' genetic makeup, but these have been mostly debunked by scientists.⁸

However, the fact that the disease has not, as yet, spread as widely as in other regions provides little room for complacency. One reason for this is that the available data on the spread of the virus are not very reliable, as we will discuss in more detail below. Another reason is that even these imperfect data show that the rate of spread grew significantly in July, when confirmed cases more than doubled, from about 400,000 to about 920,000.⁹ That said, there has been a welcome decrease in the rate of spread in recent weeks. Daily confirmed cases in Africa are now, around mid-September, at less than 10,000, down from a peak at around 20,000 in late July. (For comparison, North America had a peak of about 90,000 daily new cases in late July and is now at about 50,000.)¹⁰

South Africa has had by far the highest number of cumulative infections on the continent, with more than 650,000 cases in mid-September (the eighth highest national number, at this point).¹¹ However, the number of new daily has been diminishing significantly of late, from peaks of over 13,000 in much of July to about 2,000 in mid-September.¹² Most other African

countries have had smaller confirmed case numbers. For example, as of mid-September, Nigeria has the fifth highest number of confirmed cases on the continent (about 57,000), and Kenya was seventh with about 37,000 confirmed cases.¹³

In July and early August, high rates of spread in most African countries led the WHO emergencies chief to warn that, "South Africa may, unfortunately, be a precursor, it may be a warning for what will happen in the rest of Africa."¹⁴ At this point (mid-September), it looks like the South African trajectory is not as bad as was feared a few weeks ago, and indeed the spread of the virus has recently slowed also in many other African countries. However, there remain significant risks due to our lack of reliable knowledge about the true spread of the virus, and also because there is a chance of second wave of infections as government lockdown regulations are unwound and people revert to pre-crisis behaviors.

The major public health concern has been that a rapid growth in infections may overwhelm the already overstretched public health systems in many African countries. Massinga-Loembe and colleagues refer to "a catastrophic shortage of healthcare professionals (0.2 per 100 000 in sub-Saharan Africa versus 1.5 per 100 000 worldwide)."¹⁵ There are fewer than 2000 ventilators spread across 41 African countries, compared to more than 120,000 in the United States.¹⁶ There are also significant disparities within countries. In South Africa, the province that was initially hardest hit by the virus, the Western Cape, was able to expand health facilities, with the result that emergency beds have not run out. For example, the provincial health department converted Cape Town's International Convention Centre into a temporary 800-bed hospital, and it negotiated with private hospitals to gain access to intensive care unit (ICU) beds. But in the adjacent Eastern Cape province, which was subject to systematic underdevelopment during the Apartheid era, the situation has been more problematic, as a

growing case load has put mismanagement and lacking resources into stark relief. Health workers went on strike to protest their working conditions, including a lack of access to personal protective equipment and growing infections among staff.¹⁷

Furthermore, the available data about infections need to be treated with caution. For a start, especially because of the existence of asymptomatic infections, our knowledge of the virus's spread depends on widespread testing, and many African governments have been constrained by a lack of funding, expertise, and laboratories in rolling out large-scale testing. In South Africa, testing has been comparatively effective, with about 68 total tests per thousand people by mid-September (though more than half of these tests have been performed by the private sector).¹⁸ In Kenya, there have been about 10 total tests per thousand, and in Nigeria only about 2 per thousand.¹⁹ These total test numbers are significantly below the WHO-recommended rate of at least one test per thousand, *per week*. "Where testing is insufficient, we are fighting this disease in the dark," notes an advisor of a crisis-response nongovernmental organization (NGO).²⁰

Concerns around unreliable data also pertain to deaths due to the pandemic. This is because deaths are not always correctly attributed to the virus, especially because there are many diverse comorbidities involved. It is also because more deaths are occurring from diseases such as HIV/Aids, as health services focus their attention on COVID-19 and people avoid going to clinics for fear of the new disease. Increased hunger due to the economic and social effects of lockdown regulations, which we discuss in the following, may also be contributing to increased death rates already. In South Africa, for example, researchers compared weekly deaths from natural causes in 2020 to what would have been expected from prior years, and they found a significant number of "excess deaths." While South Africa's official COVID-19

mortality rate (i.e., deaths as a proportion of COVID-19 cases) is just over 1.5%, if these excess deaths are included the total pandemic mortality rate would be more than 6.5%.²¹

Many African countries face significant constraints in ramping up their testing programs, including limitations of their public health systems and infrastructure, as well as widespread stigma linked to the disease. The development of a low-cost testing kit in Senegal may well be a vital innovation, but its validity was yet to be confirmed at the time of writing.²² Related challenges pertain to the implementation of effective tracing programs using smartphone apps. Researchers in South Africa developed a tracing app adapted to developing country contexts, but the government seemed unable or reluctant to make use of this.²³

For the most part, these constraints in enhancing transparency and access to information about COVID-19 are due to limited resources. In some cases, however, there are willful political efforts to prevent such data from being collected and published. The Tanzanian government stopped reporting COVID-19 cases in early May, with its president, Mr. Magufuli, arguing that the pandemic "was finished" in his country due to the power of prayer and the effectiveness of unproven traditional remedies. This response fits into a broader decline toward authoritarianism in that country, with public health workers and NGOs afraid to speak out against the president's views.²⁴ Thankfully, Mr. Magufuli's overt obstructionism is not commonplace. Most African governments have sought to respond to advice from the likes of WHO and the Africa Centre for Disease Control (CDC), though as we discuss later, such advice has not always been well aligned with diverse local contexts.

<1>Government "Lockdowns" and Their Consequences</1>

As in other parts of the world, many African governments sought to limit the spread of the virus through "lockdown" regulations that significantly curtailed people's movement. The South African government's lockdown regulations, implemented in late March, were particularly restrictive, insisting that all people (except those providing "essential services") stay at home at all times. They were lauded by the WHO and initially also by most local commentators. Domestic support diminished, however, when the significant economic costs became more directly tangible, when specific lockdown regulations (such as a ban on alcohol sales) seemed arbitrary to many residents and even to some court judges, when excessive force was used in some places to enforce the regulations, and when COVID-19 cases multiplied despite the restrictions. Nevertheless, South Africa's president, Mr. Ramaphosa, defended the lockdown policies recently as having delayed the spread of the virus and thus giving the public and private health systems time to prepare.²⁵ Actuaries and public health modellers have estimated that the lockdown regulations saved between 16,000 and 50,000 lives in South Africa, though these estimates exclude deaths brought about by "the economic effect of the lockdown or the cost of deferred healthcare."²⁶

Similar policies and debates surrounding government lockdown regulations occurred in Kenya, Nigeria, and Mauritius, and each of these countries' governments implemented restrictions on movement, bans on gatherings such as markets, and closures of internal and national borders. In many African countries, including Nigeria, Uganda, and Zimbabwe, the implementation of lockdown regulations has also come hand-in-hand with allegations of excessive force and human rights abuses. In July and August, the restrictions have been eased in most African countries in order to allow at least some economic activities to resume. Mauritius is an exception in that the government regulations were able to effectively staunch the spread of the virus relatively early on. With a cumulative number of infections of around 360, there was merely one active case reported at the end of July.²⁷ Clearly, the fact that Mauritius is a small island is an important factor, in that movement in and out of the country can be relatively easily controlled. Yet the country's success is also attributable to a relatively effective government bureaucracy, working in partnership with the private sector. As soon as the first few cases were confirmed in mid-March, a rigorous testing, contact tracing, and quarantine system was put in place, with many of the local hotels making rooms available for quarantine facilities. By mid June, 10% of the population had been tested.

The lockdown regulations have been the most prominent governmental response to the pandemic. They also have crucial economic and social consequences. When we talk of the impact of the pandemic, much of this is in fact the impact of governments' lockdown regulations. Important questions remain, however, around the feasibility and relevance of lockdown regulations in many African contexts, as well as governments' ability to mitigate their consequences. We highlight five aspects.

First, the contexts in which the idea of lockdown regulations was developed and first implemented (especially in China and in European countries, such as Italy) differ in important ways from those in many African countries, so the fit of this approach is not a given. For instance, in many of the large African cities that have become the centers of the disease, such as Cape Town, Lagos, and Nairobi, many residents live in sprawling, densely populated informal settlements. The expectation that residents can "shelter in place" (the American term used for lockdown regulations) is often inappropriate to these contexts, where sometimes as many as eight people live in a small shack of perhaps 15 square meters, made

of corrugated iron and wood. Basic assumptions around people's access to water, which became especially relevant because of the prescription to frequently wash hands, are also out of place, given that in many informal settlements more than hundred residents may need to share the same communal tap. Such circumstances are shared by millions: More than half of all urban residents in sub-Saharan Africa live in poorly serviced slum dwellings and only one-third of households have access to basic hand-washing facilities.²⁸ Partly because of these widespread contextual mismatches, governments' lockdown regulations were frequently ignored, especially in such informal settlements.

A second, broader contextual debate pertains to the trade-off calculations that governments are asked to make when weighing up the public health benefits of lockdown regulations with their economic and social consequences. Although lockdown regulations are being implemented to save lives from the disease, their economic consequences would also create important threats to livelihoods and lives—especially due to hunger, in a context where so many people are already food insecure. Writing in March, just as governments in South Africa, Nigeria, and elsewhere promulgated lockdown regulations to enforce "social distancing," Broadbent and Smart argued, "We are putting in place measures that will lead to malnutrition and starvation for millions of people, and for these horrors, children and especially infants are the most at risk. And very many of those infants are born, and will die, in Africa." They also bemoan that the WHO advice "is the same globally, but the context is not."²⁹ Even though we believe that there is no simple trade-off between the public health objectives of the lockdown regulations and their socioeconomic consequences, it is important to recognize that economic contraction in many African contexts has a more direct impact on health and lives than in more developed regions.

These social consequences of the lockdown are only beginning to be understood in any systematic way. For example, a consortium of researchers who surveyed a preexisting nationally representative household panel survey in South Africa found an 18% decline in employment between February and April 2020.³⁰ This must be seen in the context of South Africa's already extremely high levels of unemployment prior to the crisis. Indeed, in the month of April, the survey found that one in three income earners did not earn an income because they lost their job or were furloughed. These job losses were concentrated among those who were already disadvantaged, "such as women, African/Blacks, youth, and less educated groups."³¹

Initial evidence in other African countries suggests a similarly severe impact on employment. In Nigeria, a survey of 1,950 households showed that 42% who were previously working were no longer working a week before the interview were conducted. There, too, the poorest were worst affected: About 35% of wealthier households lost work but 45% of the poorest were affected.³² Similarly, the United Nations warns of adverse socioeconomic impacts in Kenya particularly on already vulnerable groups, including women and girls, and internally displaced persons and migrants.³³

The loss of jobs and incomes has contributed to growing hunger. In South Africa, in the already-mentioned survey, almost half of the respondents reported that their household ran out of money to buy food during May. One in eight respondents reported frequent hunger in their household, more than twice as many as in a comparable pre-COVID-19 survey.³⁴ The survey also found that the COVID-19 crisis had worsened especially poor people's health, particularly due to hunger, but also due to diminished access to health care facilities. Even in

prior surveys, self-reported health measures were worse among poorer respondents, but COVID-19 increased this health inequality six times.³⁵

Apart from the decrease in work and incomes, hunger has also grown because food supply chains have been disrupted by lockdown restrictions and people's fear of movement. Many governments' lockdown regulations initially closed down food markets, but these restrictions were soon eased, sometimes due to protest, as in Zimbabwe.³⁶ In South Africa, a vital government measure against hunger was its school feeding scheme, in which pupils in low-income areas received at least one nutritious meal a day—but this scheme was closed down as part of the lockdown. Consequently, the South African government actually spent less on alleviating hunger during the months of the lockdown than before, despite the increasingly urgent need for hunger relief.³⁷ School feeding schemes have also been disrupted in other African countries, including Ghana.

In some parts of Africa, such as northern and eastern Kenya, the impact of the pandemic and the lockdowns has been exacerbated by other disasters, including locust invasion and flooding. More broadly, the continent is a net importer of food, so the currency devaluations brought about by COVID-19 in many African countries will likely further increase food prices and thus food insecurity.³⁸ One of the consequences of growing food insecurity has been a movement of urban migrants back to rural areas, where people at least have access to crops that they grow or products from animal herds.

<1>Responses to the Social Crisis<?1>

A third contextual feature that compounds the two already mentioned is that most African countries are not well positioned to cushion the pandemic's impacts on companies, informal traders, and households. This is also because the economic impacts have been compounded by preexisting economic difficulties at the domestic level, as well as the broader global slowdown caused by the pandemic. For instance, South Africa's and Kenya's economies were already in, or close to, recession prior to the pandemic. Nigeria suffered a double blow because oil prices fell prior to the crisis and then collapsed further due to the global slowdown.³⁹ Many countries, including Kenya, South Africa, and Mauritius, also suffered because of their economies' high reliance on tourism, which collapsed starting in March.⁴⁰ Finally, many African countries have been affected by reduced remittances from their diaspora. For instance, Nigeria is the largest recipient of remittances in sub-Saharan Africa, and these are expected to decline by at least 20% this year.⁴¹

These severe economic impacts and the associated falls in government revenue constrain many African governments' ability to mitigate the economic and social impacts of their lockdown regulations. Compared with richer countries, they have had much less "fiscal space" to do so. The South African government's stimulus package of ZAR500 billion (about USD30 billion) is one of the continent's largest, even though half of it consists of repurposed prior budgets. It amounts to about 10% of the gross domestic product (GDP), significantly lower than the responses in many developed countries (e.g., Germany's fiscal stimulus amounts to 35% of the GDP). Other African governments' fiscal commitments have been even more modest. In aggregate, sub-Saharan countries have spent about 3% of their relatively small GDP on stimulus funding – compared to 22% among G20 countries.⁴² The Nigerian government, for example, concentrated on a 50% tax rebate for companies that avoided retrenchments. Worryingly, the Nigerian government's growing fiscal difficulties

have also led to significant cuts to social development departments and anticorruption agencies, among others.⁴³

Again, Mauritius provides something of an exception, based on a strong social welfare system that had been build up even before the country's independence in 1968, including a comparatively well-established, free public health system (with more hospital beds per capita than the United Kingdom).⁴⁴ Despite the large expected shortfalls in government revenue due to the collapsing tourism industry, the government created a relatively expansive financial assistance program for people who could not work, or who lost employment, and it also included an important allocation to "self-employed" workers. A bespoke app was created to facilitate regular communication about the pandemic.⁴⁵

In most African countries, however, the scope of governments' responses was very constrained, and they have generally not been as effective or targeted as they need to be. In South Africa, for example, some parts of the state's response have worked better than others. Steep cuts in the interest rate helped, and by early August a special "temporary employment relief scheme" had paid out most of its allocated ZAR40 billion (about USD2.3 billion) to people who have lost their jobs in the crisis. However, a government-backed loan scheme launched in April to support 700,000 companies had only reached less than 10,000 (less than 2%) by early August.⁴⁶

Importantly, neither of these two government efforts in South Africa reached the millions trying to make a living in the informal sector, as domestic workers, taxi drivers, hawkers, and so on.⁴⁷ The government created special grants for the indigent, over and above its preexisting, expansive social grants program, but only one-third of these had been paid out by

early August.⁴⁸ The Nigerian government also started paying a special grant to those listed in its "National Social Register," but this list only includes about 11 million of the estimated 90 million Nigerians estimated to live in extreme poverty.⁴⁹ In Kenya, the government allocated KSH10 billion (about USD92 million) for the elderly, orphaned, and other vulnerable groups, yet its disbursement was delayed by at least two months. In many countries, the disbursement of government relief funding has also been dogged by allegations of corruption.⁵⁰

To some extent, nonstate actors have sought to fill the gaps left by a constrained government response to the social crisis. Many established civil society organizations have reoriented their work toward addressing the public health, humanitarian, and social impacts of the pandemic. Indeed, a survey of over 1000 civil society organizations in 44 African countries found that about 85% had done so, even though almost all of them also reported that their operations and financial viability had been significantly affected by the crisis, too.⁵¹

The crisis has also given rise in some places to a remarkable growth of spontaneous civil society organizing. For example, in South Africa, an extensive network of Community Action Networks (CANs) emerged to support vulnerable community members. In the context of severe economic inequalities across communities in South African cities, CANs have paired across historical divides to target food and other assistance to the most vulnerable neighborhoods, through community kitchens and other measures.⁵² Some CANs have applied experiences from Sierra Leone's Ebola epidemic to pioneer the establishment of "community care centers," that is, local, community-based self-isolation facilities for those infected, "to balance out a clinical approach to COVID-19 with a social one."⁵³

Businesses have also provided support within their communities and at national levels. In South Africa, a "Solidarity Fund" was seeded with large private donations and has worked with the government and NGOs on stemming the spread of the virus, bolstering the public health system, and supporting feeding and sheltering programs.⁵⁴ Similar efforts by civil society organizations and businesses—of varying scale, scope, and origin—are visible in our other focal countries.⁵⁵ Some of them have drawn upon local traditions, such as the tradition of "harambee" community self-help events in Kenya, and many have made effective use of social media.

<1>Impacts on Informal Workers and Inequality</1>

A fourth cross-cutting point about the impact of lockdown policies in many African contexts is that the informal economic sector has been particularly disadvantaged. This has been the case elsewhere in the world, too, but it is particularly pressing in the African context, given that "about 86% of total employment in Africa is informal, with up to 91% in West African countries," and relatedly, "about 82% of Africans are without social protection."⁵⁶ In other words, although the particular impacts of COVID-19 on informal workers have affected segments of the population in other parts of the world, in Africa this represents a systemic, society-wide impact.

Some of these severe impacts on informal workers might have been mitigated by more judicious policy responses that give more explicit attention to the informal sector. For instance, the South African government's early lockdown regulations allowed formal food retail companies to continue as "essential services," but they prohibited informal food traders in the informal settlements. This was reversed some weeks later, but the damage had been

done. This not only created severe hardship for these traders, many of whom live hand-tomouth, but it also impeded access to food to local residents. Conversely, government responses to the crisis are supporting and further consolidating the formal retail sector—for instance, social grant payments can be collected in formal retail stores, and some hunger relief schemes involve vouchers redeemable only in such stores. This deepens the longer term disadvantage of informal supply chains.

Informal-sector workers have also been largely excluded from government mitigation measures. For example, as already mentioned, the Nigerian government offered a tax rebate to companies that avoid retrenchments—but this obviously provides little benefit to informal sector workers, who represent 65% of the total of about 25 million workers in that country.⁵⁷ We thus know that informal businesses and workers have been particularly badly affected by the pandemic. But informal economic activities are very diverse. They cut across diverse economic sectors and activities; they are very dynamic and responsive to changing circumstances; they range from hand-to-mouth subsistence livelihoods to businesses with multi-million-dollar turnovers; and they have diverse interactions with the formal economy. Given this diversity and complexity, as well as the difficulties in collecting data on the informal economy, we knew too little about informal economic activities before the pandemic.⁵⁸ We know even less about the nuances of how they have been affected by the pandemic.

Our fifth and final point relates to the way that the pandemic and specifically the lockdown regulations have exacerbated preexisting social inequalities and conflicts. The disproportionally severe impact of job losses on the poor, the uneducated, and women has already been highlighted above. Longer term consequences for inequality are also likely due

to the unequal impacts on schooling. For example, in South Africa, public schools were shut entirely for months while many private schools shifted to online teaching for some weeks and then opened earlier, as well. Wealthier households also find it easier to make use of information and communication technology to home-school. Until recently, Kenya wrote off the entire school year, though a re-opening is now slated for October.⁵⁹ In any case, the extended closure and remaining uncertainties surrounding the re-opening process have had disproportionately negative impacts on poorer households.

There are also important geographic disparities within countries. For instance, in Nigeria, there are particular concerns around the public health and social impacts of COVID-19 in the northeast region of the country, which has been characterized by the United Nations Development Program as "one of the most pronounced, multi-faceted, and complex humanitarian and development crises known to the international community today."⁶⁰ The region has 1.8 million internally displaced people living in overcrowded camps and already struggling to survive. The health care system is broken, with 35% of health facilities damaged by conflict, and routine vaccination campaigns and other essential health services already disrupted.⁶¹ These conditions make people particularly vulnerable to both the public health and the socioeconomic impacts of the crisis, and this is further exacerbated by the lack of financial and other support going to this region from the national government or elsewhere.

<1>Conclusion</1>

New COVID-19 infections in Africa peaked in July and have diminished in most African countries since then. But this is no reason for complacency, because the roll-back of

lockdown regulations and people's return to pre-crisis behaviours raise the risk of a second wave of infections. Also, our knowledge of the virus' spread and its impact on public health systems is more limited in Africa. Much more concerted testing campaigns are needed to gain a better understanding of the true spread of the virus.

In the case that infections again increase in particular places, government responses should be more judicious and targeted than the initial lockdown measures, in order to better respond to the distinct and diverse African contexts. As noted by the Africa CDC and its partners, governments and other actors must "engage communities to adapt public health and social measures to the local context and effectively communicate about risk to sustain public support."⁶² One of the important implications of recognizing the important role of diverse societal contexts in how the pandemic manifests is that decision makers cannot rely only on medical experts—more emphasis must be given to social sciences in supporting more nuanced, context-specific decision-making.⁶³

This call to respond to diverse social contexts also applies to the vital international support that will need to be given to the continent in months to come. COVID-19 is a severe setback in Africa's progress toward achieving the Sustainable Development Goals, progress that was already challenged prior to the pandemic.⁶⁴ The scope of the crisis is visible in its effects on all of the goals, beyond those on poverty, health, hunger, gender, and education. The United Nations Secretary General has highlighted this need for international action to support the continent, but while some initial responses of the international community are laudable, they are nowhere near what is needed.⁶⁵

We have highlighted five aspects of diverse African contexts that are shaping the impacts of the pandemic, and that require context-specific responses:<nl>

- People living in informal settlements and relying on informal work find it difficult or even impossible to adhere to "shelter-in-place" rules, and this reduces the efficacy and social acceptability of lockdown regulations. If social mitigation measures are reinstated when infections increase, they should be targeted to particular areas as much as possible, and they must be coupled with intense testing in such areas and the provision of community-based self-isolation facilities.
- 2. In a context of poverty and food insecurity, where most workers are in the informal economy and lack social welfare protection, the social consequences of economic restrictions are severe. This increases the stakes when weighing up costs and benefits of lockdown rules. It also increases the need for comprehensive, collaborative responses to these socioeconomic impacts.
- 3. In most African countries, states lack the fiscal resources and organizational capabilities to effectively mitigate the pandemic's impacts on their economies and communities. In some places, business and civil society organizations are showing commendable resolve to help fill such gaps. Such emergent civil society organizing cannot fill governance gaps for long, but part of their promise is that they may help build accountability and local responsiveness of the state.
- 4. The informal economy is particularly hard hit by the pandemic, and this is crucial in the African context, where the overwhelming majority of workers are informal. Lockdown regulations and subsequent efforts to mitigate their impact have largely given insufficient attention to the specific circumstances of informal workers. Governments and international agencies must prioritize the consideration of informal economic activities in their policies and plans. This also includes the need to develop

a better understanding of the diversity of the informal economy and how it is being affected by the pandemic.

5. As elsewhere, in Africa the pandemic is exacerbating preexisting social inequalities and conflicts, including geographic disparities within countries that have longstanding colonial roots. This also includes the pandemic's overbearing negative impacts especially on women and girls. Women's and girls' rights must be prioritized in all COVID-19 response measures, and women need active participation in all such decision making.

Yet despite these impacts and challenges, there are important silver linings in some of the diverse responses to the pandemic in different African contexts, which give hope and inspiration for current and future efforts by various actors ranging from local neighborhoods to the international community. Even though African governments are crucially constrained in their efforts and though there are examples of egregiously misguided and autocratic government responses, many African governments have sought to adopt a transparent, evidence-based, and collaborative approach to the pandemic. Good use has been made of prior experience in combating diseases including HIV and Ebola, and the relatively young Africa Centre for Disease Control has been instrumental in this. International agencies and NGOs, local and international companies and business associations, and established and newly formed civil society organizations have played important roles in responding to the emerging health and hunger crises. This has included important technological innovations, such as a low-cost testing kit developed in Senegal or a context-sensitive tracing app developed in South Africa. It has also included crucial social innovations that foster new networks and ways of relating, such as the Community Action Networks in South Africa that are reaching across Apartheid-legacy chasms between communities. Such contextually

embedded initiatives and innovations give insight and inspiration for responding to COVID-19 in Africa in the next months, and in the recovery effort in the years to come.

<1>NOTES</1>

^{1.} Marguerite Massinga-Loembe et al., "COVID-19 in Africa: The Spread and Response,"

Nature Medicine 26, no. 7 (2020): 999, https://doi.org/10.1038/s41591-020-0960-y.

^{2.} https://www.un.org/press/en/2020/sgsm20049.doc.htm

^{3.} Johan A Oldekop et al., "COVID-19 and the Case for Global Development," *World Development* 134 (2020), https://doi.org/10.1016/j.worlddev.2020.105044.

^{5.} https://ourworldindata.org/grapher/total-covid-cases-region?time=2020-01-05..latest

^{6.} This is a rough calculation assuming a population of about 1.2 billion people in Africa and about 580 million in North America.

^{6.} Massinga-Loembe et al., "COVID-19 in Africa."

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