



## ALL ABOARD: NIGERIA'S FEDERAL GOVERNMENT STREAMLINES PANDEMIC RESPONSE COORDINATION, JANUARY – NOVEMBER 2020

*Emily Tenenbom and staff drafted this case study based on interviews conducted during August and September 2021. Bunmi Makinwa assisted. Case published January 2022. This case study was supported by the United Nations Development Programme Crisis Bureau as part of a series on center-of-government coordination of the pandemic response.*

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### SYNOPSIS

When Africa's most populous country, Nigeria, confirmed its first case of COVID-19, President Muhammadu Buhari tapped the former head of the country's HIV/AIDS control program, Dr. Sani Aliyu, to design the country's COVID-response coordination system. Aliyu's coproduction model partnered Nigerian government experts with United Nations agencies and other organizations that had essential capacities and gave each of them with specific roles. Because Nigeria's federal system of government endowed the states with major responsibility for public health, Aliyu's team worked to support governors and state-level emergency operations. The team soon realized that lockdowns were very difficult to maintain in a country where most households depended on income from the informal sector, so it employed a hot-spot strategy in lieu of nationwide lockdowns. To help fine-tune the response, the team conducted weekly national polls to assess residents' knowledge, perceptions, and behaviors and then adjusted its messages to secure greater compliance with safety measures. Gradually, the government also reached several million vulnerable households with social and economic support. Nigeria ended the first year of the pandemic without repeated surges in serious cases requiring medical care, and it was able to close many of the temporary treatment centers it had set up.

## INTRODUCTION

“The skeleton was already there,” recalled Dr. Sani Aliyu, who returned to his native Nigeria in March 2020 to advise the federal government on the development of a national plan to respond to the advent of the COVID-19 pandemic. “We just had to build on it.”

The Nigerian government had first warned the public in January 2020 about the threat of a highly contagious novel coronavirus that caused COVID-19. In early March, as the virus began to take a toll in countries around the globe, it seemed increasingly likely that Nigeria, too, would have to launch a major effort to keep its population safe. President Muhammadu Buhari’s office contacted Aliyu to solicit his help in developing a national plan to respond to the emerging pandemic. A few months earlier, Aliyu—a medical doctor and infectious diseases specialist who had led Nigeria’s successful response to HIV/AIDS—had returned to his post with Cambridge University Hospitals in England.

During preceding decades, the Nigerian government had mobilized to contain outbreaks of Lassa fever, polio, HIV, and other infectious diseases. Aliyu’s work on HIV had helped build Nigeria’s public health infrastructure, which found itself put to the test during the 2014–16 Ebola outbreak, when a fast response had served to limit the country to just 20 cases. Drawing on lessons learned from that epidemic, the Nigeria Centre for Disease Control (NCDC) and the Federal Ministry of Health had prioritized further strengthening of the system, with a view to achieving infectious-disease prevention, detection, and control and had conducted extensive planning to prepare for a pandemic. “In December 2019, they were already thinking about ways of addressing the new COVID-19 crisis if it got out of hand,” said William Tsuma, UN Development Programme (UNDP) senior adviser.

With his specific background and extensive experience to draw on, Aliyu prepared to design and implement a multisectoral, whole-of-government response to the COVID-19 pandemic.

## THE CHALLENGE

Despite this strong foundation, however, significant challenges lay ahead. Nigeria was a culturally and economically diverse nation of more than 206 million people. It had a federal system of government, with 36 semiautonomous states and the Federal Capital Territory (figure 1). The states comprised 774 local government areas (often called districts in other countries), which shared responsibility for health service provision with the national health ministry as well as with private clinics. The country’s primary health-care system was underfunded, had only limited capacity, and had to coordinate with other government agencies before it could implement masking, distancing, and restrictions on movement—nonpharmaceutical interventions that were the only weapons available against the virus in the absence of vaccines or proven

therapies. Because millions of Nigerians worked in the informal sector, living on money earned day to day, severe measures could have serious socioeconomic consequences. To make matters worse, surveys suggested that most Nigerians distrusted their government.

Under Nigeria's constitution, states and local government areas were responsible for delivering both primary and secondary health care, including preventive public health care. Because the federal government lacked the legal authority to impose national-level policies, the states stipulated their own priorities and had varying approaches to health-care investment.<sup>1</sup> At the beginning of the pandemic, in early 2020, some states set up their own emergency operations centers, laboratories, and other resources, whereas others had none of these capacities in place.

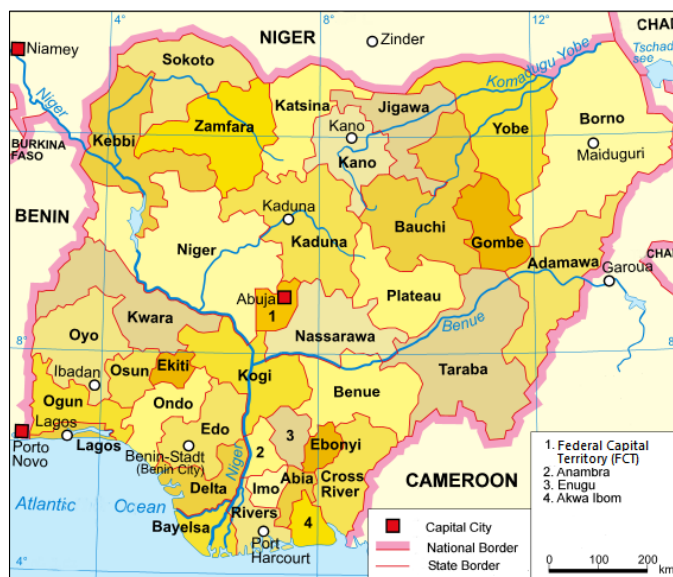
“State governments were a problem,” Aliyu acknowledged. “State governors in Nigeria have a lot of power because it's a federal system. They are not really answerable to the center unless and until they want resources.”

Blanket recommendations at the federal level would not work for all states, given differences in population density, levels of risk of exposure, socioeconomic conditions, and cultural values. Religious and traditional leaders exerted strong influence. States such as Lagos, Nigeria's most populous, had the added, distinct challenge of managing an epidemic in crowded urban centers, and several other states were conflict affected. The northeastern states of Borno, Adamawa, and Yobe had to operate while under threat from extremist Islamic groups—most notably, Boko Haram. More than 2 million people had been displaced by violence between armed opposition groups and the Nigerian army and lived in formal or informal camps supported by humanitarian aid.<sup>2</sup>

Governors from opposition political parties held power in 16 states. Moreover, elections were scheduled in two states—Edo in September and Ondo in October—and candidates might be tempted to score points by opposing national guidance.

Regional differences and the allocation of responsibility across levels of government were not the only sources of worry. Nigeria's health system was under-resourced and fragile, which constrained the country's ability to respond

**Figure 1: Nigeria's States and Federal Territories**



to an epidemic. In 2018, Nigeria spent 3.89% of its GDP on health care, the World Bank reported, which was lower than the global average of roughly 5.9% and far below the 12.5% average of member countries of the Organisation for Economic Co-operation and Development.<sup>3</sup> The share of government spending devoted to health never surpassed 7% during the period 2001–21. For the 2021 fiscal year, which began in 2020 amid the COVID-19 pandemic, spending was only 4.5%—far short of its 2001 Abuja Declaration commitment to spend 15% of Nigeria’s annual budget for health care.<sup>4</sup> (Other African Union nations, such as Rwanda and South Africa, achieved the target.<sup>5</sup>)

Overall, Nigeria had only limited equipment and facilities for coping with COVID-19. For example, prior to the outbreak, the nation had only 350 ventilators and 350 intensive-care-unit beds serving the entire country, or 0.17 of each per 100,000 inhabitants.<sup>6</sup> Aliyu said even he was worried about receiving adequate care if he contracted COVID-19.

Widespread poverty further complicated efforts to deal effectively with the virus. At the end of 2019, an estimated 40% of the population, or 82.9 million people, were living below Nigeria’s poverty line of US\$381.75 per year, according to a report by the country’s National Bureau of Statistics.<sup>7</sup> That figure was roughly equivalent to the proportion of the population living on less than US\$1.90 per day—the World Bank’s measure of extreme poverty. The prevalence of poverty across Nigeria meant that lockdowns or public health interventions that shut down economic activity were possible only if the government also provided significant social assistance to ease the impact. Roughly 86% of the country’s workforce labored in the informal sector and relied on day-to-day earnings.<sup>8</sup>

Public perceptions also presented a challenge for health officials who wanted a science-based response. Use of folk medicine was widespread, often bolstered by the influence of religious and traditional authorities, who were the dominant thought leaders in many parts of the country. Widespread lack of trust in the government augured poorly for popular compliance with safety measures and undermined confidence that the country would be able to respond effectively to the pandemic. But even before COVID-19 reached Nigeria, the country’s policy makers were dealing with misinformation and disinformation. Government surveys indicated that at first, many people did not believe there was any risk at all.

## FRAMING A RESPONSE

Aliyu met informally with Nigeria’s leadership, including President Buhari, his chief of staff, and ministers, many of whom Aliyu already knew from his previous work on HIV/AIDs. Beforehand, he contacted a former colleague from the US Centers for Disease Control and Prevention, Dr. Deborah Birx—who had recently been named response coordinator for the US White House Coronavirus Task Force—and asked for her views of the epidemic and her new

role. Birx urged him to accept the president's request, as did President Buhari's chief of staff (who subsequently died of COVID) and close friends in the UK.

Drawing on his experience in managing HIV/AIDs, Aliyu began sketching out his initial ideas about how to set up a COVID-19 response structure. "This was just sort of back-of-the-envelope on a Saturday morning, over tea with the leadership, saying, "This is what I think you should do,"" he said.

Aliyu knew that any successful response would require the involvement of a broad group of stakeholders as well as strong political will. COVID-19 was not just a health issue but one with a potentially significant impact on the economy as well. There were existing plans, capabilities, and organizations on which Aliyu could draw. The NCDC and federal health ministry had published a five-year strategy and implementation plan (2017–21), aptly titled *Idea to Reality*, which set forth key principles, five strategic goals, and a restructured organogram to guide objectives and activities for strengthening emergency coordination, disease surveillance, laboratory capacity, and risk communications.<sup>9</sup> And as stipulated under the World Health Organization's International Health Regulations, Nigeria had developed a National Pandemic Influenza Preparedness and Response Plan in 2013.<sup>10</sup> Nigeria had used that plan to fend off Ebola virus disease in 2014, and the plan could be modified to address COVID-19. In addition, in December 2019, the NCDC completed training of infectious-disease rapid-response teams across all of Nigeria's 36 states and the capital territory.<sup>11</sup>

Two Nigerian institutions were already actively monitoring the situation. The NCDC's job was to prepare for, detect, and respond to national and international outbreaks of infectious diseases, and Dr. Chikwe Ihekweazu, a career infectious-disease epidemiologist, was director general. The NCDC was new to its role in pandemic response, although its scientists had previously led the country's disease surveillance functions. In 2017, a bill supporting formal establishment of the NCDC had been approved by Nigeria's legislature and signed into law by Buhari, thereby giving the institution the authority to lead public health initiatives and providing resources for sustaining its work.<sup>12</sup>

The Africa Centres for Disease Control and Prevention (Africa CDC) also had an influential role in the development of responses to the COVID-19 pandemic. In January 2020, the public health agency had been working with member countries to identify appropriate systems to put in place and had wanted continuity across Africa with regard to institutions, structures, and policies. To harmonize those policies, the Africa CDC unveiled a template that member countries could adopt and tailor to their own individual situations.

Taking into account the differing responsibilities of the federal government, states, and local government areas, Aliyu laid out a management structure along with policies and practices tailored for each phase of the response. The response structure included a national policy task force, a national emergency operations center, and an incident management system that interacted with state-level counterparts. Aliyu located emergency operations within the NCDC and seated NCDC personnel on many of the national policy task force subcommittees, also

called pillars. He further proposed a coproduction model that called for representatives of UN organizations, nongovernmental organizations, and the private sector on the task force committees that managed each pillar.

## GETTING DOWN TO WORK

Aliyu's effort to implement a whole-of-government response took on greater urgency after February 27, when Nigeria confirmed its first COVID-19 case: a traveler from Italy who tested positive for the virus in Lagos. Though Aliyu was the architect of Nigeria's national government structures that would coordinate the response, many other people in the national and state governments, the private sector, and international organizations came together to develop the necessary infrastructure and then implement strategies to control the spread of the virus and mitigate its impact on residents and the country as a whole.

### *Establishing emergency operations centers*

On January 26, about a month before the country's first documented case of COVID-19, the NCDC established a multisectoral and interministerial National Coronavirus Preparedness Group at the federal health ministry. Led by Dr. Olaolu Aderinola, head of the Response Division of the NCDC's Health Preparedness and Response Department, the group met daily to review trends in global patterns of COVID-19, assess risks, and strengthen preparedness—especially in terms of early detection and timely response.<sup>13</sup> The preparedness group included representatives from across the government as well as international agencies and nongovernmental organizations. Colleagues from the WHO, the US Centers for Disease Control and Prevention (US CDC), and others collaborated to conduct a risk assessment and begin preparations for a response. The group identified laboratories for COVID-19 testing, worked with states to establish isolation and treatment centers, trained health workers, instituted surveillance measures, and conducted a simulation to assess capabilities.<sup>14</sup>

After Nigeria confirmed its first COVID-19 case on February 27, the NCDC transitioned the preparedness group into a national emergency operations center to oversee the overall response. The organization was activated at level three, the highest, which was intended for public health emergencies that required national coordination and the use of all available resources.<sup>15</sup> It developed a comprehensive Incident Action Plan that specified objectives, strategies, and urgent national tasks in seven areas: coordination, epidemiology and surveillance (including points of entry), laboratory preparedness and efficiency, infection prevention and control, case management, risk communication, and logistics.<sup>16</sup>

The response was initially at the national level, but leaders at the NCDC knew they had to decentralize operations and establish a network across states. The 2018 law that had created the organization had also given it the authority to

establish state public health emergency operations centers. NCDC director Ihekweazu and his team worked with state health commissioners to identify space within their state ministries to set up COVID-19 centers.

“Once we got clearance from the states, we swung into action,” Aderinola, head of division, said. First, the NCDC helped Lagos and Ogun States—the first two affected by COVID-19—activate their operations centers.<sup>17</sup> During the first hundred days, the NCDC helped 22 other states activate their emergency operations centers and later extended support to others.<sup>18</sup> Some states had existing centers that focused on polio, and the NCDC entered discussions with those states to transition the centers to deal with COVID-19. Using funding from development partners and organizations such as the Bill and Melinda Gates Foundation, the NCDC helped make necessary renovations, purchased equipment, improved communications, and trained staff. Ultimately, every state had its own public health emergency operations center, and the national emergency operations center coordinated and provided guidance.<sup>19</sup>

#### *Setting up the Presidential Task Force*

Based on Aliyu’s recommendations, Buhari established on March 9 the Presidential Task Force on COVID-19 (PTF) that had ultimate responsibility for target setting, national-level policy decisions (such as school closures and business capacity limits), interstate and interagency coordination, international engagement, and public communication.<sup>20</sup> The chairman was Boss Gidahyelda Mustapha, Nigeria’s most senior public servant in his position as secretary to the government of the federation. The members included nine cabinet ministers and the heads of the secret police, the primary health care agency, and the NCDC. WHO representative Fiona Braka, like Aliyu, brought lessons from the country’s experience with HIV/AIDs and provided an outside expert’s view.

Buhari asked Aliyu to be the PTF’s national coordinator, a job that entailed helping guide the many levels of the response. Though Aliyu was experienced and well connected and had earned the trust of Nigerian policy makers through his career combating infectious disease, he was initially reluctant, he said, having just recently resumed his job in the UK. However, he added, he knew how effective his work with HIV had been, and he felt an obligation to his country.

The president gave the task force the authority to make major decisions related to COVID-19. “This was really critical,” Aliyu said. “We could impose a lockdown and know we had support from the very top from someone who believed in scientific evidence and would accept our advice.”

Aliyu quickly established a technical secretariat to assist the PTF and tapped Dr. Omotayo Bolu—a Nigerian American who headed the global immunization division of the US CDC in Nigeria at the time—as Chief of Secretariat to manage support for policy decision making (Exhibit 1). The Gates Foundation helped finance the cost of some of the personnel. Aliyu said the secretariat’s staff was enormously helpful: “They were all extremely competent, competitive, and very hardworking and were able to give us their best. And my job became

much easier.” Aliyu described his own role as ensuring that senior leaders on the task force received accurate and timely answers to their questions and concerns.

The technical secretariat, called the National COVID-19 Response Centre, was organized into 10 (later, 11) functions, or pillars—each of them chaired or cochaired by senior Nigerian officials and coordinated by technical officers from different health and nonhealth sectors. Based on their core competencies, nine different ministries were represented, covering key government agencies such as health, emergency management, security, and humanitarian affairs.<sup>21</sup> The pillars, or subcommittees, included a variety of other participants drawn from development partners such as UN organizations and entities in the private sector. For example, the pillar on infection prevention and control was collaboratively managed by the NCDC and the health ministry. The action arm was an incident command system based at the NCDC.

Initially, the task force held daily coordination meetings. Aliyu also established an advisory panel he called the Tuesday Evening Group, which brought together thought leaders from Imperial College London, Harvard University, and Nigerian universities—usually on a weekly basis. Professor Ibrahim Abubakar of University College London was scientific and technical adviser to the task force and led the group. Questions from policy makers in the task force were sent to the Tuesday group, which modeled the effects of proposed policies and also briefed leaders on the growing body of scientific knowledge about the virus (Exhibit 2).<sup>22</sup>

To align the response with outsiders, Aliyu met weekly with key members of the international community and a coalition of private partners. Because the coproduction model Aliyu created included development partners and businesspeople on committees, the task force could reach out to foreign organizations and the private sector for help without breaching protocol.

### *Setting national policy*

During the early days, Aliyu worked closely with the NCDC to modify and adapt Nigeria’s existing 2013 National Pandemic Influenza Preparedness and Response Plan. The revised draft was linked to the budget, became finalized, and was presented to the task force. During its first week, the task force signed off on the secretariat’s proposed new National COVID-19 Multi-Sectoral Pandemic Response Plan, which served as a blueprint for a coordinated whole-of-government effort.<sup>23</sup> By March 22, the response plan had a budget of US\$231 million, the World Bank reported.<sup>24</sup>

After the first case of COVID-19 was recorded in Nigeria, the task force quickly established a containment strategy focused on movement restrictions and contact tracing. First, all flights to and from Wuhan, China, were canceled, even though the WHO was still advising against travel restrictions at that time.<sup>25</sup> And travelers from 13 COVID-19 high-risk countries were banned from entering the country.<sup>26</sup> (A midterm report later identified delayed closure of international and local borders as a missed opportunity to reduce infection.)



The NCDC recommended 14 days of self-isolation upon arrival in Nigeria for travelers coming from areas other than Nigeria. But voluntary compliance was weak. Some returnees reportedly filed fake contact addresses and incorrect phone numbers at points of entry, which impeded effective contact tracing.<sup>27</sup> Subsequently, the Port Health Services and the NCDC were tasked with monitoring the self-isolation of returnees from high-risk countries.

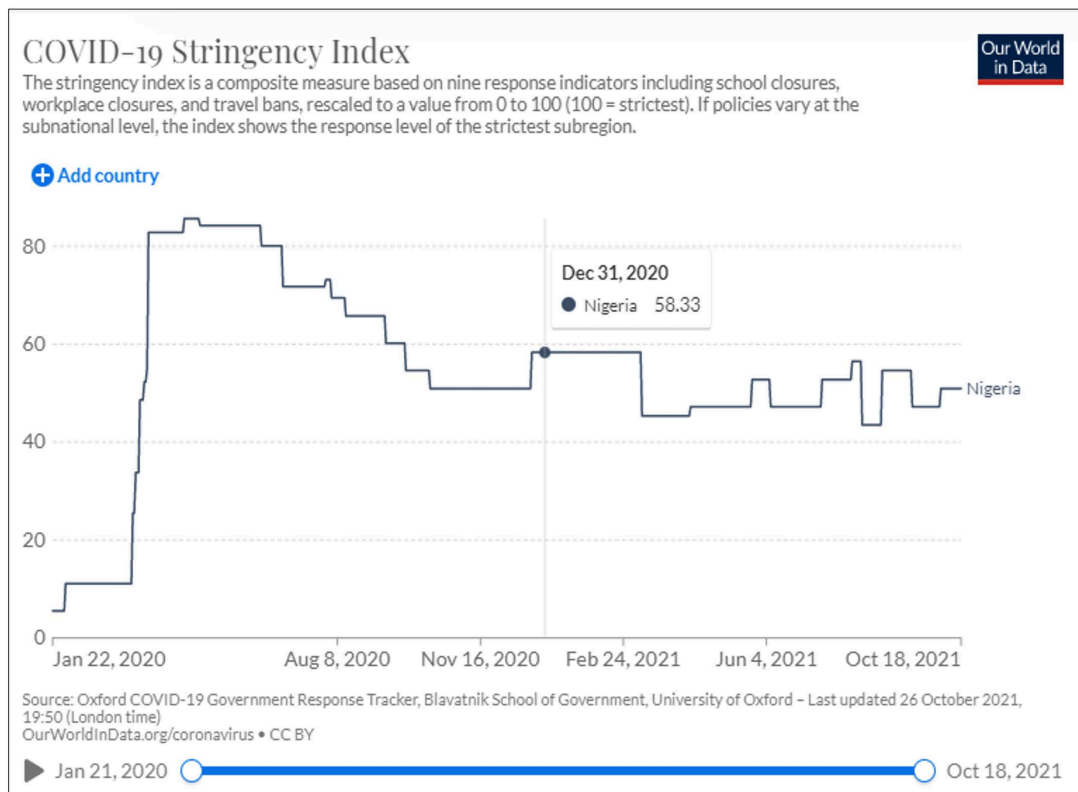
On March 30, in line with what was then a relatively common global practice and based on the task force's recommendation, President Buhari announced targeted lockdowns to curb community transmission. He imposed a two-week partial lockdown on Lagos and Ogun States and the capital territory.<sup>28</sup> His directive included a stay-at-home order and the shutdown of government and private businesses in those states, as well as restrictions on interstate travel throughout the country. Aliyu released a list of 15 essential services and businesses that were exempt, including hospitals, fuel stations, electricity suppliers, private security companies, seaports, cargo haulers, food distributors and retailers, and market stalls selling food and groceries, which were allowed to operate but with sharply limited hours.<sup>29</sup> Telecommunications workers, broadcasters, and print media staff who could not work from home also were permitted to work on-site as long as they observed certain safety measures.

The lockdown extended to Kano State in April after several hundred people died in a suspected COVID-19 outbreak.<sup>30</sup> Nine other states reported cases during the first 14-day phase of the interstate travel ban. The president extended the lockdown for a further three weeks. Another 13 states reported their first cases during the second phase. Many cases involved people who had managed to travel from hot spots in Lagos or Abuja in violation of the travel ban from those areas.<sup>31</sup>

The response soon pivoted from strict lockdowns, however. Although the COVID-19 pandemic had begun as a public health crisis, the lockdown implemented to contain it had far-reaching socioeconomic consequences—particularly in dense, highly populated, and poor areas. Households struggled to put food on the table as their incomes diminished. “What we hadn’t anticipated was the relationship between the public health crisis and economic stability and social order,” said Dr. Akin Abayomi, Lagos State’s commissioner for health, referring to Lagos in particular. “The consequences of lockdowns were almost worse than the pandemic.”

Adapting, the government announced a phased and gradual easing of restrictions in the capital territory, Lagos, and Ogun, effective May 5.<sup>32</sup> That step was accompanied by expanded testing and contact tracing. On average, about 91% of contacts were traced.<sup>33</sup> Other restrictions remained, including a curfew, a ban on interstate and international travel, mandatory face mask use, and prohibitions on mass gatherings.<sup>34</sup> The national task force later shifted to a hot-spot strategy and introduced public health measures selectively when clearly needed (figure 2).

Figure 2: Policy Stringency

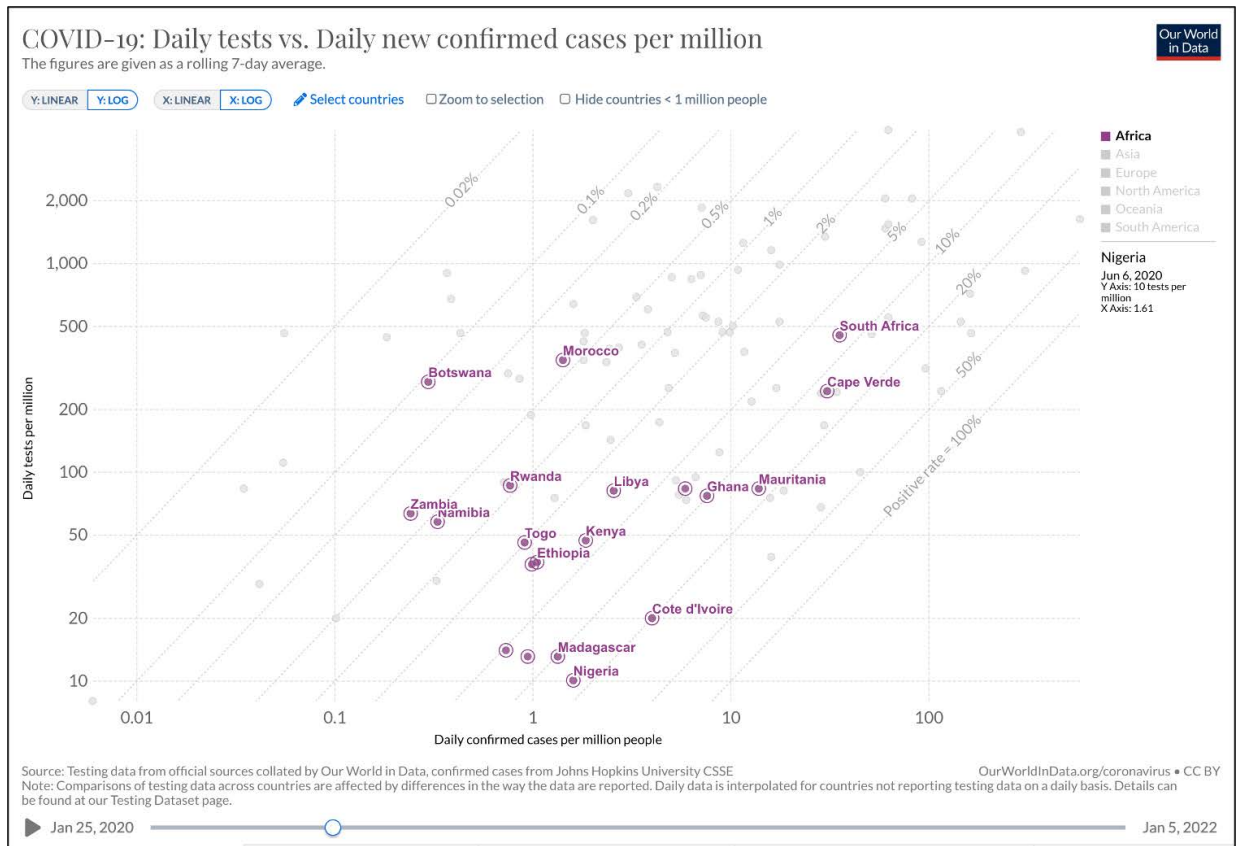


Testing initially targeted likely sources of outbreaks, including travelers entering the country from abroad and individuals who had come into contact with others who tested positive. Then the government started to scale up laboratory capacity to expand the program. In mid-April, polymerase-chain-reaction (PCR) testing capacity was approximately 2,500 tests per day. By late May the number of tests per day had more than doubled—after additional PCR laboratories came online in Lagos and the capital territory.<sup>35</sup>

Despite expanded testing capabilities, coverage remained relatively low, however. By the end of May, only about 10 tests had been conducted per million people in Nigeria—far lower than in South Africa (over 300 per million), Ghana (close to 100 per million), Senegal (above 50 per million) several other African countries<sup>36</sup> (figure 3). The average positivity rate was 15.9% overall, which was well above the WHO’s acceptable level of 5%.<sup>37</sup> Challenges to scaling up the weak testing program included inadequate supplies of reagents because of delayed orders and airport closures, insufficient numbers of testing centers to meet the need, and public skepticism. By December the country was testing only 38 per million.

Even with limited testing, Aliyu said, it was still possible to track outbreaks. “Even if you aren’t testing, you cannot hide severe COVID, because treatment centers get filled up and health workers fall ill.”

**Figure 3: Daily COVID-19 Tests v. Daily New Confirmed Cases per Million**



### *Working with the states*

The PTF had the delicate task of leading and guiding the national response while honoring the autonomy of state governments. “We all knew that for an effective response, the NCDC couldn’t call all the shots at the national level,” Aderinola said. The states had to do much of the public-facing work of the response. Each state had its own policy task force—led by its governor—to manage resources, implement nonpharmaceutical measures, and ensure compliance.

Dr. Mukhtar Muhammad, who served as national incident manager in the emergency operations center during the pandemic’s early months, said that initially, all states looked for direction from the PTF, which supported them as much as possible. Task force staff met with counterparts in all 36 states and the capital territory and consulted regularly with state-level health commissioners and incident managers. The task force outlined metrics for different states, tracked specific targets assigned to them, and reviewed implementation challenges and progress with each state’s technical teams (text boxes 1 and 2).

But not all governors were completely on board with the mission, and not all states were well positioned to undertake the epidemic management tasks required. Some struggled to develop incident management plans, establish

### Text Box 1. Implementation in Lagos State

When COVID-19 hit Nigeria in early 2020, Lagos State, a major economic and cultural center and arguably the most important of Nigeria's states, was a prime example of state-level government coordination and implementation of a tailored response. The country's smallest state in terms of area, Lagos was home to the nation's largest city and the second-largest metropolitan area in Africa. Lockdowns were especially economically risky because many households depended on earnings from the informal sector.

The center of Nigeria's 2014 Ebola outbreak, Lagos State already had a biosafety committee and a preparedness plan when the COVID-19 pandemic began. In 2019, it completed development of a five-year biosecurity policy and road map.<sup>1</sup> Lagos also had an emergency-operations-center structure in the state Ministry of Health that typically managed localized biological threats but could be activated in the event of an infectious-disease threat in the state. The center created a management dashboard before the first index case in order to facilitate information sharing about trends in positive cases and deaths, but also about supplies, personnel deployments, reports, communications, and other essential functions.

But as COVID-19 began to spread quickly across the globe, Dr. Akin Abayomi, the state's health commissioner, recognized that the state's preparations would not be sufficient to deal with the threat. He said he knew an effective response required an aggressive, clearly defined strategy that should be in the form of a multipronged approach with more lines of activity, a nimble structure, and a higher level of authority to make decisions quickly and mobilize resources immediately. It also had to involve more state ministries than earlier envisioned.

The state health ministry established an incident command system, a state executive council overseen by Governor Babajide Sanwo-Olu as sole incident commander, with participation by the commissioners of relevant ministerial departments and 14 special advisers. The system gave the governor total executive control and ultimate decision-making power. He was involved in daily activities and handed down decisions to Abayomi, whom he appointed as his deputy, or to another agency for implementation. According to Abayomi, "The incident command system stops at the governor's desk. As incident commander, the governor coordinates the system's daily activities and makes decisions at the end of each day. Things happen very quickly because all he has to do is give his approval. The incident command system is a much nimbler, stealthier, swifter way of managing a biological shock because it is operating at the highest political level."

Abayomi created what he called a "war cabinet" of commissioners from the state executive council to implement decisions made by the incident command structure. He presided over the group, which could convene and respond quickly to changing circumstances. "It could be every two days, every week, or every day; you just get a call depending on what's happening," he said. "The war cabinet is very quick to change or shift policies based on data." Every evening, Abayomi briefed the governor and the other senior decision makers.

Abayomi said the structure enabled the state to engage high-level support from both the federal government and international organizations. "From his position as governor, he can reach out to the president or international agencies like the African Union, the UN, or the WHO," he said. "When the governor wants to speak to the president, it's a much easier request, as opposed to my trying to reach the president or the African Union." There were different levels of escalation depending on the severity of the issue. Several times, the governor sent Abayomi to the capital, Abuja, to deliver a message or request assistance from the federal government.

The structure facilitated effective communication both from within and from outside. International partners could interact through both the emergency operations centers and the incident command system. Information would flow upward through Abayomi to the war cabinet and the governor when necessary.

### Text Box 2. Service Delivery in a Crisis Context

Nigerian policy makers feared that an outbreak of COVID-19 in the conflict-affected areas of the country's Northeast could be catastrophic. Residents of the states of Borno, Adamawa, and Yobe tended to be poorer, less educated, and more at risk than Nigerians in other states. Since 2009, insurgent groups such as Boko Haram had killed tens of thousands of people and displaced almost 2 million, many of whom lived in highly congested camps. Conflict had damaged 35% of health facilities. Overall, the WHO estimated, the COVID-19 pandemic was likely to increase the numbers of people in need of emergency humanitarian assistance to 10.6 million from 7.5 million.

Effective March 31, 2020, Borno banned all vehicle and passenger movement except humanitarian services and goods; Adamawa went into lockdown; and Yobe closed its borders.

Because there was already a large United Nations agency presence in the Northeast, the Nigerian government adapted existing partnerships to respond to COVID-19 in the region. It sent rapid-response teams to assist, and it worked with the WHO to train health workers and conduct case surveillance. Humanitarian partners helped sustain routine and emergency health-care services, with steps to isolate from other patients all patients with suspected COVID-19.

National response leaders observed that, unexpectedly, community transmission of COVID-19 did not become a major problem in the areas under security threat—at least during the initial months—though they noted that only one of Nigeria's states had a laboratory to conduct testing, and testing rates were low. “These states have done well in terms of planning and regular coordination with the center, keeping us fully abreast of what was happening. They have been able to mount a response that was quite effective, and we had no specific concerns,” said National Incident Manager Dr. Mukhtar Muhammad.

See: ReliefWeb North East Nigeria: COVID-19 Situation Update (As of September 6, 2020), accessed at <https://reliefweb.int/report/nigeria/north-east-nigeria-covid-19-situation-update-6th-september-2020>; HRP Addendum to COVID-19 Response Plan for Borno, Adamawa, and Yobe States Nigeria Northeast, accessed at [https://reliefweb.int/sites/reliefweb.int/files/resources/ocha\\_nga\\_2020\\_hrp\\_addendum\\_covid19\\_response\\_plan\\_10062020.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/ocha_nga_2020_hrp_addendum_covid19_response_plan_10062020.pdf); WHO web resource <https://www.who.int/emergencies/situations/nigeria-crisis>; UNDP, The COVID-19 pandemic in Nigeria: Potential impact on the North-East - Brief 2, April 3, 2020, accessed at: <https://www.ng.undp.org/content/nigeria/en/home/library/the-covid-19-pandemic-in-nigeria--potential-impact-on-the-north-.html>.

standard case management procedures, and improve health center infection prevention and control measures.<sup>38</sup> “The biggest challenge we had was persuading people that COVID-19 was real,” Aliyu said. “People didn’t really believe that, and the states didn’t have the resources to mount effective operations, so some took the position of denying it entirely.”

Complicating matters further, the Nigerian Association of Resident Doctors, which represented young doctors in training at public hospitals and whose membership comprised about 40% of physicians in the country, led brief strikes seeking back pay, higher pay, benefits, and hazard pay. The first of the strikes took place in March, just as the COVID pandemic response was revving up. A second followed in June, and a third in September.<sup>39</sup>

The NCDC had already trained rapid-response teams to assist the states. The teams included doctors, lab technicians, NCDC staff, public health experts, and social workers. In December 2019, many of the teams had just concluded a two-year pandemic preparedness program supported by the US CDC and the Africa CDC.

Response teams were initially deployed to Lagos and Ogun States and the capital territory and later to other parts of the country.<sup>40</sup> The teams provided logistical and technical support and aligned responses with national task force guidance.<sup>41</sup> The PTF provided the broad outline and direction for operations, and the NCDC deployed the teams to the states to strengthen coordination and provide logistical and technical support with implementation.<sup>42</sup>

One of the first assignments was to launch contact tracing in these states, building on community systems and strategies developed in response to outbreaks of Lassa fever, Ebola, HIV, and tuberculosis.<sup>43</sup> “Looking at what was happening around the world, we realized key issues were going to be how to diagnose COVID-19 and how to isolate and contain positive patients,” said Abayomi, Lagos health commissioner and leader of his state’s response. “For us to have any chance, we needed to be very aggressive and identify cases early enough and contain them.” With the rapid-response teams’ help, the Lagos state government decentralized contact tracing to localities, focusing initially on the five areas with the most cases. And to ensure consistency, surveillance teams received instruction in best practices for contact tracing.<sup>44</sup>

The national response leaders further created a community of practice for COVID-19 case managers and amplified the online training of health-care workers. The communications pillar staff shared information with all the governors and trained 420 risk-communication team members in the 36 states and the federal capital territory.

In addition, the national task force worked with the Nigeria Governors’ Forum, chaired by the governor of Ekiti State, to improve coordination. The forum met monthly and provided an opportunity to brief the governors on how to prepare state-level responses. But it also allowed the PTF to hear the perspectives of the state leaders and their own COVID-19 task forces.<sup>45</sup> In addition, Aliyu met weekly with a subcommittee of six governors under the auspices of the National Economic Council, and he said these conversations, together with the Forum, “completely changed the response” of many governors who were hesitant.

As the pandemic evolved, these meetings became more ad hoc. During the second half of the year, the task force shifted to a hot-spot strategy that focused on states and local government areas that had specific issues or high infection rates. Muhammad said the step enabled the implementation of specific measures in areas most burdened or most critical to controlling the epidemic. “Focusing on these gave us the advantage of going deeper with each of the states and also of giving them a kind of mentoring on what to do,” he said.

*Risk communication and misinformation*

To help the public stay safe, response leaders had to persuade people to rely on official guidance. But only 40% of Nigerians felt the president could be trusted, and about the same proportion placed little stock in state governors, according to Afrobarometer surveys conducted during 2020 and earlier.<sup>46</sup>

To make matters worse, the early days of the pandemic generated an “infodemic” as a storm of rumors and misinformation swept Nigeria, according to Aderinola of the NCDC. Many people did not believe in the existence of COVID-19 and resisted public health interventions such as wearing masks and social distancing. Aliyu said even some state government officials expressed skepticism. Misinformation pertaining to COVID-19 proliferated on social media. And videos on Facebook and WhatsApp spread rumors and information falsely attributed to public figures, including Aliyu himself.

Leaders of the PTF and the NCDC began to design a vigorous and credible public communications campaign that would be culturally accepted and accessible across Nigeria’s diverse ethnicities, religions, and languages; that could quickly identify communication challenges; that would be flexible and modifiable based on feedback and community polls; and that would involve many kinds of media.<sup>47</sup> The information provided by different agencies and various levels of government had to align in order to instill that confidence—an *internal* communication challenge, and the medium and the message had to attract attention and shift behavior—an *external* communication function.

Dr. Yahya Disu, the epidemiologist who was a member of the task force’s communications and community engagement pillar and led the same functions at the NCDC, said media news coverage initially did not reflect a full understanding of the epidemic and its potential impact. The task force began hosting daily televised press briefings to provide status reports and communicate policies. And as the response progressed, Disu’s team at the NCDC helped tutor media newspeople on specific aspects of COVID-19 reporting and fact checking.<sup>48</sup>

Effective communication also required maintaining consistent messaging among 50 government agencies as well as many other partners. “There was a huge number of stakeholders,” Disu said, “and managing that was challenging.” The team took a sectoral approach and helped the task force hold local gatherings with religious leaders, health-care workers, businesses, schools, and the public to provide information and give people opportunities to ask questions. In an attempt to preemptively address anticipated public concerns about corruption in COVID finance, other members of the response team created websites where people could find information and track all COVID-related funding.

“We focused on ensuring our messages were science based and context sensitive,” Disu said. The NCDC began a multilingual social media communication campaign (#TakeResponsibility) that emphasized the importance of hygienic practices and the role of individuals in helping prevent

the spread of the virus.<sup>49</sup> With the help of the UN, the NCDC then launched what became known as the HANDS campaign: Have your hands washed or sanitized frequently; Always cough or sneeze into your elbow; No going out without face mask; Distance of at least two arm's lengths should be maintained; and Stay indoors and self-isolate if you are sick.<sup>50</sup> Disu said opinion polls showed that Nigerians found it easier to comply with hand hygiene and masking and that physical distancing was the biggest problem.

Before the end of March, the task force secretariat brought on board a private Nigerian consulting firm, Credo Advisory, to assist the PTF Risk Communication and Community Engagement pillar, which an information ministry official, Joe Mutah, headed. The Credo staff began working around the clock every day of the week to provide information and support the pillar's subgroups, which focused on four key areas: opinion research, messaging, content development, and rumor management. Awele Okigbo, the firm's CEO, supported Aliyu, the PTF's national coordinator, managing his media appearances, arranging interviews, and drafting daily press briefing speeches, while also serving as a member of the risk communication and community engagement pillar of the task force.

"Everything started with polling and data," Okigbo said. With the help of the UK Cabinet Office and UNICEF (the United Nations Children's Fund), the Presidential Task Force on COVID-19 was able to conduct weekly national and state-wide surveys that assessed awareness of and attitudes toward COVID across the country. The feedback helped other committees in the communications pillar tailor their approaches and adapt to different needs and styles in different states. The team members tested questions with focus groups that were often convened by health workers in local government areas. "The network of health workers played a key role," Okigbo said. "They had phones, and they could organize focus groups and administer their own polls if asked."

To develop content and improve messaging, the team pursued several approaches. They reached out to religious leaders and traditional authorities both to impart information about health issues and to secure their advice and assistance in securing community compliance with public health policies. Two-thirds of Nigerians trusted information these respected community members shared, according to Afrobarometer reports. The communications staff persuaded some of them to speak on the radio, appear on video, and tape messages the team could share on WhatsApp, the second-most-common way of receiving information, after radio, in Nigeria at the time. National Incident Manager Muhammad said religious and traditional leaders cooperated well with the task force's requests.

COVID responders had to develop special approaches to curb skepticism among younger Nigerians, who often believed the disease spared their generation, especially when they saw media images of youthful patients laughing and waving from their beds in quarantine. Disu's NCDC team began to tailor messages with a personal approach. It searched for ways to encourage those



who might not experience severe disease to take others' wellbeing into account and stressed that the people affected were their loved ones and caregivers. "These are your mothers, your fathers, your aunts, your teachers—the people who provide for you and give you guidance," Disu said. "We stressed that if you lose them, you then you lose the benefits you get from them—and then they started paying attention."

Because the young responded favorably to celebrities and social media influencers, the Credo team also worked with risk communication pillar to enlist public figures as spokespeople. They also included religious and traditional leaders who were influential in the rural communities. The team uploaded messaging and videos and monitored WhatsApp groups to determine how quickly the videos began circulating. (Usually within 30 minutes, Okigbo said.)

To deal with misinformation, a six-person group, including Ministry of Information staff, sought to identify and quickly counter so-called fake news and rumors that circulated widely on the internet and social media. The group's work included labeling spurious content, posting videos that directly engaged misinformation, and creating radio and television shows on trending issues of public concern.

The NCDC also launched a free, 24-7 hotline service on WhatsApp that provided a central source of accurate, verified, and up-to-date information on COVID-19 in Nigeria.<sup>51</sup> And some states set up their own hotlines to receive direct calls with state-specific questions and reporting.<sup>52</sup>

Unanticipated challenges materialized as the response unfolded. Communications staff members quickly realized that many Nigerians viewed COVID as a disease of the wealthy—those who lived in cities and traveled abroad. To counter the idea, they asked COVID survivors from rural areas to broadcast on radio or use other media to describe their experiences. They also discovered that the disease carried a stigma that arose partly from the initial perception that COVID was a death sentence. But it was also a product of the way emergency responders clad in personal protective equipment swept into neighborhoods and escorted to quarantine sites any residents who tested positive.

To dispel the first type of stigma, the responders contacted COVID survivors and had them tape messages in which they described their recoveries. To address the second stigma type, they permitted those who tested positive to quarantine at home while using an oximeter—a small device that can detect weakening levels of blood oxygen, often associated with worsening COVID.

Okigbo credited quick responses and successes to the subcommittee structure within each of the communications pillar's four functional areas. Each had its own job to do and could respond quickly as changing events and opinions warranted.

*Financing*

The Nigerian government's initial estimate of the costs of the response, quickly assembled in early March, totaled about 85 billion naira (US\$207 million), but the amount increased as the government made plans to provide targeted social support, purchase safety equipment, and buy vaccines if and when they became available.<sup>53</sup> Aliyu said, "We wrote the budget in a week and missed out on large chunks—especially the cost of risk communication."

The question was where to find the funds. Nigeria's tax revenues as a share of GDP were among the lowest in the world.<sup>54</sup> The finance ministry forecast that pandemic containment measures would suppress economic activity and therefore reduce tax revenues further. Nigeria was especially vulnerable because of its dependence on oil revenues, which started falling as travel declined globally. The government proposed to draw about US\$40 million from the national budget, about twice that much from a special COVID-19 levy, and a comparable sum from development-partner and private-sector donations.<sup>55</sup>

Since the 2014 West African Ebola outbreak, international organizations and governments had tried to prepare for this kind of emergency spending. In February, the Nigerian president's office requested that the UN reprogram some of its support—by directing it to the COVID response—and begin to create a seed fund. The UNDP office developed a coordination plan, identified areas where other UN support could help, and set up a basket fund, under its direction, for procurement and social services (text box 3).

The International Monetary Fund approved US\$3.4 billion in global emergency financial assistance in April under a special rapid-financing instrument, which helped countries use their budgets for targeted and temporary spending increases aimed at containing and mitigating the economic impact of the pandemic.<sup>56</sup> Nigeria secured additional assistance from the World Bank, the European Union, several bilateral donors, the Aliko Dangote Foundation (the largest private charitable foundation in sub-Saharan Africa), the Gates Foundation, and other sources public and private, including in-kind contributions.

The government took several steps to ensure funds were spent as intended. It created new budget lines with monthly expenditure information on emergency funding and posted them on the presidency's State House Transparency Portal. It also published contracts through the Nigeria Open Contracting Portal. In 2017, for its work on the portal, Nigeria's Bureau of Public Procurement won an innovation award in a competition run by the Open Contracting Partnership and the Open Data Institute, which described the portal as "a pioneering project with civil society and business to use open data underpinned by legal reform to make information about the country's notoriously corrupt procurement sector more accessible, transparent and accountable to the public."<sup>57</sup> Transparency International noted that the portals did not always provide complete data and were sometimes unavailable, but Aliyu and others pointed to their unanticipated value as a way to help journalists understand where money was going.<sup>58</sup>

### Text Box 3. Donor Coordination

Even before Nigeria's first confirmed case of COVID-19, government officials and international partners had discussed strategies for assisting the country. The Nigeria office of the UN Development Programme (UNDP), mandated to convene other UN and international partners, had started to discuss the issue as early as December 2019. "The question was, How do we mitigate the risks associated with a multiplicity of responses and ensure there is a shared understanding of the country's needs?" said William Tsuma, senior adviser on crisis prevention and recovery at the office.

In consultation with the Nigerian government and international partners, the UNDP helped set up a response plan linked to what it called the One UN COVID-19 Response Basket Fund. The purpose of the program was to mobilize public, private, and development partner resources to mitigate risks, support Nigeria's response efforts, and coordinate effort, with the aim of maximizing impact. Edward Kallon, the UN's resident coordinator and humanitarian coordinator for Nigeria, co-chaired the fund with the Federal Ministry of Health. The fund's board included representatives from the PTF, the federal health ministry the NCDC, government agencies, donors, and the UN. A technical committee led by UNDP was established to handle technical issues and review requests. The UNDP managed the day-to-day activities. The basket fund, which totaled over \$73 million, complimented federal government response efforts, Tsuma said.

Lealem Berhanu, the UNDP's Deputy Resident Representative in Nigeria, said national ownership and management of the fund were critically important, and he said he worked to align them with the national framework and priorities the Nigerian government had developed. UNDP personnel met daily with policy task force committees to coordinate. Although the fund was meant mainly to support social services, most of the fund was used for procurement, Tsuma noted. By July 2020, the basket had accumulated US\$63.8 million. Nigeria used the money to procure about half of the testing kits it needed during the initial year of response to the pandemic, as well as other personal protective equipment and social assistance.

See: <https://nigeria.un.org/en/46132-nigeria-one-un-covid-19-response-basket-fund-board-holds-inaugural-meeting-approves-us-22> and <https://www.ng.undp.org/content/nigeria/en/home/coronavirus/support-to-national-response.html>.

In Lagos, response leader Abayomi said the state government had accelerated its financial processes. During the pandemic, "we stepped up emergency preparedness access" to respond to COVID-related financial requests from hospitals and health workers in a day or less, he said. "The release of funding during a pandemic is a very critical aspect of the ability to contain whatever is going on at that point in time." Because governors served as incident commanders, they could activate emergency procurement processes and ensure the release of funds for specific needs and the Lagos governor did so.

#### *Economic and social relief measures*

The Nigerian government anticipated that movement restrictions, distancing, and lockdowns would hurt the ability of many residents to earn a living. Accordingly, the task force proposed economic and social measures to

mitigate that effect. On March 24, Nigeria's House of Representatives passed an emergency economic stimulus bill that included a US\$120 million credit facility for small and midsize enterprises and affected households.<sup>59</sup> Many of the businesses were still hard-hit, reported the Center for Financial Inclusion, a global research and advocacy organization for low-income people. A little more than half of the workers employed in small and midsize businesses lost their jobs during the opening months of the pandemic, and about half of such businesses closed, although both businesses and employment partly rebounded in July after restrictions eased.<sup>60</sup> Crucially, the relief bill did not cover most workers in the informal sector, who relied on day-to-day income for basic necessities.<sup>61</sup>

President Buhari promised direct support to the poorest, highest-risk communities that were directly affected by the pandemic and the associated response. To help meet emergency needs, Nigeria's Federal Ministry of Humanitarian Affairs announced that it would provide food for vulnerable households during the lockdown in Lagos and Ogun States and the capital territory.<sup>62</sup> A government school-food program introduced take-home rations for households near participating schools. The private sector also expanded capacity by providing substantial food supplies for state governments to distribute.

Still, it was difficult to identify and help people who genuinely needed assistance. Nigeria had set up a conditional cash transfer program a few years earlier, but the system served only a fraction of poor households in rural areas. There was no easy way to reach people living in cities, nor was it possible to reach rural residents at the scale necessary. In addition, the goods and services could be diverted. Some of the supplies, including private-sector contributions, landed in warehouses for extended periods of time or were looted during protests, the BBC reported.<sup>63</sup> Nonetheless, during the first three months of the response, the government managed to deliver food from its strategic grain reserves to 3.7 million households.<sup>64</sup>

On April 1, the humanitarian affairs ministry began distributing monthly cash transfers of 20,000 naira (about US\$52) to poor and vulnerable households already listed in the National Social Register of poor and vulnerable households—the basis for the regular conditional cash transfer program established in 2016.<sup>65</sup> UNICEF's representative in Nigeria, Peter Hawkins, who worked closely with the ministry, said the goal was to implement a digital pay structure across all states. But by July, the register contained only about 11 million names on its platform, even though an estimated 87 million Nigerians lived on less than US\$1.90 a day.<sup>66</sup>

The government decided to launch a rapid-response register that could be used for distributing cash payments to urban poor and would eventually become part of the National Social Register. The plan was to use satellite data to identify high-poverty neighborhoods using indicators such as road quality, building density, and land topography, and check the information against household survey data. Then the government would send to people in those neighborhoods

cell phone messages offering them a chance to apply for assistance. Officials would follow up to verify all information and obtain bank account data so that the government could directly deposit the cash assistance.<sup>67</sup>

The humanitarian effort was widely criticized because of the limited impact it had as a result of the scale of the problem and the limited resources available to accommodate the needs of so many in a country as populous as Nigeria. Still, by the end of December, Vice President Yemi Osinbajo said, the government had incorporated 24.3 million individuals into the National Social Register—the equivalent of about 5.7 million households.<sup>68</sup>

### *Engaging the private sector*

Partly because of the initial shortage of public resources available to Nigeria's health sector, policy makers actively integrated the private sector into formal COVID-19 decision-making structures. The government also worked with local pharmaceutical companies and private health-care providers, and it made loans available to Nigerian companies that could produce some of the supplies needed to respond to the pandemic. Aliyu made occasional special requests to the private sector, such as when he discovered that tech companies were proposing a high price tag for a travel portal that would enable double-tested travelers to move into and out of the country or across state boundaries. He turned to a coalition of private sector firms to help construct and fully finance a functional portal, a project the coalition completed within a week.

The NCDC's Incident Action Plan, published after Nigeria's first confirmed COVID-19 case in late February, outlined areas of special need and listed potential donors and partners. The Aliko Dangote Foundation was on the initial list and joined response meetings early on, according to Zouera Youssoufou, the foundation's managing director and chief executive. The foundation immediately pledged resources and focused its contributions on specific target areas based on expected effectiveness.

The Aliko Dangote Foundation then went a step farther. "After we disbursed those initial funds, it became clear to our chairman that we would need to pull in other private sector players to increase our response to the COVID-19 threat," Youssoufou recalled. "The needs were too significant for the foundation to engage alone." Although many businesses contributed individually to the COVID-19 response, there was at that time no unified and coordinated private sector effort.

Youssoufou said Aliko Dangote's chairman contacted other private sector players including Herbert Wigwe, managing director of Access Bank, one of the largest financial institutions in Nigeria. By late March, the foundation and Access Bank had formed the private sector Coalition Against COVID-19, called CACOVID. The Central Bank of Nigeria joined the effort, with its governor serving as CACOVID chair. CACOVID's strategy included pooling private sector resources to support the federal government of Nigeria's fight against COVID-19 and to cushion the economic impact of the lockdown on the most

vulnerable 5% of the population. Youssoufou said, “CACOVID’s operational and advocacy strategy was informed by the technical working group we convened, which included the director of the Nigeria CDC, the head of the Presidential Task Force on Covid-19, representatives from the WHO, the Bill and Melinda Gates Foundation, and Dr. Christian Happi, who first sequenced the Covid-19 genome in Nigeria.

The coalition was designed as a vehicle for using private sector funds appropriately and responsibly. The operations committee handled implementation through a command center provided by Access Bank. CACOVID also hired a monitoring and evaluation team and received pro bono contributions of services from both PricewaterhouseCoopers (project management) and KPMG (bookkeeping). “That’s how the private sector works the world over,” commented Youssoufou. “Companies would never just spend money and hope for results. They ensure they are clear on how their funds are utilized.” By the end of June, more than fifty of the largest private companies in Nigeria had partnered with CACOVID, and over 38 billion naira had been raised.

The oil and gas industry, which accounted for about 90% of Nigeria’s export revenue and was the most important sector of Nigeria’s economy, also played a critical role in the response.<sup>69</sup> Members of the Oil Producers Trade Section, comprising more than two dozen oil and gas companies, collaborated to fight COVID-19 in communities and states where they drilled, and they pledged US\$30 million in support initiatives.<sup>70</sup> “We came together to determine which critical areas of support the government would need,” explained Dr. Akinwunmi Fajola, the regional community health manager at Shell Nigeria. “For example, by the time a few state governments including the Nigerian Centre for Disease Control reached out to us [at Shell Nigeria], we had been quite proactive in identifying interventions that could yield quick wins and support the test-trace-treat-isolate strategy of government.”

Shell had a relationship with key health stakeholders across communities, state and local governments, and civil society and, before the pandemic, was already supporting about 20 health facilities across four states in the Niger Delta. The company expanded its community health programs, including projects that equipped and paid staff at hospitals in hard-to-reach areas where it operated, he said.

Sometimes the assistance was in-kind. In one instance, when the company learned that the government needed help in strengthening community awareness of the COVID-19 challenge, it saw that it had a unique way to help. Shell already sponsored an existing radio program called Canvas-On-Air, which focused on sustainable development initiative in the Niger Delta and aired weekly across several states. For over six months, beginning in April 2020, the station broadcast programs dedicated to risk communication, public awareness, and social mobilization.<sup>71</sup>

“Communication that helped build awareness of the pandemic and preventive measures was something my team and I saw as a critical need,” Fajola said. The lightbulb moment came after consulting with government leaders. “If we already had this radio program that reached many people, why don’t we just tweak it to help with risk communication and reach many more with factual health information that countered the myths being peddled about COVID-19? We then invited civil society leaders and health experts from the public and private sectors to come on the program to explain what people could do to protect their families?” Fajola said he also worked with the Shell leadership and his colleagues to boost lab capacity in 8 states—and help them secure NCDC accreditation—by procuring specialized equipment, consumables like testing reagents, and additional PCR test machines and by supporting the training lab technicians required help the labs win NCDC accreditation.

Aliyu noted that early on, Nigerians started to try to find masks, but there were few to be had. Private organizations and CACOVID ran successful mask campaigns and also procured cloth required for manufacturing masks that they distributed to camps for the internally displaced and to other areas with security challenges. The private sector also donated support to bolster testing capacity.<sup>72</sup>

Many businesses worked directly with multilateral organizations. For example, Guaranty Trust Bank, based in Lagos, partnered with the Africa Finance Corporation, a development institution established by African countries and based in Lagos, to create a 110-bed isolation center in Lagos State.<sup>73</sup> Others moved quickly to address early outbreaks in the northern city of Kano and took the initiative to work with the UN system in that response.

Zakari Momodu, who helped lead CACOVID, noted, “After 20 years working in the private and development sectors, I must confess I was impressed with the enthusiasm of the private sector to collaborate on the national COVID-19 response. There has been a lot of talk about public-private partnerships the last few decades, but in practice they are not usually very successful because at the end of the day, these are often direct commercial competitors. However, as soon as a recognized credible player took the initiative and responsibility for the heavy lifting, people from all different organizations and sectors were quick to sign up and put in resources and ideas. That doesn’t normally happen in business.”

Aliyu agreed. “The private sector played a crucial role in the entire response,” he said. “The biggest advantage was the speed with which they could implement things.” He valued the ability to pick up the phone, call CACOVID, and get a response within a day. “They could reach out to their corporate friends, tell them how much oxygen we needed on a daily basis, and we would have what we needed. They saved so many lives with this simple intervention.” Private firms also helped by concentrating much of their attention on the states. In some instances, closer coordination with PTF activities could have stretched resources further because the states were sometimes unable to use resources

such as food and lab equipment effectively, Aliyu reflected, but he welcomed the help the private sector provided. `

*Getting the big picture*

The government operated multiple data portals that both responders and members of the public could consult to learn more about the pandemic and the policy response. “The portals provided information on everything we had: from the [personal protective equipment] that had been donated and where it had gone to, to the state of face masks in certain hospitals, to the number of people being treated for COVID, to the breakdown of the budget we had, to our funding balance,” Aliyu said.

Responsibility for disease tracking and surveillance lay with the NCDC, which posted numbers of new confirmed cases, numbers of deaths, and related information.

During Nigeria’s Ebola outbreak, the federal government’s disease surveillance had relied on paper-based reporting and SMS text messaging, which resulted in losses of data, delayed information transfer and feedback, and poor case management. In 2015, in response to the need for improved disease surveillance, the NCDC partnered with Germany’s Helmholtz Centre for Infection Research to develop a far more robust and integrated system called the Surveillance Outbreak Response Management and Analysis System, or SORMAS.<sup>74</sup>

The module-based system allowed for relatively easy customization and addition of new functionality. It had a template for disease-X, which epidemiologists could modify to fit COVID-19. It facilitated contact tracing, case management, real-time reporting at the local level, monitoring of disease spread, and data sharing and reporting between users and stakeholders. Because the system had a mobile cellular application component, it could be used on tablets by local surveillance officers and volunteer community health workers in communities that lacked strong internet connectivity. After they collected information, they could go to a location with connectivity in order to upload and synchronize their data. The system also had a web-based platform used by supervisors at the state and national levels.

After data gathered in local government areas was aggregated, it could then be shared, downloaded, and analyzed or connected to multiple dashboards for monitoring, reporting, and modeling. Data was accessible to relevant government agencies and select partners to support state- and national-level public health policy decisions. According to Lois Olajide, leader of the SORMAS team in the NCDC’s Surveillance and Epidemiology Department, the system enabled her team to determine that just a few local areas were responsible for about half of Nigeria’s COVID-19 cases. That recognition led to the development of the country’s hot-spot strategy.

SORMAS already had a coronavirus module that had been developed when Nigeria recorded its first COVID-19 case. “Any time there is a case of a disease



that hasn't been recorded before, we can quickly develop a module," said Olajide. By the time Olajide came aboard in May, the system had already been deployed in 19 states. Throughout the pandemic, she worked to scale up training and deploy the system to all states and local government areas. SORMAS required substantial human, material, and financial resources, and it depended on support from a range of stakeholders, including government agencies, private entities, and nonprofit organizations.

These improvements did not resolve all data management problems, however. During the initial months of the response, laboratory testing capacities were limited, which slowed reporting, the PTF's mid-term review reported.

## OVERCOMING OBSTACLES

Winning the public's respect for safety protocols became increasingly difficult as the weeks passed. In polls, even people who indicated they knew and understood the safety measures reported that they did not comply, Okigbo reported. There was a difference between awareness and action, and the communication teams with which Murtaf, Disu, and Okigbo worked faced the challenge of linking minds to behaviors.

Government communication teams began to sharpen their targeting by calibrating the messenger and the messages to Nigeria's different demographics while also adapting to focus on particular types of events. For instance, during the days before and after religious holidays, when people planned to gather, the communication teams adjusted their approach, focusing on ways for people to stay safe in crowded venues. Through December, there was little evidence of spikes in numbers of cases clearly attributable to such events, though testing remained minimal.

The reasons for the unexpected and fortunate outcome were unclear, but some response leaders hypothesized that the situation may have stemmed from a combination of safety measures people undertook, the youthfulness of the population, time spent outdoors, low numbers of older residents in assisted-living institutions, and cross-immunities (protection gained from prior exposure to another, related virus).<sup>75</sup>

But in October, events took a turn that put emergency responders on edge. For months, Nigeria's COVID responders had worked to help Nigerians keep the pandemic at bay. But during that period, the country's increasingly restive youth had watched civil rights demonstrations sweep across cities in the United States, sparked by multiple deaths of Black men and women at the hands of police. The protests resonated. During the previous three years, a similar movement against brutality by Nigeria's Special Anti-Robbery Squad, called SARS, had gained strength. The pandemic heightened the sense of injustice. "People were restless, jobless, and confined at home with a lot of time to think about their grievances against the government," said Abayomi.

Distrust of the government and the police erupted in early October, as #EndSARS demonstrators took to the streets of Nigerian cities. Police shot at

the protestors during one demonstration later that month, killing 10 people and triggering more violent clashes, in which 51 civilians, 11 police officers, and 7 soldiers lost their lives, the president reported.<sup>76</sup>

Flouting COVID safety regulations, large numbers of people congregated without masks and without distancing from one another. Rapid transmission of the virus seemed certain, and heavy demand for limited medical facilities was likely to follow. The numbers of COVID cases rose during the weeks just after those protests, but the consequences were not quite as severe as many feared. Nigeria recorded a 32% increase (923 cases) the week of October 25–31, and a subsequent 2% increase the week of November 1–7, to 937 new cases.<sup>77</sup>

When the EndSARS protests and the cases they spawned did not produce a corresponding sharp spike in deaths and when people saw that deaths had not risen much after the earlier repeal of lockdowns, it became more difficult to persuade people to adhere to recommended safety practices, Disu said. The communications team had to find new strategies. Identifying key influencers and asking for their help in getting the message out helped, but compliance remained an unresolved problem as the year came to a close.

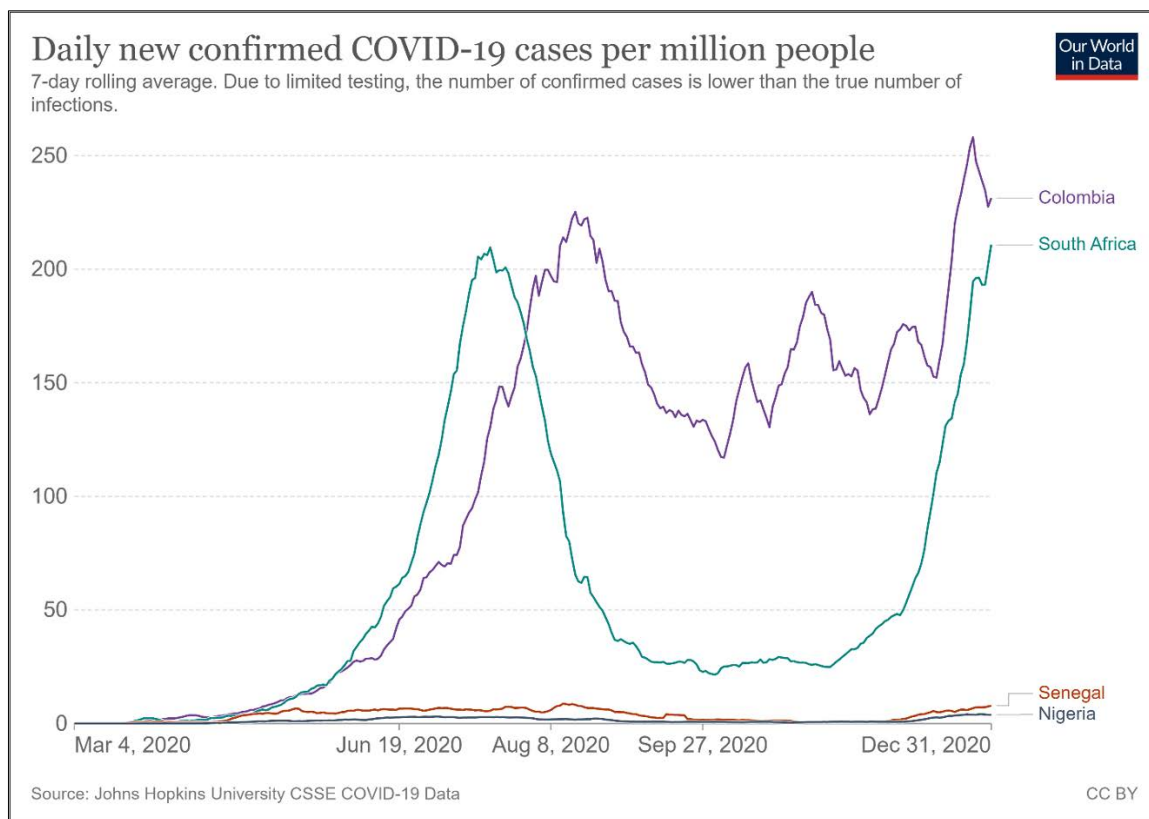
## ASSESSING RESULTS

Despite challenges and unexpected obstacles, Nigeria’s response to COVID-19 during 2020 was exemplary in several ways. During the first three months of the pandemic, the Presidential Task Force on COVID-19, together with the NCDC, the federal Ministry of Health, and other partners, set up 39 labs, 131 treatment centers, 256 intensive-care-unit beds, and other health infrastructure. It trained more than 17,000 health-care workers to assist with infection prevention and control, laboratory operations, and case management. It delivered food aid to several million households and transferred cash support to 730,000 especially vulnerable households—mainly in rural communities.<sup>78</sup>

The number of daily new confirmed cases remained below three per million people during the country’s first wave—about half the level in Senegal, a fifth the level in South Africa, and a fraction of the level in industrial countries. The second wave, which began in November, peaked at about 7.5 daily new confirmed cases per million. For the full year, confirmed cases totaled 85,560—below the number recorded in many other, less-populous African countries (figure 4).

The comparatively low numbers could have understated the actual incidence of disease because of limited testing, but by rougher measures, such as clinic visits and deaths, Nigeria indeed appeared either to have performed well or to have experienced a relatively mild form of COVID-19 that went largely unrecognized. Many temporary isolation and treatment centers closed for lack of patients. Notably, by the end of the year only 1,289 of the over 85,000 people with confirmed cases had died from COVID-19, indicating a lower fatality rate than many other countries experienced.<sup>79</sup>

**Figure 4: Daily New Confirmed Cases per Million**



The Nigerian response team conducted a review of its own work in mid-May 2020, released a July midterm report prepared by the PTF secretariat and PricewaterhouseCoopers, and published some of its evaluations in international medical journals.<sup>80</sup> The scope of its efforts to learn and adapt in real time distinguished it from many of its counterparts, as did its transparency in making the information public.

In the report, the response team acknowledged a number of ways that it could have performed more effectively or taken better advantage of opportunities.

- Difficulties in procuring specialized medical supplies and delays in securing personal protective gear plagued most countries, and Nigeria was no exception. Scaling up domestic production of some of those items was possible but took time.
- Expanding testing was a priority, but in some instances states were unable to sustain new lab capacity the NCDC created for them. “They all wanted molecular labs,” Aliyu said, “but within weeks, many were sending samples to the lab in Abuja because they couldn’t fund the labs at a level that would enable them to function.” Delivery of samples from hard-to-reach areas was slow because of transportation problems, and the midterm report found that lab capacity was also limited by the

inability to hire technicians who were willing to work the kinds of shifts needed for a round-the-clock operation. However, regardless of low testing capacity, Nigeria did not experience overcrowded hospitals or an extraordinary rise in mortality.

- Reaching vulnerable urban households with cash payments took time to organize. Food support helped fill the gap, but only partly. The steps taken to reach households represented an enduring contribution to Nigeria’s social welfare system and pandemic preparedness.
- Both the UN’s Nigeria One COVID-19 Basket Fund and the private-sector coalition CACOVID proved helpful in mobilizing emergency financing during the first three months of the response. As of July 2020, the UN fund had mobilized US\$63.8 million—mostly from the European Union, the private sector, and UN agencies.<sup>81</sup> As of the end of June, CACOVID had mobilized US\$72 million in donations from the private sector.<sup>82</sup>

Three other dimensions of coordination capacity—data, relationships with the states, and communications capacity—attracted particular concern during the opening months.

Timely and reliable data were essential for managing a science-based response—especially a hot-spot strategy. The use of SORMAS—the Surveillance Outbreak Response Management and Analysis System—enabled national responders to increase the level of data completeness to 78.5% from 65% during the first three months.<sup>83</sup> However, the quality of the data depended on having adequate contact tracing, securing public cooperation with testing, and improving the speed of test results. The response struggled with all three of those dimensions during its initial phases. Members of the public sometimes refused to be tested, or they objected to sampling in their communities.<sup>84</sup>

Despite a cohesive center-of-government response, some states did not initially adhere to national policies, and the effectiveness of the government response varied greatly from state to state. The national task force’s midterm review identified state-level difficulty in assembling incident action plans as a barrier to governors’ ability to tap fiscal support for their COVID responses.<sup>85</sup> And some states made inadequate use of their emergency operations centers to coordinate their own responses. Aliyu said states that invested resources poorly likely would be ill positioned to handle the next pandemic response.

National government agencies and leaders had a coherent message and a united front. When misinformation arose online, the risk communication teams were quick to offer rebuttals. When new issues arose or policies changed, leaders quickly adjusted communication strategies and disseminated new messages. But to reach households in many areas, the PTF communications team needed state and local governments to help spread accurate information and mobilize residents to take steps to protect themselves. During the initial months of the response, that key component was often weak or missing; and the national team

had to work hard to get officials and health-care workers at these levels on board.

According to Disu, the epidemiologist who was part of the task force's communications and engagement pillar and led the same functions at the NCDC, as community transmission of COVID-19 worsened it became clear that the response had to address community stakeholders and incorporate all of society. "This is when the government started talking about a whole-of-society response, and the need for the response to be community-led," he said. "But in some ways this came too late; people had already lost trust in the government's COVID response."

## REFLECTIONS

Because it had significant experience in combating infectious disease and no shortage of skilled personnel, Nigeria was able to design a COVID-19 response plan and move the pieces into place quickly despite getting a fairly late start. Important factors included active involvement and continuing support for a science-based strategy at the top of government as well as competency, dedication, and tenacity among respected senior members of the response team. A willingness to adjust approaches in the face of the shifting pandemic was another significant aspect of the response. Engaging the skills of development partners and the private sector also aided effectiveness.

Looking back at 2020 the following year, members of the team offered several ideas about what had worked and what they might do differently in a future situation.

UN Development Programme senior adviser William Tsuma stressed that locating the task force in the presidency was "critical" because effectiveness required a whole-of-government approach and leadership with the mandate to coordinate and mobilize across national departments and ministries. An individual ministry or other government arm would have lacked the clout needed to get important things done quickly and efficiently. In the presidency, the task force had strong political backing, could summon ministries' core competencies to create a true multisectoral response, and was generally able to avoid bureaucratic slowdowns related to formulating and implementing policy.<sup>86</sup>

As in other countries, the demands of confronting COVID-19—especially in the initial stage of the pandemic—drained response workers' energy and challenged aspects of the response. Dr. Mukhtar Muhammad, who served as national incident manager during the early portion of Nigeria's response, said fatigue became apparent during the first six months of the emergency, when the situation was in flux and systems were still developing.

"We had to go the extra mile," he said. "It was difficult for senior staff to have any control over their schedules, and there were no limitations on working hours. It was very stressful for everyone, and we saw the effect of that on productivity fairly soon but after the initial six months, things stabilized a little and we used that period to plan." He also noted that cooperation from partner organizations dwindled,

and “we had to push and beg people to participate in team operations.” The steering committee began to let ministries run their own activities as much as possible but sacrificed efficiency as a result.

Some team members stressed the impracticality of sustaining some of the nonpharmaceutical measures epidemiologists proposed. Broad lockdowns proved problematic in a context in which many people lived on what they could earn day to day. Dr. Akin Abayomi, health commissioner of Lagos, said his state “suffered harm in excess to COVID. It was a steep learning curve; we learned quickly that a place like Lagos cannot afford the luxury of an economic slowdown or lockdown. You have to develop other means of containing a biological shock without aggravating loss of life, property, and infrastructure. Nobody really expected this.”

Aliyu said clinical considerations outweighed regard for socioeconomic impact early on, reflecting Nigeria’s past experience with infectious diseases. “At the beginning, we were too aggressive,” he said. “But it is hard to lay blame on us, because some of the other pandemics did have quite high mortality.” Aliyu suggested that future pandemic responses might prioritize community engagement and a data-driven hot-spot strategy combined with rapid social and economic support.

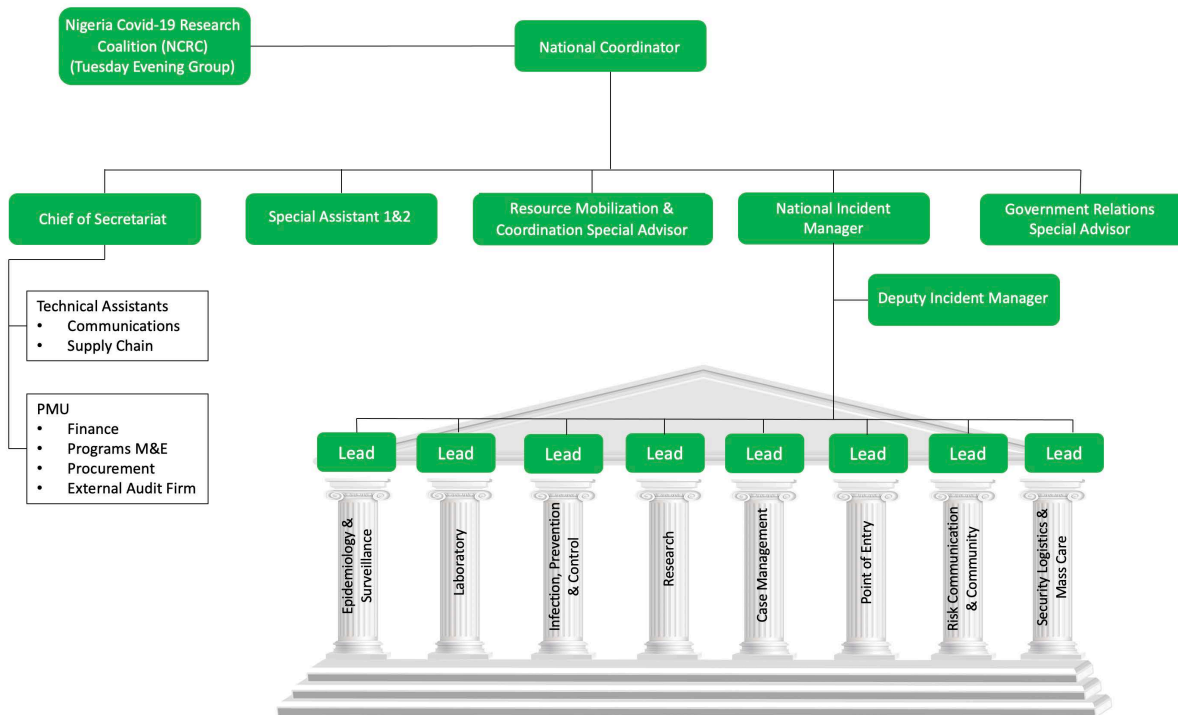
Support for targeted risk communications also merited higher priority, Aliyu said, noting that his team had adjusted its early approach as the pandemic wore on. “Over time, we started to work closely to convince people, not just push them,” he said. Distrust was still apparent when vaccines became available more than a year later and take-up stalled.

Leadership played a key role in Nigeria’s 2020 fight against COVID-19, and Aliyu drew praise from many senior members of the response team for his effective, low-key personal style. Dr. Omotayo Bolu, chief of the PTF secretariat, emphasized what many other senior response personnel also observed: “Dr. Aliyu’s leadership really helped. His diplomatic style helped move things forward. Relationships really matter, and Dr. Aliyu’s ability to work not only at the highest level with the president but also at the lowest level with anyone really made a difference.”

“I think what helped me more than anything else was the fact that I already had my network because of my HIV work a year earlier,” Aliyu said. “I knew how the system worked, and I had a lot of goodwill—especially from the international community.”

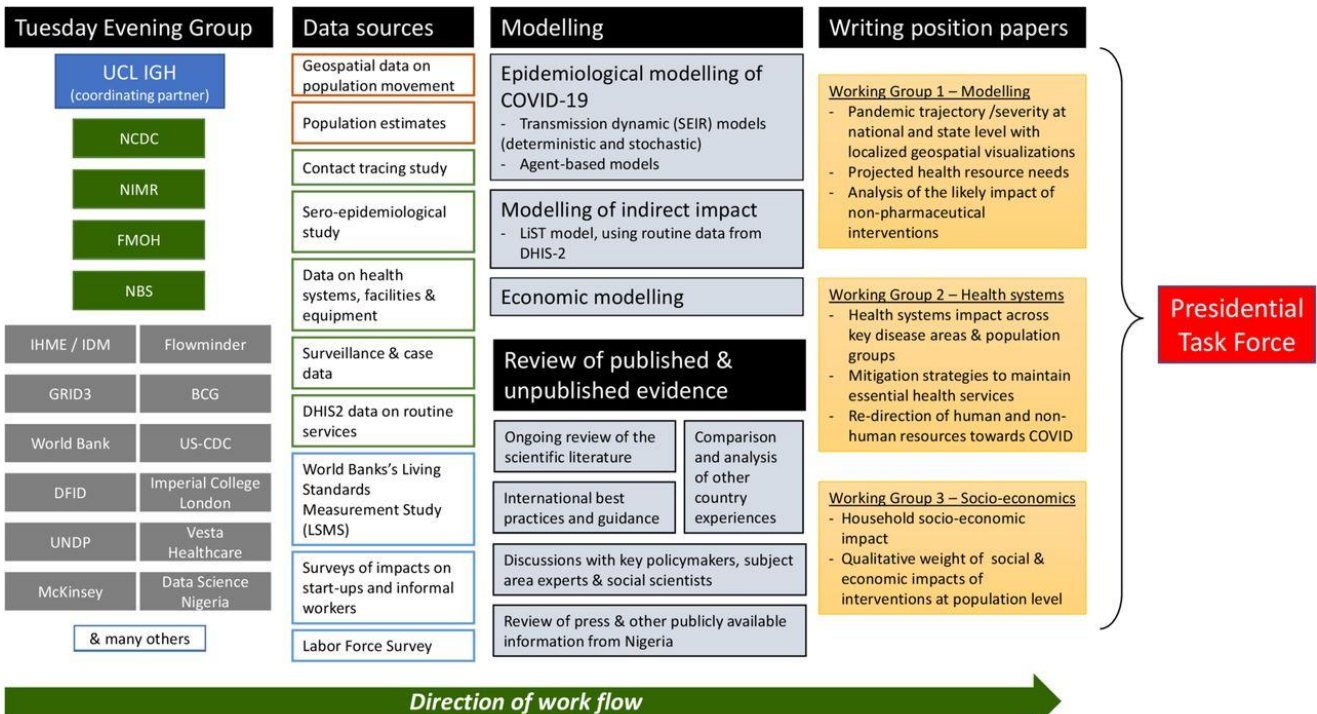
Aliyu applauded the dedication and talent of the Nigerian members of the team, and he singled out another crucial leadership dimension: the need for strong political backing from someone who believes in science and evidence and is willing to accept advice. He commended President Muhammadu Buhari’s consistent backing as responders adapted to the changing demands of the pandemic. “If a political leader’s body language is mixed, the quality of the response will suffer,” he said. “Political leaders have to be willing to provide support and to communicate effectively with the public.”

### Exhibit 1: Structure of Nigeria’s COVID-19 Response



Adapted from Nigeria’s National COVID-19 Multi-Sectoral Pandemic Response Plan, revised May 18, 2020.

### Exhibit 2: Tuesday Evening Group & Modeling



From: Ibrahim Abubakar, Sarah L. Dalglish, Chikwe A Ihekweazu, Omotayo Bolu, Sani H. Aliyu, “Lessons from co-production of evidence and policy in Nigeria’s COVID-19 response.” BMI Global Health. January 2021. Doi:10.1136/bmigh-2020-004793

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