



Global  
Partnership  
for Sustainable  
Development Data

# Data for a Resilient Africa

Partnering  
to meet the  
challenges of  
COVID-19 and  
build toward  
inclusive  
economic and  
social recovery



United Nations  
Economic Commission for Africa

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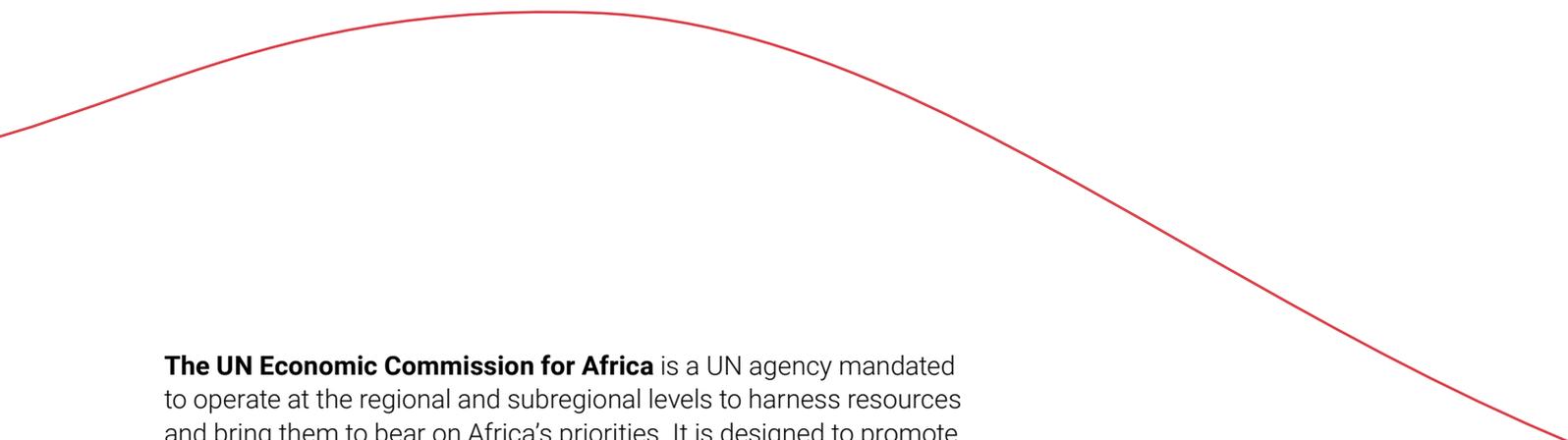
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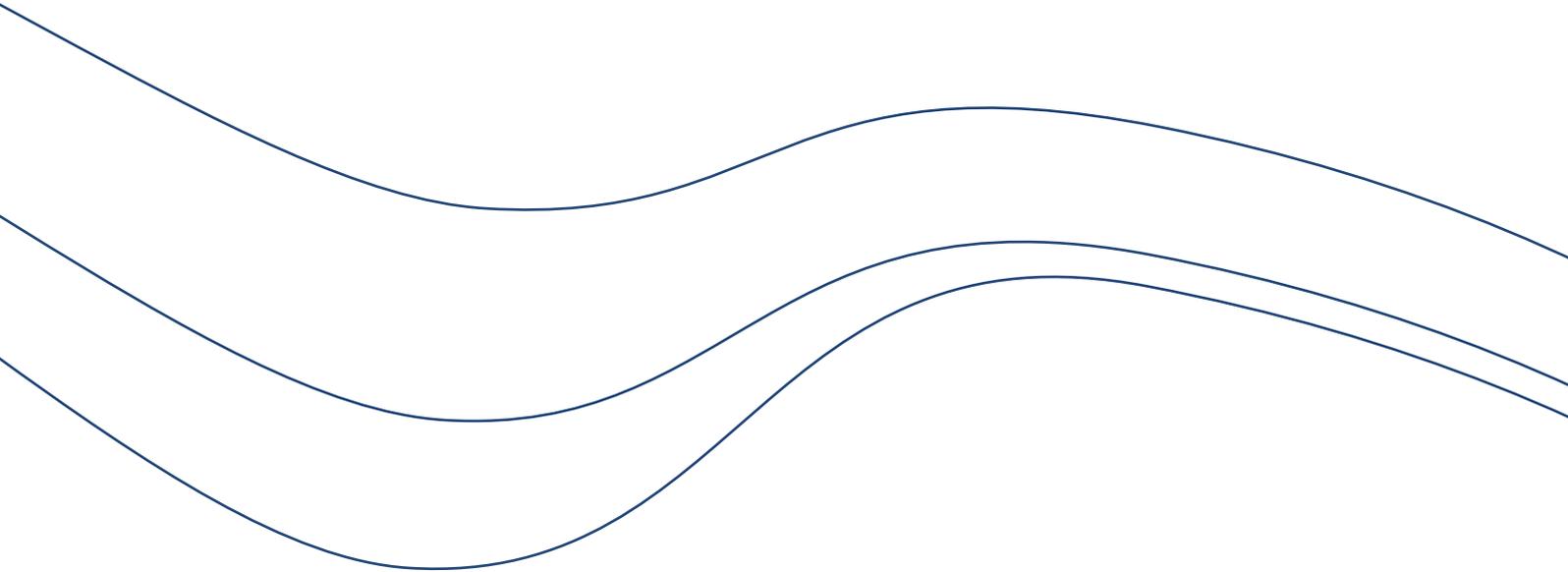
A full list of participating organizations is available in Annex B.

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**The Global Partnership for Sustainable Development Data** is a global network bringing together hundreds of partners from Governments, the private sector, and civil society organizations to ensure the new opportunities of the data revolution are used to achieve the Sustainable Development Goals. Since 2015, we have been dedicated to forging partnerships and connections to take action, galvanize political commitment, build trust, and spur innovation to ensure everyone has the right to life, dignity, and security on a healthy planet. It is demand led, working with partners to understand what a country needs.



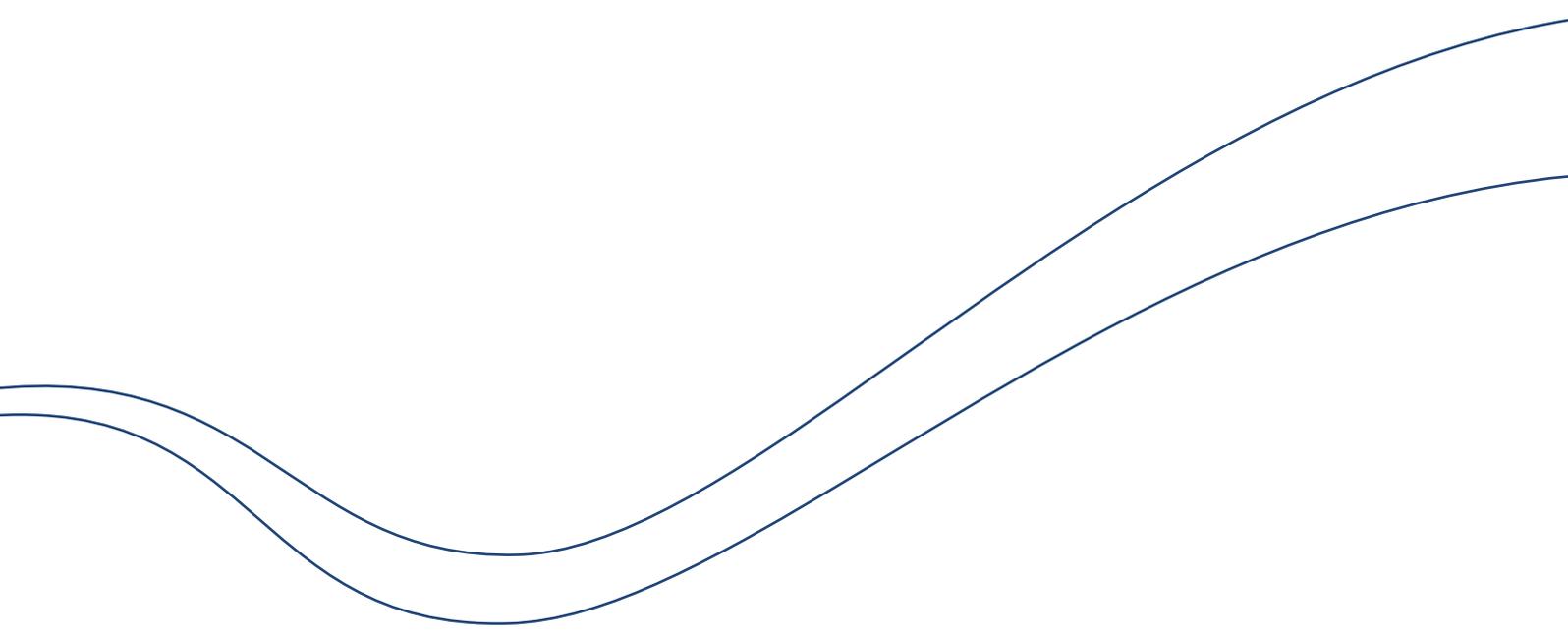
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## Acronyms

<b>FSWR</b>	Food Security War Room
<b>GIS</b>	Geographic Information System
<b>GRID3</b>	Geo-Referenced Infrastructure and Demographic Data for Development
<b>GSS</b>	Ghana Statistical Services
<b>NBS</b>	Nigeria Bureau Statistics
<b>NIS</b>	National Institute of Statistics
<b>NSA</b>	Namibia Statistics Agency
<b>NSO</b>	National Statistical Office
<b>UNECA</b>	United Nations Economic Commission for Africa
<b>UNFPA</b>	United Nations Population Fund
<b>UNEP-DHI</b>	United Nations Environment Programme Centre on Water and Environment



# Foreword

COVID-19 exposed the reality of global crises and challenges — from the vulnerabilities of data ecosystems and health systems to the need for clean, accessible water for all.

To assess these challenges and work out how to solve them, we need good data to understand what is happening, and effective skills to use that data to take appropriate action.

In 2020 — the year COVID-19 spread across the globe — the UN Economic Commission for Africa (UNECA) and the Global Partnership for Sustainable Development Data (the Global Partnership) worked together to play our part in responding to this unprecedented crisis.

Across Africa, we listened to what Governments wanted and found our network of partners were ready and willing to respond collectively to their needs. Building on five years of strong partnerships, in this time of crisis, our network came together to support each partner with vital resources, information, and experiences.

A common theme across our conversations was that COVID-19 intensified the urgent need for timely data. We worked in collaboration to bring partners together with the data, technology, and tools they needed.

COVID-19 also starkly demonstrated the need for that data to be produced, analyzed, and shared within a robust data system. Data systems take time to build securely and ethically, and we believe COVID-19 has clearly shown the need to continue creating them. There will be more pandemics and more global crises — including the ongoing climate crisis.

While focusing on the challenges of today, we did not forget about tomorrow. Our work has always been about the future of our societies and planet. The skills that have been built through these partnerships will also help Governments plan for sustainable development to mitigate climate change, track economic progress, and apply data science to get the best outcomes in health, education, and other critical challenges.

We need to be better prepared in the future. COVID-19 saw a rush for short-term fixes, creating a danger that poor-quality data will be used to inform important decisions or that data sharing oversteps its original purpose. To build a robust system for future crises, we need partnerships, we need skills in government to utilize those partnerships, and we need more public dialogue about what data is collected and shared, and why. This will mean more collaboration that builds trust between the public and private sectors, civil society, and academia, to lay the groundwork for future scaling up and flexibility when crises hit. Preparedness also requires stronger technical capacity in Governments in geospatial data and data science, not only for emergency response but also to improve data access and



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Chief Executive  
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**Vera Songwe**

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use across the range of government activities every day. At the Global Partnership and UNECA, we are working to ensure that the momentum gathered during the pandemic helps to build stronger systems for the future.

Ensuring that the vast potential of new data and technologies is used to make lives better, prevent crises, and protect our planet is a huge challenge. Getting it right will result in better policy and, ultimately, better lives. The Global Partnership and UNECA are committed to working with partners from every sector to build the data systems we need across the continent of Africa. We are bringing together organizations to interrogate assumptions and ask hard questions to make data partnerships more transparent and work together to protect rights and prevent data misuse.

We call on organizations with data, tools, skills, resources, and other capabilities to join us in using them to foster resilience amid the climate and health challenges ahead.

“

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Accra, Ghana. Photo: Jordi Perdigo/GPSDD

# Introduction

On February 14, 2020, Africa recorded its first case of COVID-19, spurring many nations to quickly implement measures to curb the spread, including closing borders and enforcing lockdowns.

Governments across the continent needed to implement public health control measures, especially in areas with high population density and with levels of deprivation, insecure livelihoods, and infrastructure challenges.

Early on, the Global Partnership and UNECA jointly convened the Data for Now: Building Africa's Resilience to COVID-19 initiative. Both organizations are dedicated to encouraging and assisting the public and private sectors across Africa to build and invest in robust data ecosystems, especially for data-driven decision-making in response to crises. The Global Partnership brings a global network of nearly 300 partners, all driven by the mission to use data to accelerate progress on the Sustainable Development Goals, while UNECA brings the power of the UN system and deep relationships with Governments across the continent.

The focus of the data partnerships is to strengthen countries' response mechanisms as well as address the short- and long-term impacts of COVID-19 with data, through mapping populations, tracking the economic impact of the pandemic, and strengthening data ecosystems for the longer term.

From Botswana to Zambia, this initiative has been rolled out across Africa. It supports more than 40 partnerships between Governments and more than 30 technical partners who bring data, skills, tools, and resources.

Partners have worked together to develop immediate insights into the pandemic, have shared knowledge with each other to increase the speed and scale of change, and have developed skills to enable countries to rebuild and face future challenges with resilience.

Underinvestment and weak systems for data collection and analysis — especially cross-governmental institutions collection and sharing of data for quick decision-making — have been longstanding issues across the continent, and the situation worsened under COVID-19. The need for data was acute, but data collection that would ordinarily be done in person could not happen; surveys and censuses were canceled.

The pandemic has underlined the need for modern systems and innovative ways of gathering data. Through this initiative, the Global Partnership and UNECA have contributed to countries' processes of modernizing their statistical systems — digitizing the data processing chain, from data collection to dissemination. They have encouraged consideration of alternative and complementary tools, methods, and technologies, with the aim that this should become the norm across the continent.

## Data for Now

**40**

partnerships  
between  
governments

**30+**

technical  
partners who  
bring data,  
skills, tools  
and resources



People stand at a bus stop in Lagos, Nigeria, with their face masks on after the Lagos State Government made it mandatory for residents to use face masks in public. Photo: Oluwafemi Dawodu/Shutterstock

**In Kenya**, the work included major efforts to ensure food security as the country entered lockdowns. The Global Partnership worked with the Food Security War Room (FSWR) of the Ministry of Agriculture to bring in technology partners to help with data collection and analytics and develop an app to track supplies and solutions. This app helped to manage threats such as locust infestations.

**In Nigeria**, partners came together to create a comprehensive data hub to show where cases of COVID-19 were occurring and what support might be needed. Nigeria's National Bureau of Statistics used the hub to provide data for high-level meetings, including for the Presidential Task Force subcommittees on managing the pandemic.

**In Ghana**, very early in the pandemic, an existing partnership between the national statistics office, Vodafone Ghana, and the Swedish nonprofit foundation Flowminder was adapted to provide insights into Ghanaians' mobility, and to help in public health emergency planning, disaster preparedness, and response.

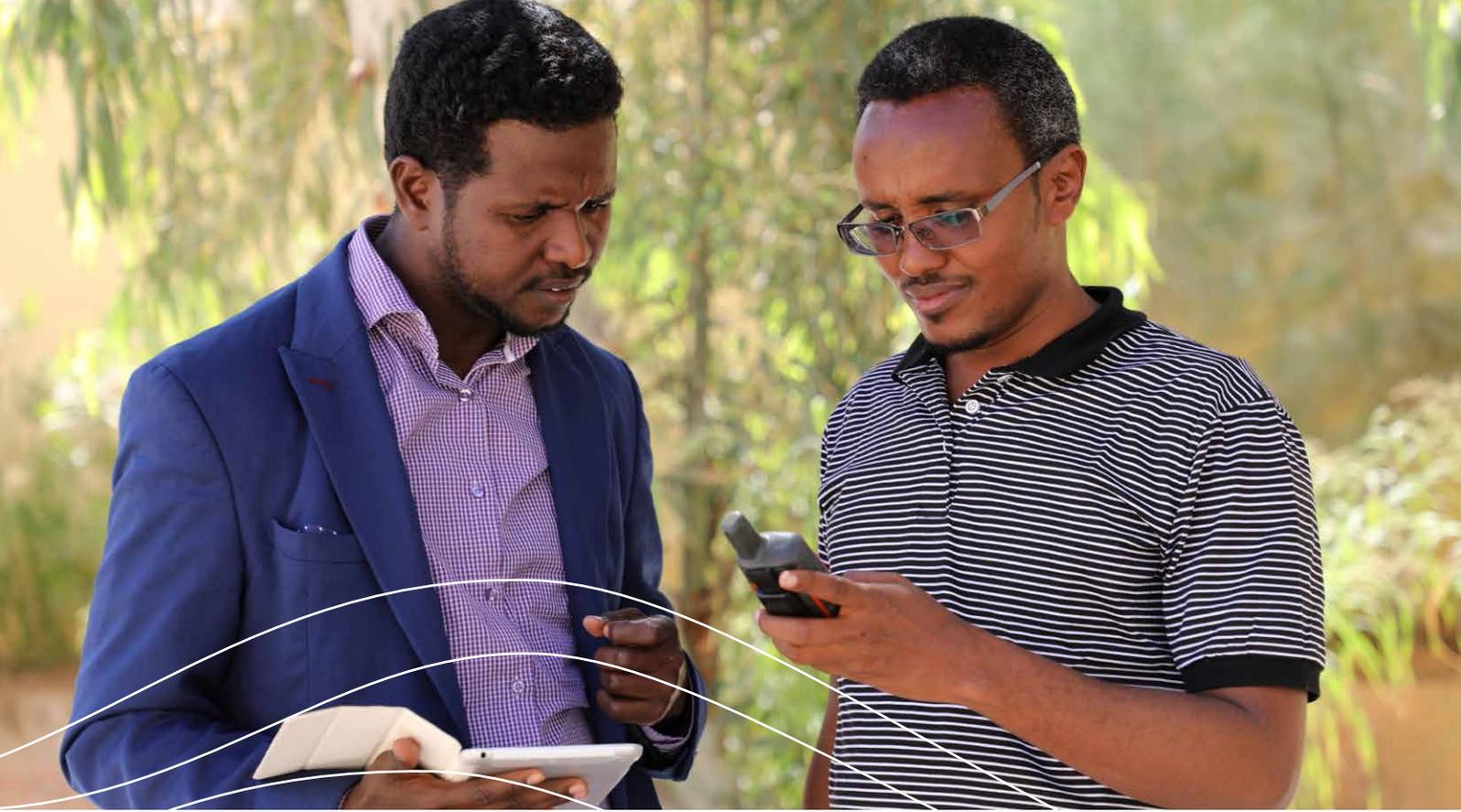
These partnerships have helped countries manage the pandemic in the short term and will continue to strengthen data systems in the longer term. Partnerships developed in one country can help show the way for others and provide support for colleagues across the continent wanting to test out similar approaches.

These relationships have also laid the groundwork for sharing other ideas and resources in the future — and rebuilding with resilience. Stronger links were forged between national statistical offices (NSOs) and data users across line ministries. UN Resident Coordinators collaborated with national and regional stakeholders on accessing financial resources or in-kind support.



**In Nigeria, partners came together to create a comprehensive data hub to show where cases of COVID-19 were occurring and what support might be needed.**





Abdirisak Aden, Head of GIS, and Mohamud Ali, Head of Population Housing at Puntland Statistics Department. Photo: Faaris Adam/GPSDD

Officials in Somalia first gained new skills in using geospatial data to estimate the impact of the virus and were able to use those skills later for cyclone prediction and recovery efforts.

In Francophone West Africa, the Global Partnership helped countries to use new methods and data to tackle environmental issues when restrictions on movements meant fieldwork was limited.

Again and again, the pandemic underscored the importance of working together on solutions, and how crucial partnerships are to achieving the best outcomes. Governments were more willing to explore and adopt solutions in collaboration with the private sector, civil society, and academia, and bureaucratic processes were minimized across all stakeholders. This sense of urgency had to be balanced against the need to follow due process and due diligence – working with vetted and trusted partners.

This report offers insights into how and why data partnerships were so crucial during this unprecedented time and what was achieved when stakeholders from across the world came together to share resources – whether knowledge, technology, or technical support. And it shows how this work will need to continue if the world is to be ready to meet future health crises and to tackle the looming threat of the climate emergency.

The rest of this introduction outlines the partnership between the Global Partnership and UNECA. Chapter 1 focuses on data partnerships for urgent pandemic insights, and Chapter 2 focuses on partnerships for future data needs, with both sharing lessons for the next crisis. Finally, the conclusion shares reflections on overarching lessons learned from the COVID-19 pandemic. A map of all partnerships brokered by the Global Partnership and UNECA is included in Annex A.



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## The power of networks

The Global Partnership and UNECA have worked together since the Global Partnership was created in 2015, so when COVID-19 emerged it was natural for the two entities to join forces to support countries with better data to tackle the pandemic.

Oliver Chinganya from UNECA describes the partnership between the two organizations as strategic, with each partner bringing a different set of capabilities: “As UNECA, we have regional reach to all the countries, which most agencies do not have. We have a convening power, in that we bring the countries together. Even in a situation where we are faced with COVID-19, we can mobilize them to discuss issues and devise innovative solutions. We recognized that the Global Partnership has a bigger reach of partners, in the private sector and academia, who have the capacity and tools to support the countries. We also knew countries were struggling to collect and analyze data to inform their decision-making during COVID-19. For us it was clear we needed to work with the Global Partnership so that African countries could benefit from these global partners.”

When the Global Partnership works with countries, the focus is on listening to needs and then making the connections to assist them in fulfilling those needs. For COVID-19 responses, it had wide-ranging partners ready to connect with Governments across the continent, including the Geo-Referenced Infrastructure and Demographic Data for Development (GRID3) initiative, the software company Esri, Facebook, and the nonprofit Qatar Computing Research Institute. Among Governments, COVID-19 brought countries together to find ways to monitor and respond to outbreaks across the continent while also creating systems that can be used for future crises.

The partnership was quick to deliver results. One of the critical collaborations was with Esri. Matthew Pennells, the Regional Manager for Africa at Esri, says that early on in the pandemic, the tech company made its solution templates from ArcGIS — its geographic information system application — freely available globally to help with COVID-19 responses. The Global Partnership and UNECA helped to get the templates to where they could do the most good.

Pennells says everyone was on the same team and had the same goal: “It was one of those things where you work with your competitors; you work with your partners. It didn’t matter. If the phone rang from the Global Partnership, I just said, ‘Link us up to the right people, and we will get it moving.’ In the same way, a lot of these people were existing customers and existing users. So we reached out to them all saying that this is all here for you and freely available if you need it.”

Because there were already those partnerships and connections in place, it was easy to get solutions out quickly. “That’s the strength of the partnership,” Pennells explains. “We already knew each other, and that’s a credit to the Global Partnership because the network was already there. They just had to flick the idea up, and everyone responded.”



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**Matthew Pennells,  
Regional Manager  
for Africa at Esri**

# Chapter 1: Data partnerships for urgent pandemic insights

Without a vaccine, in early 2020 the first line of defense against the pandemic was good data. Governments needed to see where the virus was spreading and where the vulnerable populations were concentrated, and to monitor the stocks of medicines and personal protective equipment available.

An early priority for Governments across the continent was to develop ways to bring together available data and make it easy to visualize for hard-pressed government decision-makers trying to protect public health, food security, and the economy. The Global Partnership and UNECA mobilized partnerships to share data across government and between the public and private sectors, and to make data easier to access and understand.

The Global Partnership facilitated the development and strengthening of COVID-19 data hubs in seven countries – Ghana, Namibia, Nigeria, Sierra Leone, Kenya, Zambia, and Guinea – to assist in policy and decision-making. This included connecting government stakeholders with relevant data infrastructure providers and data producers and connecting national statistical offices with line ministries and non-government stakeholders, such as academia and private-sector stakeholders, to consolidate and enhance data analysis and insights.

Across the continent, the Global Partnership and UNECA often found that Government ministries were not adequately sharing data. Building these data hubs was a way to encourage sharing, as the data hubs are more effective the more information they can host, which involves sourcing administrative data from across government ministries.

Countries were able to develop data dashboards featuring visual, analyzed data of confirmed cases, recoveries, deaths, and other indicators that could inform Governments', businesses', and communities' COVID-19 responses. These data hubs were able to provide immediate insights into the virus's spread as well as the social and economic impacts. They also provided a foundation to add other metrics to be used for other needs, including future pandemics, health interventions, or climate change adaptation.

In many cases, government officials needed to rapidly acquire new skills to enable them to take advantage of new data sources and develop insights. The Global Partnership facilitated capacity-building partnerships to support immediate pandemic insights across 14 countries: Burkina Faso, Central African Republic, Ghana, Madagascar, Mauritius, Namibia, Nigeria, Senegal, Sierra Leone, Somalia, Somaliland, South Sudan, Togo, and Zambia.

## The Global Partnership

7

COVID-19 data hubs in 7 countries

14

Capacity-building partnerships in 14 countries

Oliver Chinganya, Director of the Africa Centre for Statistics at UNECA, says COVID-19 has helped countries see the importance of having real-time data: “That’s really something that we have seen changing, countries demanding more ways of looking at things in terms of how to disseminate data. Data collection and analysis can also be seen in real time. That’s also a big change.”

As the Global Partnership and partners start focusing on recovery and resilience from COVID-19, Davis Adieno, Director of Programs at the Global Partnership, says the hubs created during the pandemic will have significant use in the future, and will build support for data among the public and politicians.

“The hubs that have been put in place integrate multiple platforms and data sources,” he says. “The global challenges around climate, poverty, and hunger are largely the same but exacerbated by COVID-19. The data made available through the hubs will continue to support Governments in these critical areas and foster response to crises. The hubs are really helpful in raising the profile of data and not just amongst organizations, but also the general population, because with the pandemic, suddenly everyone was paying attention to numbers. COVID-19 catalyzed and accelerated the importance of data, something we had been talking about for so many years. Countries that were not paying attention to partnerships and collaboration around data are now reaching out, saying they know it is important and see the value in what these partners are providing.”

However, Adieno says, the hubs need to be sustainable – which means they need to be funded. If countries use private-sector partners to host and build them, then paying for licensing needs to be considered. Even in an emergency situation, it’s important to ensure that new products are sustainable and that countries choose solutions that will work for them going forward.

“While many countries were given access for free for limited periods, they need to consider how to keep these hubs up and running in the long term. Countries have pointed to their usefulness for interventions aside from COVID-19. We want to see countries commit to incorporating these hubs into their everyday use, which does require that Governments commit to funding for the long term,” Adieno says.

New skills will outlast the pandemic and will strengthen data systems for the longer term, increasing the use of timely and inclusive data for decision-making across government. These data systems need to go beyond pandemics and encompass the broader economic and social impact of shocks such as pandemics, floods and droughts, or, in the case of Kenya, locusts.



**The hubs created during the pandemic will have significant use in the future, and will build support for data among the public and politicians.**



Davis Adieno, Director of Programs at the Global Partnership



## CASE STUDY

# Kenya food staples dashboard



A woman buying cauliflower at Wangige Market in Kiambu, Kenya. Photo: Elphas Ngugi/GPSDD

When COVID-19 cases emerged in Kenya, there were fears that the inevitable restrictions would mean people would not be able to transport their produce from the farms to the market or import staples from neighboring countries. A plague of locusts in the region in early 2020 further threatened the food supply of tens of millions. Even before COVID-19, the [Food and Agriculture Organization of the United Nations](#) found that almost one in five people in Kenya were food insecure.

Kenya was a founding partner of the Global Partnership in 2015. Since then the relationship has grown, with numerous collaborations over the last six years. The focus during the early months of the pandemic was on collecting and sharing data in real time to help the nation with its resilience, while also laying down a blueprint for future use.

The Global Partnership was a partner in the Food Security War Room, a consortium set up to ensure Kenya would have access to food while under movement restrictions. The key to implementation was access to data to see what food is available and where it is.

Karen Bett, a Global Partnership policy officer who worked on this project, says it all started with a conversation on WhatsApp. “We started brainstorming on some of the solutions to tackle food security. And from the word ‘go,’ it was clear that what was worrying these stakeholders was the state of food access in the country.”

The Global Partnership was able to broker a solution using geospatial technology from Esri.

**Food  
insecurity**

**1 in 5**

people in  
Kenya were  
food insecure  
even before  
COVID-19

Richard Ndegwa, National Program Coordinator for the Agricultural Sector Development Support Programme at the Ministry of Agriculture, Livestock, Fisheries, and Cooperatives, says this effort made a real difference. County officers and enumerators were sent out across the nation to work with farmers and stockists to collect data on the type, surpluses, and prices of available foods. They entered their findings into an app, which fed data into an online system that the FSWR could use to make decisions.

Officials in the Ministry had real-time and reliable data to fully understand the situation and concerns they were hearing from people across the nation.

“Those who supply food produce to various markets were concerned about the restriction of movement in the lockdown,” Ndegwa explains. “One of the concerns was the markets and also the transportation of produce or products. The other concern that had been reported from various parts of the country was the availability, accessibility, and affordability of staple foods. There was fear that prices were going to increase, and therefore if prices were to increase, then the situation of those who are generally food insecure was going to be worsened by the restrictions.”

Mildred Sangura trained and coordinated enumerators and also went out to collect data in Mombasa. While it was an uncertain time, she says, the importance of the work kept her going out each day to work with stockists to collect data: “We explained to them that this data is important because it’s going to be used by the Government to come up with decisions on rationalization because, for instance, Mombasa is a destination county for most commodities. We were explaining to them that ‘maybe in your county you could be lacking certain commodities, but they are in excess in another county so the Government can use that kind of information to help you to be able to access it.’”

She also used the opportunity to explain what COVID-19 was and the health precautions people needed to take. While she was worried about contracting the virus herself, she persevered because she saw it as important work. “I convinced myself that gathering this information was crucial — if we get the data and the Government gets the data and uses it in the right way, a number of lives will be saved,” she says. “I believe I contributed so much because you can’t divorce food from food security from health. Some decisions were made, like rolling out programs like the kitchen gardening project,<sup>1</sup> so I feel like I’ve contributed towards improving livelihoods in this COVID period.”

The technology used to collect, analyze, and visualize all this data was from the global tech company Esri, which offered its services at no charge.

Clifford Okembo, CEO at Esri Eastern Africa based in Kenya, was proud to be involved. “They [the FSWR] were getting information in real time, they were making decisions, almost in real time, in that it’s something that almost every day that the minister could be checking how far is it and how much are we doing,” he says.

For Ndegwa with the Agricultural Sector Development Support Programme, the key to the project was coming up with ways of mobilizing all hands on deck and using the existing structures and capacity at the county level to quickly collect

**“**  
**County officers and enumerators were sent out across the nation to work with farmers and stockists to collect data on the type, surpluses, and prices of available foods.**  
**”**

<sup>1</sup> Kenya’s Ministry of Agriculture is delivering sacks, seeds and water tanks to a million Kenyan households in both rural and urban areas to lessen the impact of severe food shortages during the pandemic.



A woman selling maize to a customer at Wangige Market in Kiambu, Kenya. Photo: Elphas Ngugi/GPSDD

and aggregate data on available food stocks. “Once we aggregated the data, it was shared with the leadership at the county level. And it was also shared with the national leadership through the FSWR that had been established. And they were able to look at the data and make decisions, particularly one of the decisions that was made to ensure that the food supply system was not disrupted.”

The FSWR soon realized that despite the restrictions on movements, trucks still needed to transport food commodities across Kenya to meet demands and avoid significant price increases. Ndegwa says their team used the data collected to ensure that vehicles transporting food across the nation and from neighboring countries were authorized to move and pass through roadblocks.

Ndegwa says the pandemic has seen an overdue focus on using technology to improve well-being. “Coronavirus is a dark cloud, but it also has its silver linings. And one of the silver linings is to make countries embrace technology.”

This increasing reliance on technology included moving from in-person to remote training, an efficient way to help build capacity in government offices and in the counties, Ndegwa says.

Post COVID-19, he predicts, Kenya will want to continue to use technology to improve data collection and use, to ultimately improve accuracy and efficiency in monitoring the food security situation. The apps that were developed can be customized and used to improve access to market information and linkages.

“The application that we used was very, very useful,” he says. “It gave us an indication of the potential of technology in collecting and sharing real-time and reliable data to aid in decision-making and also to inform any interventions or strategies or policies that needed to be put in place by the decision-makers.”

While the Global Partnership’s Karen Bett points out that there were some who says building an app was not going to overcome the complex issues in Kenya, introducing one has proven to be a catalyst to encourage wider changes. “It was part of a solution,” Bett says. “The Government didn’t know the food security situation, and this was a way to overcome that. The overall aim is that now the Government and all the stakeholders see the importance of getting this information, and how it can be done. The process will get the Government to rethink how it does data and can make data systems resilient. We should not be looking for farmers to mobilize data collection in an emergency. Next time there is an emergency, we want them to be ready to go with this system.”

“  
**Coronavirus is a dark cloud, but it also has its silver linings. And one of the silver linings is to make countries embrace technology.**



**Richard Ndegwa,  
National Program  
Coordinator for the  
Agricultural Sector  
Development Support  
Programme at the  
Ministry of Agriculture,  
Livestock, Fisheries,  
and Cooperatives**



## CASE STUDY

# Nigeria's COVID-19 data hub



Airport staff member at Lagos Airport stands at the door of a bus as domestic flights resume in Nigeria. Photo: Oluwafemi Dawodu/Shutterstock

When COVID-19 hit, there were global fears over what would happen in Africa's most populous nation. More than 200 million people live in Nigeria, with several informal settlements constituting hotspots, so concerns were high that the already overburdened health care system would not withstand a rapid spread of the virus. There were also fears that low public trust in health care systems and widespread misinformation about the virus would add to the challenges of effectively controlling COVID-19.

Having data, evidence, and easy access to information was vital for this West African nation during the pandemic, and the Government wanted to draw information together to make it easier to use and understand.

The Global Partnership, UNECA, and their partners worked with the National Bureau of Statistics in Nigeria (NBS) to create a comprehensive data hub to show where cases of COVID-19 were occurring and what support might be needed.

The Global Partnership identified the GRID3 Consortium (the nonprofit Flowminder, the location-based data services company Fraym, Esri, the United Nations Population Fund, and Columbia University's Center for International Earth Science Information Network), Qatar Computing Research Institute, Surgo Foundation, as solutions providers that would enable the NBS to update its existing COVID-19 tracker into a more robust COVID-19 data hub.

**Nigeria  
population**

**200m**

with several  
informal  
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hotspots

In two months, the COVID-19 data hub was launched, incorporating and presenting pandemic information, with case numbers and health information from diverse sources, including the Nigeria Centre for Disease Control's COVID-19 tracker. Through the Global Partnership, the data hub was expanded with additional data embedded, including mobility data from Flowminder and Qatar Computing Research Institute. The hub was a user-friendly one-stop shop for COVID-19, used by the Government, the Presidential Task Force on Covid-19, the Nigeria Centre for Disease Control, and anyone else who wanted to understand Nigeria's dynamic situation.

The NBS brought into the hub additional critical information, including locations of health care facilities, cases by region, and locations of infection epicenters, drawn from diverse sources including Nigeria Centre for Disease Control, Our World in Data, and the MRC Centre for Global Infectious Disease Analysis at Imperial College.

Lola Talabi-Oni, a technical adviser to the Statistician-General at the NBS in Nigeria, says there were significant concerns over Nigeria's ability to handle COVID-19. Early on, the Global Partnership reached out, offering to organize partnerships and products to help track the pandemic in Nigeria. "After consulting with these partners, we decided on a COVID data hub. Housing all the different data points that are coming out across the country was the most relevant and easily accessible way for us to monitor the pandemic," Talabi-Oni says.

The key reasons for needing the hub were challenges in getting access to data, and the bureaucracy and coordination difficulties experienced between government agencies trying to share data.

Talabi-Oni says the office faces challenges similar to those in other developing countries. The National Bureau of Statistics has to rely on administrative data that is collected from other ministries. "Many agencies are maybe not as transparent or they don't have the capacity to be as transparent consistently, and some data producers are not very comfortable with the idea of sharing data," she says. "Sometimes there's a sense that once you share data, then you don't have ownership of the data anymore."

The NBS has worked to build capacity within agencies as well as data culture awareness, which has been especially necessary in the nation's battle to contain COVID-19.

Working across the Government and getting as much data as possible, made available for anyone to see, was necessary to build trust about the seriousness of the pandemic. The NBS wanted to make sure whenever someone looked for information about cases, they would see the same numbers.

"It was really important because, during COVID, you had data coming from the Ministry of Health, you had data from the Nigeria Centre for Disease Control, you had data coming from the Presidential Task Force," she says.

The NBS worked to harmonize the data coming from different sources and agencies. "We thought that it's a really good opportunity to bring everything together so that even though there are multiple data points, people have access to one hub where they can see data coming from these different agencies," Talabi-Oni says.



**The key reasons for needing the hub were challenges in getting access to data, and the bureaucracy and coordination difficulties experienced between government agencies trying to share data.**



The NBS worked with the Nigeria Centre for Disease Control to share and aggregate data for the hub, including maps of landmarks, hospitals, access to water, and access to health care at the local government level.

The NBS was able to “bring together all the different data points available within the Government, and make it accessible and useful not just to policymakers within Government but also useful to users outside,” Talabi-Oni says.

The hub was used when the NBS was called on to provide data for high-level meetings, including for the Presidential Task Force subcommittees on managing the pandemic.

It also encouraged other ministries and agencies to use data in their policymaking and planning. “That has also helped to ensure that policy responses are based on data and driven by data, and not just that, but everyone is singing from the same hymn sheet,” Talabi-Oni says.

The hub was an important resource for public information as well as government decision-making. Across the world, as news of the pandemic spread and the restrictions on movements took effect, the climate was ripe for misinformation. This was also true in Nigeria. Conspiracy theories were prominent on social media, as were unverified cures for the virus.

Jamie Hitchen, an independent researcher who has delved into the impacts of misinformation and disinformation in Nigeria, observes that the source of information is important when it comes to public trust. “If you have wonderful and credible data, but the institution producing it lacks credibility or name recognition, then the data it produces may not be that well received by the public,” he says.

He points out that to increase trust, it is essential to produce credible data collected as transparently as possible and share it. This will help to challenge misconceptions people might hold about the virus. “If they have that information and believe the risks, they are more likely to comply with public health guidelines,” he says. “From a planning perspective, it is also important that the health authorities and other stakeholders have credible data they can use to provide nuanced responses.”

‘Gbenga Sesan, Executive Director for Paradigm Initiative, a pan-African organization that advocates for digital rights and inclusion, notes that the social contract that should exist between citizens and government has been eroded by years of corruption and bad governance that have left people distrusting government promises. Data can play an important role in healing this breach. “Data allows citizens to get verifiable information that can be trusted,” he says. “Instead of high-sounding promises, data can be subjected to time and action tests.”

However, data needs to be provided in a context that citizens can relate to, he says, and it also needs to be current. For instance, 2001 data used to justify a 2021 policy will be viewed as suspicious, he says.

For combating COVID-19, Sesan also believes quality data in Nigeria has a crucial role. “There is already a lot of misinformation about COVID, vaccines, and the need to flatten the curve, so any information that doesn’t help dispel this problem contributes to it,” he says. “Data has the potential of making citizens take a second look, verify independently, or trust more.”



**The hub was an important resource for public information as well as government decision-making.**



For Talabi-Oni, this matter of trust was very important. She says it is crucial to the National Bureau of Statistics that the public can trust in the numbers they were putting out through the dashboards, and it was important that anyone could see them.

She was aware that users of data sets, including members of the general public, would often struggle to compile data points if they had to go to different places to get it. Putting it all on one data hub with a dashboard and making it easy to understand and navigate was crucial, she adds.

“It’s been a good case study for us, showing that we can create data visualization and expand our geospatial information systems (GIS) capacity within the National Bureau of Statistics,” she says. “I wanted it to also be a hub where others, including tertiary institutions, can add their analysis. We wanted to make it open and accessible as much as we can.”

The COVID-19 data hub was critical to building up public trust and awareness around COVID-19 in Nigeria, where there was so much uncertainty.

“[Our COVID-19 data hub] helps people to understand some of the data that Governments also use. It’s a little bit more inclusive,” Talabi-Oni concludes. “It builds trust, it builds understanding, and that’s a world that we also quite want to live in.”

“**The COVID-19 data hub was critical to building up public trust and awareness around COVID-19 in Nigeria, where there was so much uncertainty.**”



A woman washes her hands at a makeshift hand-washing system in Lagos Nigeria. Photo: Oluwafemi Dawodu/Shutterstock



## CASE STUDY

# Ghana mobile call detail records



A seller at a market in Accra, Ghana, uses her cell phone. Photo: Jordi Perdigó/GPSDD

Mobile phone data is hugely valuable in providing location-based trends, but unlocking it safely and transparently takes time. A partnership set up in 2017 proved crucial three years later in Ghana's fight against COVID-19.

During the 2017 [Ghana National Data Roadmap](#) process, which was supported by the Global Partnership, the Ghana Statistical Services (GSS) held conversations that led to a public-private partnership with Vodafone Ghana and the Flowminder foundation, with support from the Hewlett Foundation. The partnership was intended to harness anonymized and aggregated mobile data to advance the production of official statistics. The resulting data source was to be used for insights into Ghanaians' mobility, especially to help in public health emergency planning, disaster preparedness, and disaster response. During the COVID-19 pandemic, authorities have been using this data to inform their responses.

On March 30, 2020, Ghana closed schools, banned public gatherings, and implemented a lockdown in some major cities. By using anonymized and aggregated mobile phone call detail records, data scientists were able to produce rapid mobility estimates to gain high-level insights into how these restrictions affected people's movements, providing a critical and timely look at the lockdown's effectiveness.

On April 3, GSS released a report that detailed these initial insights. By looking at the change in the count of active mobile phone subscribers in various districts on a particular day, officials could monitor the volume of movements within and across districts and understand the effectiveness of the lockdown on restricting

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**Mobile phone data is hugely valuable in providing location-based trends, but unlocking it safely and transparently takes time.**  
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movement, which would help to stop the spread of the virus. On May 15, GSS released a second report showing movement across the country after lockdown measures were lifted on April 20. This report found that mobility levels remained lower than before the implementation of initial restrictions.

The Data for Good Partnerships between GSS, Vodafone, and Flowminder was formed to strengthen humanitarian and development decision-making in Ghana, and COVID-19 has proven just how important this partnership has been in this time of unprecedented crisis.

### **Box 1: Rapid vaccine landscaping and surveying**

As COVID-19 vaccines started becoming available, Governments needed to plan and deliver rapidly, using effective and equitable deployment strategies. Within the context of limited supply and high public expectation, data was key to determining appropriate allocation strategies. However, in general, navigating and capturing information about the health sector is complex because of political dynamics and personal data sensitivities, which were heightened with the potential for competition and the global pressures of vaccine nationalism.

Leveraging the relationships built with countries across the continent, the Global Partnership partnered with the Frontiers Technologies Hub through its COVIDaction hub to gather intelligence about some African states' approaches to vaccine distribution in order to inform additional data partnerships. The insights showed that accessing rural populations, mapping priority groups, ensuring vaccines get to them via cold chain logistics, and procuring adequate doses were among the key delivery challenges. The aim was to support countries with capacity and tools for designing their vaccine allocation and distribution strategies within the rapidly changing environment.

Underpinning this effort were more systemic data-sharing challenges. Given the high level of scrutiny around pandemic response, confidentiality and political opposition concerns hindered Governments from sharing data across agencies and information externally about potential capacity needs. Coaxing data holding agencies into sharing sensitive information takes time and trust building. The best time to work on data sharing is before a crisis hits – it requires patience, due diligence, and capacity-building efforts and often relies on personal relationships.

Mike Klein, the UK Foreign, Commonwealth, and Development Office's COVIDaction data lead, says, "The Global Partnership was able to quickly tap into their network to provide information directly from Governments to help us understand what solutions might be useful. We will continue to work with them as a connector between country-level relationships and technologists to provide rapid support."

To support countries in understanding challenges to vaccine demand and access within the rapidly changing environment, the Global Partnership and UNECA also worked with the mobile surveying platform GeoPoll to conduct a public perception survey across Benin, Cote d'Ivoire, Ghana, Kenya, Mozambique, Nigeria, South Africa, and Zambia to gauge the public's willingness and likelihood to take a COVID-19 vaccine.

The survey found that vaccine perceptions were shifting, with declining likelihood of taking the vaccine and perception disparities among sexes and age groups. This finding suggests the need for urgent vaccine campaigns and communication plans tailored to specific demographics. Citizen trust is key to the vaccination campaign and requires mechanisms to sustain the momentum and regular data collection and analysis for rapid course correction – a challenge all countries are grappling with.



African Union Mission in Somalia during the handover of COVID-19 relief items Wadajir district. Photo: AMISOM Public Information

## Lessons for the next crisis

- **Trust is key.** There must be trust between government and resource partners, among non-state resource partners, and between government and citizens for effective data sharing and consumption. Particularly in times of crisis, when the situation is rapidly evolving and uncertain, it is essential to make data and insights available in a usable, transparent, and accessible way, bringing it together for decision-makers and the public to increase awareness and foster trust.
- **Wayfinders increase efficiency.** Identifying and collaborating with people and agencies at the country level who are trusted and can navigate the system is critical. These custodians help to open doors, lead to people who can make decisions quickly, and ultimately help make the partnership process and acceptance of solutions easier.
- **Preparation pays off.** Facilitating rapid response data partnerships, particularly at scale, is most effectively done through consortia of technical partners with ready-to-go resources. This allows partners who know each other already to mobilize quickly, pool and deploy their resources, and efficiently delegate to the most relevant partner based on the data context and need. Preparation also requires investment and prioritization of data by both domestic and external funders.
- **Build in sustainability.** A crisis requires a rapid response. But in setting up data infrastructure such as data hubs, it is important to consider the sustainability implications, from both a financial and a social perspective. This might mean building a transition plan from a pro bono or trail model for licenses to a more sustainable model that enables consistent access and use, or building in break points to ensure that decisions are accountable to people who may be affected.

# Chapter 2: Partnerships for future data needs

Data partnerships were critical in getting the right data to the right place to help manage the pandemic across Africa. Yet the potential of these partnerships was much longer term — to leave behind stronger systems that could provide data in future crises and inform the routine business of government.

## Communities for knowledge sharing

Community building, to share knowledge and strengthen relationships, was critical from the start. Before the program was even launched, in April 2020, UNECA and the Global Partnership hosted a session for partners to share their experiences and challenges in combating the impacts of the pandemic. The session covered different approaches Governments had adopted to data management in the pandemic and the national frameworks of coordination, sharing of data, the utility of available data platforms, and the role of national statistics offices (NSOs) and other stakeholders. In addition, participants outlined emerging data and information gaps and needs. This work set the stage for building strong relationships throughout the program.

As the work developed, countries came together to learn from each other. The Global Partnership has hosted five joint learning activities, bringing together participants from 18 countries to share their expertise on topics including COVID-19 data hub development, population mobility tracking and contact tracing, economic impact monitoring, and population census approaches and data. Many of these relationships will endure beyond the pandemic, strengthening data systems across the continent.

Within countries, too, there was an emphasis on relationships for the long term. Working groups were established in 11 countries<sup>2</sup> that brought together government and non-government actors, to create the formal and informal linkages that would outlast the pandemic and set the stage for building resilient systems in the years to come. UN country teams played a critical role, convening across the sector and bringing everyone to the table.

### The Global Partnership

5

joint learning activities, bringing together 18 countries

Working groups in

11

countries

<sup>2</sup> Cabo Verde, Ghana, Guinea, Kenya, Madagascar, Namibia, Nigeria, Sierra Leone, Somalia, Somaliland, and Togo.



## CASE STUDY

# Ghana and Namibia's knowledge exchange



A woman has her hands sanitized at a political event in Accra, Ghana as part of coronavirus protocols. Photo: Delali92/Shutterstock

Ghana was one of the first countries across the continent to work with the Global Partnership in developing a dashboard with varied metrics to monitor COVID-19 — going beyond just case numbers. This dashboard compiles census and survey information, including limited access to water and soap for handwashing, smoker households, and those with multiple households in one room — all factors that increase the risk of COVID-19.

Omar Seidu, from the Ghana Statistical Service, says setting this up was a swift process, with partners quick to lend expertise: “We spoke to the Global Partnership, and in a matter of 48 hours, we were already having conversations with Esri, and then in less than five days, we had set up this platform. The first cases of COVID in Ghana were in the middle of March. By the end of March, we had a COVID dashboard. I give credit to the Global Partnership for mobilizing the support for us.”

With its dashboard in place, Ghana, in conjunction with the Global Partnership, worked with other countries to share information — showing what was possible and how to do it.

“The Global Partnership has always been encouraging on the continent,” Seidu says. “Our founding father, Kwame Nkrumah, indicated that Ghana’s independence is meaningless if it is not linked up with the independence of the entire continent, so it means that we value the engagement and sharing of knowledge across the continent.”



**The first cases of COVID in Ghana were in the middle of March. By the end of March, we had a COVID dashboard. I give credit to the Global Partnership for mobilizing the support for us.**



**Omar Seidu,  
Ghana Statistical  
Service**

Namibia was one of the key countries where this cross-country partnership yielded positive results.

Victor Ohuruogu, from the Global Partnership, says Ghana's swift adoption of the data hub, combined with the rapid development of a national impact survey on COVID-19, which looked at impact at the household level and also across enterprises, showed the innovative approaches countries were taking to monitoring the pandemic and its effects.

Ghana invited the Global Partnership to participate in its dissemination workshops; this offered an opportunity to get other African countries involved so they could learn from what Ghana was doing.

"The team in Ghana was very supportive," says Ohuruogu " We set up a meeting between the statistical agencies of Namibia and Ghana, and Ghana transferred a lot of information about how they created their COVID data hub, how they designed, secured funding, and implemented their COVID-19 national impact survey, including what tools they used. And that helped to strengthen the capacity for the team in Namibia." That peer-to-peer exchange helped Namibia to do the same."

Tulimegamenno Amutenya, a data processing manager at the Namibia Statistics Agency (NSA), says the Global Partnership and UNECA's roles in bringing together nations and partners helped to identify areas the country wanted to focus on to help curb the pandemic.

She notes that being connected with counterparts in Ghana showed her the "great potential" in exploring mobility data analysis. "We learned a lot from them through peer-to-peer knowledge exchange sessions," she says. "Now, we continue to engage with colleagues through formal or informal communication channels."

Amutenya would reach out to the Ghana office when they were doing the COVID-19 Household and Job Tracker survey in Namibia, finding guidance and assistance at any hour.

Building these relationships also means laying the groundwork for sharing other ideas and resources in the future. "You can collaborate on projects, you can share ideas and share resources, so that really is important," she says. "Nowadays, we are talking about making statistics offices more automated, having more processes automated, and sharing resources and sharing codes. For example, if you have a good pipeline for trade statistics production, which are more or less the same in every institution, why should Namibia reinvent the wheel?"

However, Amutenya notes the importance of choosing the right partners for data collaboration projects — and emphasizes that stakeholders need to understand the usability of what is being created, as well as a country's context.

"The most important aspect is to consider the relevancy of support to the local community," Amutenya says. "For instance, online platforms are not easily accessible by remote and village areas. Hence there is a need to ensure we adopt the most appropriate methods for everyone.

"We had to step back and assess what is important for us, and what works. When dealing with international companies, issues of data protection, ethics, and privacy need to be considered and factored into data agreements set up."



**Online platforms are not easily accessible by remote and village areas. Hence there is a need to ensure we adopt the most appropriate methods for everyone.**



**Tulimegamenno Amutenya, data processing manager at the Namibia Statistics Agency (NSA)**

Ensuring data companies that want to work within Africa are credible and understand the contexts there has also been a top concern for the Global Partnership and UNECA – especially as they have been working to build trust around data.

Oliver Chinganya from UNECA found COVID-19 brought many more players into the data arena, which brings its own set of risks. “Everyone is claiming to become a statistician because they are interested in the data,” he says. “And the risk with that is that people will be looking for short solutions, for short fixes, which are difficult to validate – that’s the danger – whether that data is really sound enough or whether the results of their data is sound enough to inform decision processes for the long term, that is a problem.

“People want solutions, for instance in digitalization, but these are short-term solutions. So we need to have a holistic approach, but it’s not going to be easy because there are so many players now.”

## Skills for the future

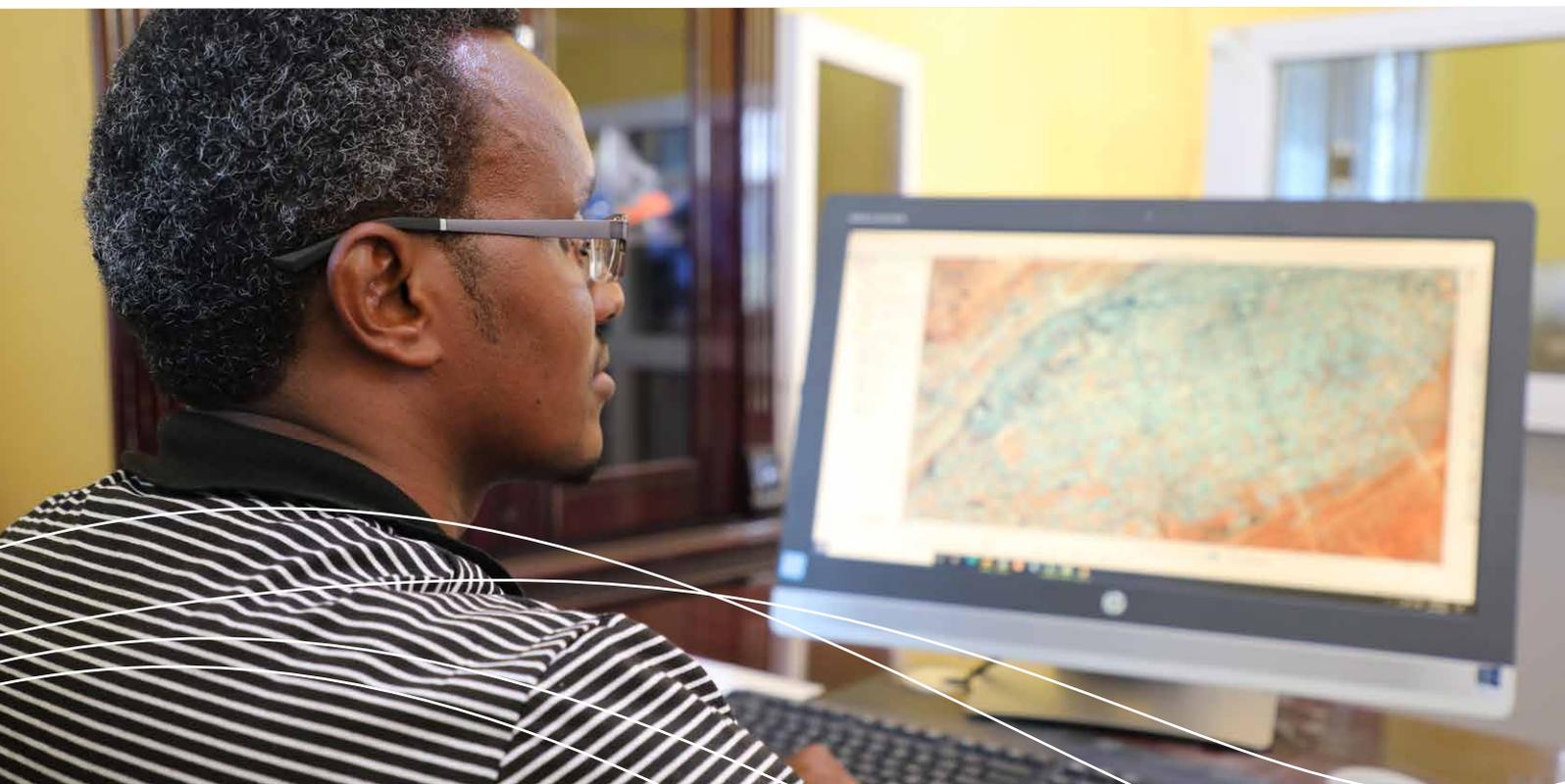
Looking to the future means focusing on skills. Throughout 2020, there was an emphasis on developing skills to sustain the impact of the program and to contribute to progress over time.

The skill-building included data science, environment data, machine learning, earth observations, gender data, inclusive data, and administrative data. Over the course of the year, more than 100 people from 20 countries and 47 different institutions – spanning national statistics offices; ministries of environment, agriculture, health, gender, and planning; and various academic departments – were involved in training activities.

**100**

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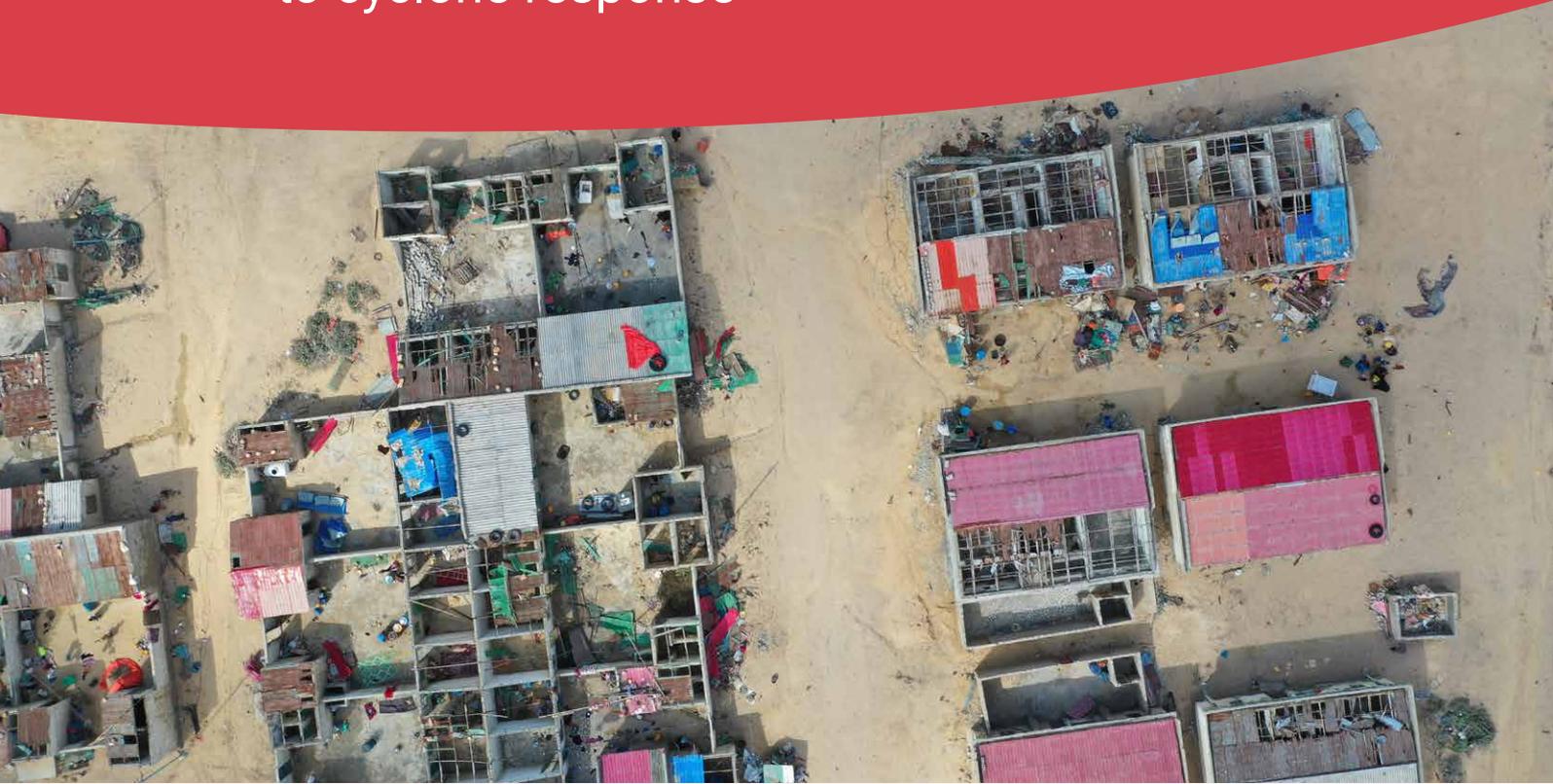
Abdirisak Aden, Head of GIS at the Puntland State Statistics Office examining the areas effected by Cylone Gati. Photo: Faaris Adam/GPSDD





## CASE STUDY

# Somalia — from COVID-19 to cyclone response



An aerial view of Hafun City shows how Cyclone Gati destroyed homes. Photo: Faaris Adami/GPSDD

Somalia has a hot, dry climate, with uneven rainfall and regular droughts, and, in recent years, cyclones. In addition, the majority of the population relies on livestock and agriculture for their livelihoods, meaning the country is highly vulnerable to climate change's current and future impacts.

When COVID-19 hit, the Global Partnership and UNECA facilitated partnerships between Somalia's National Statistics Offices and other partners to support Somalia to access and use geospatial data to estimate the impact the virus was having on the nation.

GRID3 provided remote training over two months, focusing on capacity-building in GIS for the National Bureau of Statistics in Mogadishu, and officers from the Puntland State statistics office in Garowe.

Using their new skills, the officers were able to help authorities make decisions in response to COVID-19.

Abdullahi Abdulkadir Kelly from the Puntland Statistical Office says the training was "eye-opening." "It's like a new mindset. It changed the way our Statistical Department was working, using the available technology. A lot of things come into our mind since we have discovered these trainings. And now, we are trying to optimize and utilize the whole potential of geospatial stakeholders within Puntland. Now we are working with other ministers from other agencies, like education."



**Using their new skills, the officers were able to help authorities make decisions in response to COVID-19.**



All too soon, the new skills were put to the test in a very different context. On November 22, 2020, Tropical Cyclone Gati made landfall on Puntland's coastline. In this fast-moving and dangerous situation, the Puntland Statistics Department used GIS to monitor the cyclone and rapidly assess its impact to inform the emergency response. Staff identified and mapped the cyclone's path, its magnitude, and the number of villages, roads, and other infrastructure that would be in its path for reference in preparedness, emergency, and recovery efforts.

Cyclones have afflicted Somalia for the past ten years and are becoming more frequent due to climate change. They cause a lot of destruction, especially if they come after a drought.

"When we heard that there was a cyclone moving to Puntland, we appointed a team of GIS officials within the Department of Statistics, and we said that we could do something about this because it's within the training that we took," Kelly says.

The training meant the team could know which areas would be most affected by the cyclone and warn people to avoid them – something that has not been possible in the past. They were able to send out messages to people within the boundaries of the cyclone to warn and advise them about what to do, including covering animals and moving to higher ground. They also liaised with other government departments to pass on the messages to people. Using the geospatial information provided, the Puntland response coordination team could determine where impacts were greatest and locate damaged buildings or injured residents so that they could act more quickly.



Fishing boat destroyed during the cyclone and buried by sands in Eyl District 3. Photo: Faaris Adam

For Kelly, the training and the access to these data portals was about gaining a more comprehensive perspective. “You can know the status of your people, but before that, our data was sparse among a lot of departments, but now we are trying to collect the information from each and every department so that we connect these dots to see the bigger picture.”

It also meant they could help save lives – in real time. “You can add something, you can help your people,” he says. “And now you can save some lives with this technology.”

Cyclone Gati killed eight people and affected nearly 180,000 people in total, including fishers, pastoralists, small business owners, and other vulnerable communities such as internally displaced persons who had lost their livelihoods, shelter, and other basic life essentials. The data Kelly and his team collected were passed on to the President of Puntland State’s High-Level Cabinet Coordination Team so they could discuss the implications and determine an appropriate course of action to address the condition of food security and infrastructure in the region.

Davis Adieno, the Director of Programs for the Global Partnership, says it was impressive seeing what partnerships could lead to. “It initially started with the basic skills for COVID tools,” he notes. “But then those skills were deployed for the response efforts for the cyclone.”

Annie Werner, from GRID3, says it was encouraging to see the training and data used in innovative ways. “It does take a certain level of creativity to be able to take what you’ve learned in training and then actually implement it and use it,” she says.

GRID3 works to support geospatial data use for development purposes through the creation of data products, provision of technical support and capacity strengthening and training. In training activities like those with the Puntland staff, it works to empower the participants to take what they have learned and use the skills and knowledge in practice.

“It can definitely still be a challenge sometimes to see that translation from training and using these data products and analysis that we may help provide or that our partners do and then turning it into actual decisions and action. Definitely, we would love to see more of the types of things that the Puntland staff were doing.”

For the NSO’s Abdulai Abdulkadir Kelly, having these different partners to call on for the training was crucial – it was “like having more than one friend.”

Working with the different partners, facilitated by the Global Partnership, meant the NSO could access “different ideologies, different capacities and ideas and thoughts. You can get different ideas from different people instead of having one idea from one person,” Kelly adds.

Going into a situation where the Global Partnership had already consulted with authorities on what was needed also meant GRID3 could be efficient in a time of crisis, Werner says. “They were very useful for that initial engagement since they have a lot of contacts already all over sub-Saharan Africa... They know ahead of time what it is that we can offer often. That’s the difficult part – trying to find what exactly is needed – and they were definitely helpful facilitating those conversations.”

## Cyclone Gati

Category  
3 tropical  
cyclone,

**180,000**  
**people**  
affected



## CASE STUDY

# From COVID-19 to climate action in Francophone West Africa



Roads flooded with water in the forests of Oussouye village in the Casamance region of Senegal. Photo: Xavier Llauger Dalmou/Shutterstock

While the world's attention was focused on COVID-19, environmental challenges like floods, drought, and deforestation in West Africa did not go away. A partnership formed to help respond to COVID-19 also helped countries develop skills to tackle climate crises.

The Global Partnership worked with its partners to facilitate GIS training in Guinea, Togo, and Senegal. It also organized a three-phase capacity-building exercise on using the UNEP-DHI Flood and Drought Portal for environment monitoring.

Government stakeholders from Guinea, Senegal, and Togo attended the training provided by UNEP. The exercise focused on training trainers so regional institutions could provide technical assistance to their country partners.

The Global Partnership also invited GRID3, which needed data on the portal for ongoing work in Zambia and South Sudan. The process has strengthened collaboration between various institutions by tackling a common SDG-related national goal. It also aims to generate a strong partnership among regional training institutes and knowledge transfer between the three countries and develop knowledge products for public awareness-raising.

Mohamed Alass Sylla's team from Guinea's Ministry of Environment is responsible for monitoring forest coverage and drought. "This training was useful for us because it helped us to understand how to use the unit, the UNEP-DHI portal and produce maps, and the level of degradation on the ground," he says.



**While the world's attention was focused on COVID-19, environmental challenges like floods, drought, and deforestation in West Africa did not go away.**



Though the team is still working to validate the data, Sylla says it was helpful to learn how to use the portal, as they can now produce and interpret maps. Once the data is validated, he hopes it will be used in the country's national reforestation campaign, a presidential initiative.

In Guinea, the skills gained and data generated are bolstering mapping processes to inform decisions by the Presidential National Reforestation Initiative, though there is still a need to validate the findings by completing a field visit to compare satellite data with the reality on the ground. Before using this portal, they had to rely on other data-producing sectors to monitor deforestation, including farming activities.

Gora Mbengue, from Senegal's Direction de la Planification et de la Veille Environnementale, believes that the partnership with the Global Partnership is "very strategic and important for the country, particularly with regard to the implementation of the Sustainable Development Goals (SDGs) at the national level. Indeed, the level of data availability on the SDG indicators identified through this partnership has been significantly improved."

During the pandemic, the Global Partnership facilitated Senegal's use of the UNEP-DHI portal, implemented the Data for Now initiative, and conducted data science training in partnership with the African Institute of Mathematical Sciences. The training has helped Senegal to improve data availability. The plan is to use the skills learned at the training to inform national flood policy as part of the 10-year flood management programme.

"We learned how to explore and use data on deforestation, drought, and floods in Senegal, which are not often collected at national level. New indicators were discovered in the platform with concepts and methodology through existing literature," Mbengue says. "This allowed us to better understand the concepts and methods that are used to measure or assess the extent of deforestation, flooding, or drought intensity and to strengthen the analyses on these issues. In addition, we were able to get a new source of data on these different national challenges." He says that it also gave his team a baseline to easily assess the effectiveness of policy projects implemented. In addition, it has helped Senegal by saving the time and resources deployed to collect these data, which are easily accessible on the portal.

Aside from COVID-19, in 2020, Senegal suffered severe flooding. This portal will help inform the Government on regions that are under serious risk of flooding, so they can be better prepared.

In Togo, the portal provides access to data that would usually be harder to collect, again saving time and money.

Commandant Feysal G. Moumouni, the coordinator of Togo Environmental Information System Improvement Project, says it's essential to monitor Togo's environmental changes. "Before this training, we used to get data based on connections and friendships, so you have your friend working in one of the departments or he has the data and is working on a project, sometimes they can supply those. But today, this platform is helping us to get the data on our own, at our own time, and at no cost."



**Today, this platform is helping us to get the data on our own, at our own time, and at no cost.**



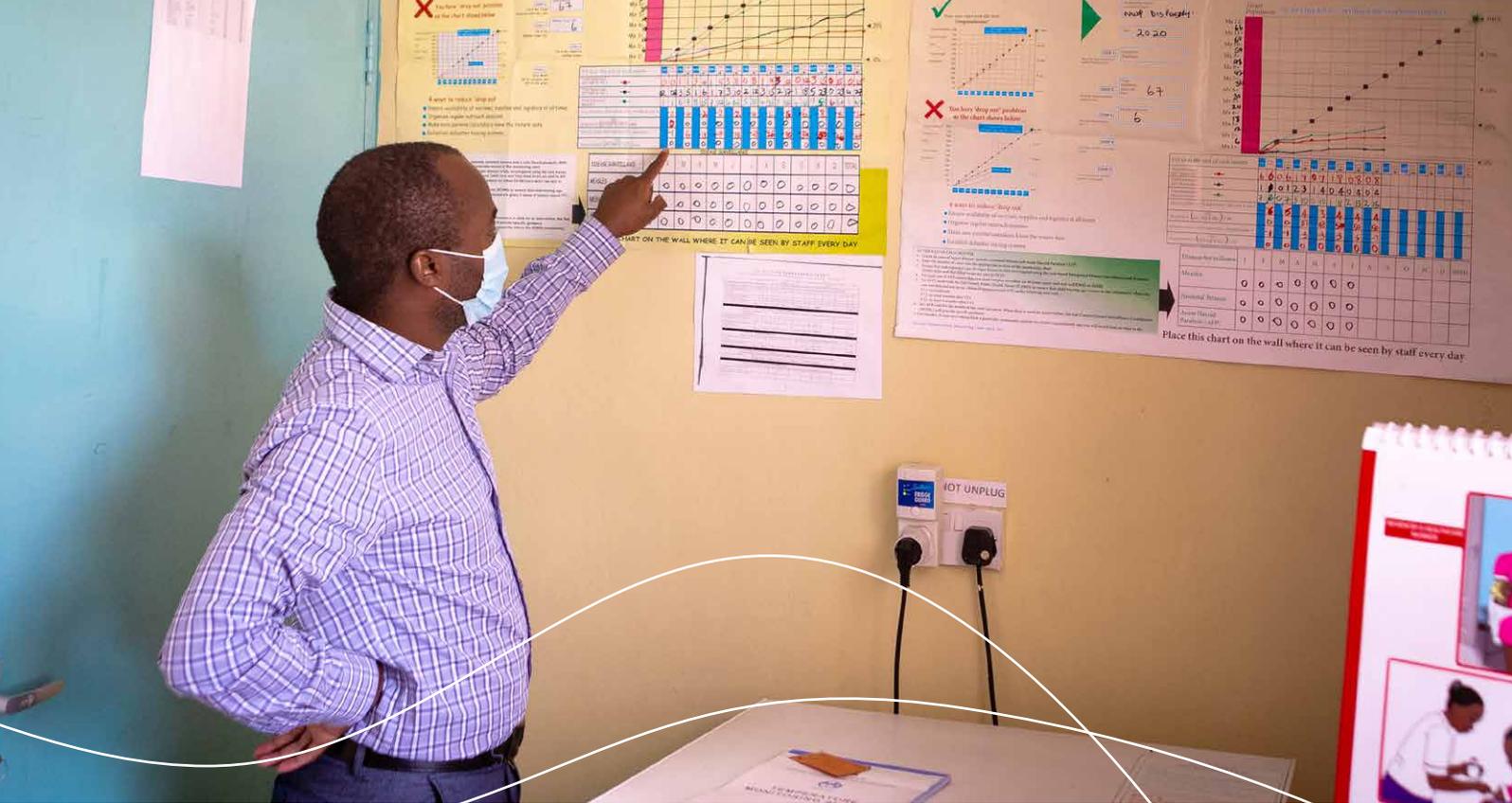
**Commandant Feysal G. Moumouni, the coordinator of Togo Environmental Information System Improvement Project, Agency (NSA)**

He hopes it will be used for policies in Togo and that there will be more access to innovations like it in the future. In Togo, the skills gained from the UNEP-DHI training build on ongoing work to develop a national inventory of environmental indicators.

“What was memorable as an innovation was to see more countries working at the same time on this, being trained at the same time and learning from their countries and knowing their context during their presentation,” he says. “It was also like a knowledge-sharing opportunity, so that was also very nice, seeing many countries coming together.”

## Lessons for the next crisis

- **Community matters.** Creating spaces to share experiences and learnings builds relationships and knowledge that strengthen the system and equip people to confront challenges. To sustain good practice and replicate success, investment in networks is vital.
- **Skills are the critical investment.** A broad-based set of skills and the confidence and creativity to apply them are the best guarantor of a strong data system for the future. Governments and development partners should invest in skills now to ensure they are ready to tackle future crises.
- **Collaboration must enable solutions for local needs.** Solutions become more effectively taken up, applied, and sustainably maintained when they directly speak to local needs, through a collaborative process that puts local players in the front and middle of it.



A medical practitioner explains a vaccination chart at Nairobi West Prison Clinic. Photo: Elphas Ngugi/GPSDD

# Conclusion

The ongoing COVID-19 pandemic is the clearest possible lesson in how and why we need good data to make decisions.

Across the world, eyes continue to fix on graphs and daily cases and death tolls as nations battle COVID-19 outbreaks. Seeing those numbers rise or fall in almost real time showed politicians and the public whether measures like lockdowns were working to control the pandemic and made the authorities more accountable to the general public.

Measuring, monitoring, and combating the pandemic has also revealed how and why data partnerships are crucial for impactful change – whether for access to innovations, knowledge sharing, or support.

COVID-19 has been a catalyst for increasing openness to exploring and adopting new or innovative data technologies and methods. Countries have adopted new data sources to fill critical gaps, such as satellite, mobile, and retail scanner data. They have discovered the possibilities in producing and using timely or near real-time data to help decision-making on how to protect people from hunger, safeguard public health, and support the economy.

Through the Global Partnership and UNECA partnerships, we learned a lot about what was needed to support countries to adopt new technologies and methods. Fully utilizing new data involves bringing together partners who may not have

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**Measuring, monitoring, and combating the pandemic has also revealed how and why data partnerships are crucial for impactful change.**  
 ”

worked together before. Trust is the bedrock, but trust underpinned by practical considerations focused on investment, sustainability, and accountability.

All policymaking relies on good data. COVID-19 demonstrated again how numbers are critical for effective action at global, national, and local levels. More than a year into this pandemic, both Governments and citizens are more aware of the need for quality and timely data to support decision-making and accountability.

Davis Adieno, the Director of Programs for the Global Partnership, says the organization will now build on this awareness to create more incentives for evidence-informed policies and decisions and illustrate to the public the power of data to transform lives.

“We continue to work with Governments and technical partners in their COVID-19 response, but the focus is increasingly shifting on recovery and building resilience through capacity-building and strengthening data ecosystems broadly,” he says. “Out of the COVID work, we now have a brand-new country engagement strategy that is defining critical steps to a partnership-led scale-up and replication of our work in more countries. Over the next two years, we’ll more than double the number of countries we work in.”

Oliver Chinganya, Director of the African Centre for Statistics at UNECA, says all the work around COVID-19, especially with statistics departments across the continent, will have a lasting impact; this means modernizing, changing the infrastructure, and digitizing the statistical processes.

He wants to see academia have a more significant role in working with the national statistics offices to help do some further research to develop methodology on various topics. “I think the link between the academia and the official statisticians is going to be bridged,” he says. “It’s going to get narrower and be closer to each other. And possibly it might influence the curriculum of academia, so they can have a curriculum that has a developmental approach instead of a theoretical approach at the moment.”

COVID-19 has underscored the importance of partnerships, including working with the private sector, so he wants to see more discussion and sharing of resources and building trust. “I think the link and trust with the private sector are going to increase,” he predicts. “Because at the moment, official statisticians are quite skeptical of the private sector. They don’t trust them. They think, ‘If we give them data, they’re going to misuse it.’ So, I think the trustworthiness is going to change; I think they’ll rely on each other.”

Partnerships forged in the heat of the COVID-19 response have proven their worth and are the basis for sustained improvements in the quality and timeliness of data across Africa. Fully realizing the benefits of new data sources will require changes beyond individual ministries or projects. A sustainable data system within which high-quality data is produced, shared, analyzed, and used means investment in infrastructure, a strong legal and regulatory framework to protect people’s rights, and a culture of openness and sharing across government and beyond.

As they have worked together to tackle COVID-19, the Global Partnership and UNECA have kept sustainable futures as their key priorities. This pandemic was not the only health challenge nations faced over the last 18 months, and there will be



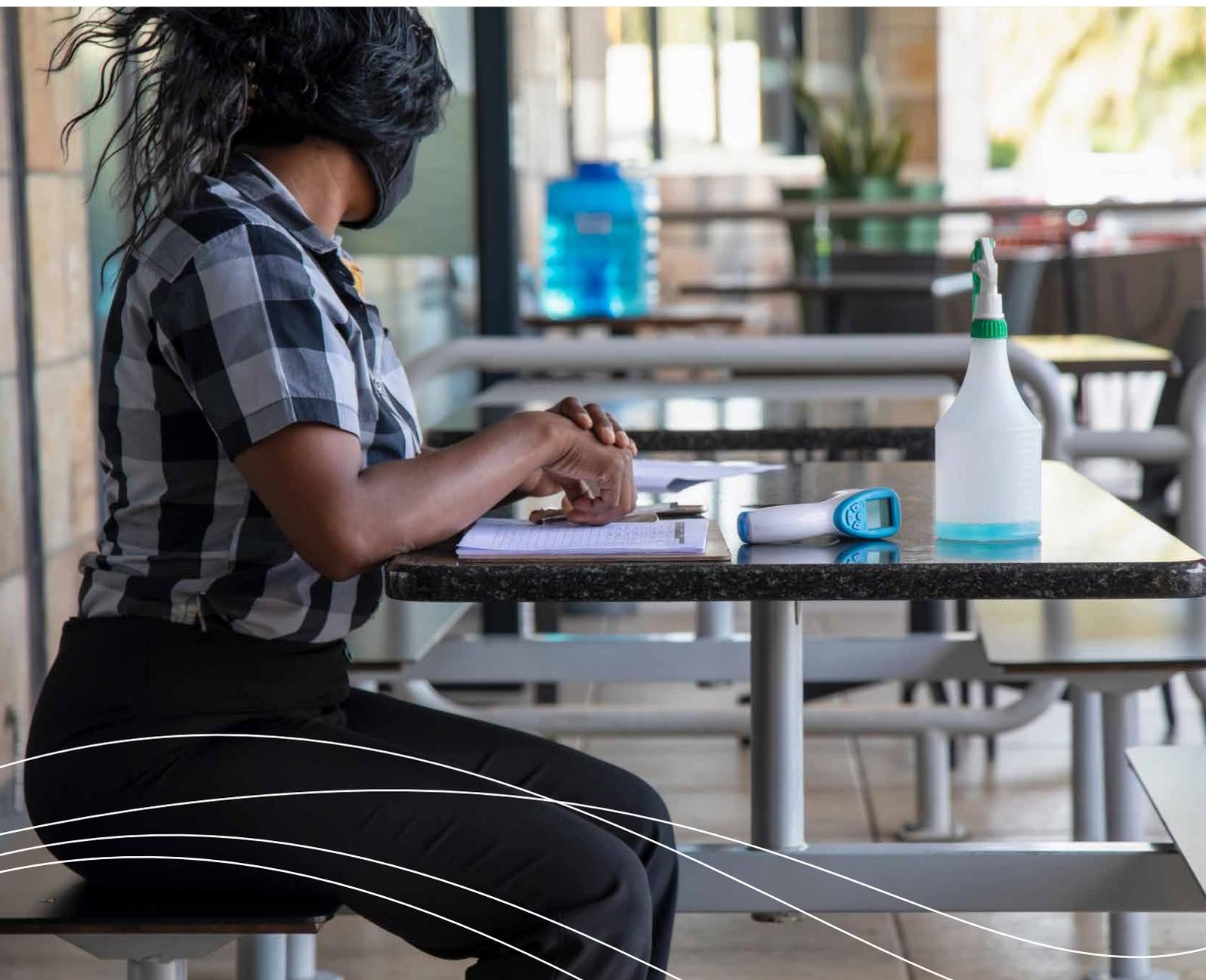
**COVID-19 has underscored the importance of partnerships, including working with the private sector, so he wants to see more discussion and sharing of resources and building trust.**



more crises in the future. Data is crucial, and investments in data systems will pay off again and again.

One thing is clear: Trust cannot be forged overnight. Sustained funding is needed to close the technical and social gap between supply-side technology providers, data holders, and academics and demand-side Governments in the Global South, and to establish global norms and cooperation on data governance to guide a common vision. We still have much to learn from one another.

It may sometimes feel that we come from different worlds, but we share the same planet, as these global emergencies starkly demonstrate. We must not lose this moment to forge common understanding and agreement on ways to use technology to protect our people and planet.

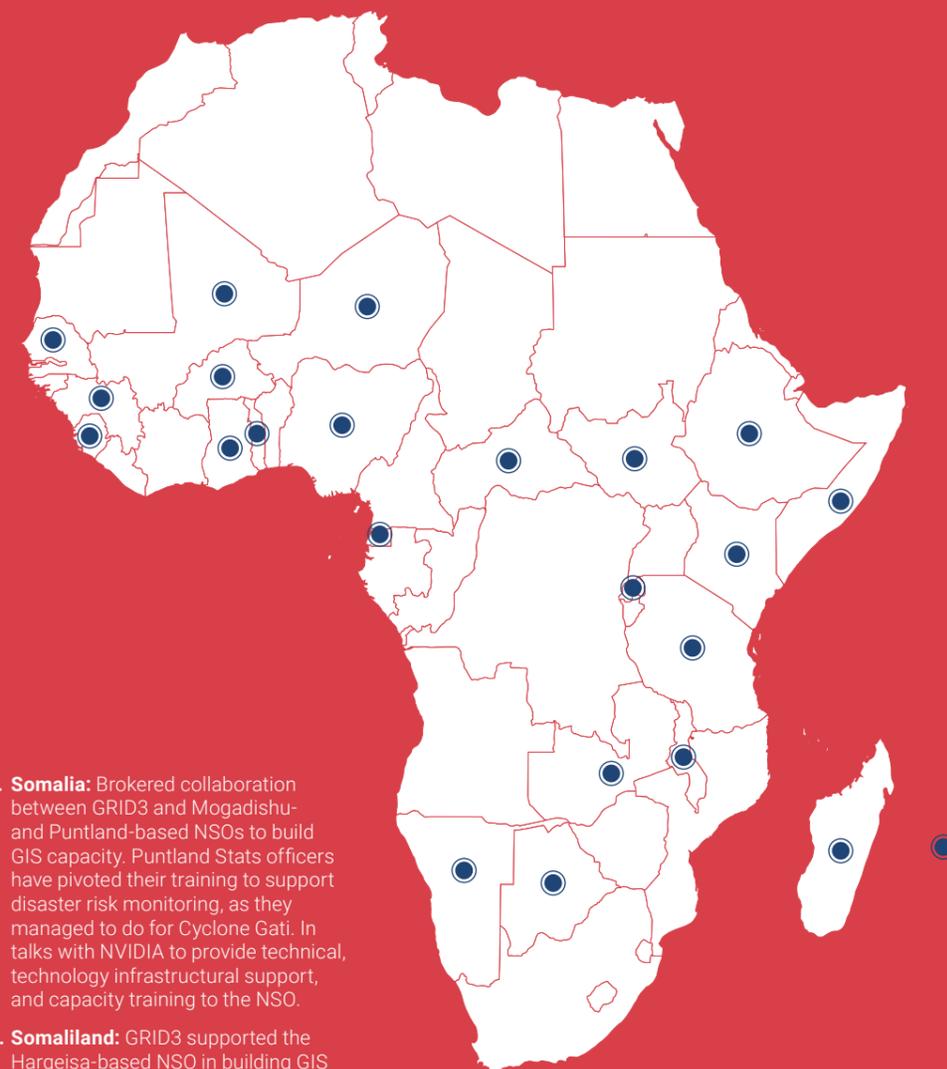


A woman in Gabarone, Botswana sits with hand sanitizer and an infrared thermometer. Photo: Lucian Coman/Shutterstock

# Annex A: Map of COVID-19 Data Partnerships in Africa

The Global Partnership and UNECA supported work in 22 countries focused on COVID-19 data or strengthening data systems for economic and social recovery and resilience post-pandemic. Under this initiative, they:

- 1. Guinea, Madagascar, Malawi, Mali, Mauritius, Nigeria, Senegal, Sierra Leone, Somalia, Somaliland, UNECA/Ethiopia:** Provided a capacity training and fellowship program in data science through the African Institute for Mathematical Sciences for 11 countries.
- 2. Mauritius + Madagascar, Ghana, Botswana, Kenya:** Coordinated training in scanner data for consumer price indices by Statistics Finland with five countries.
- 3. Togo, Senegal, and Guinea-Conakry:** Provided capacity development and technical support, through the United Nations Environment Program Centre on Water and Environment (UNEP-DHI), to NSOs and Departments of Environment of on data access and production for flood and drought monitoring to support adaptation and mitigation efforts, as part of the Global Partnership-supported environmental data workstreams.
- 4. Botswana:** Brokered a partnership between Statistics Botswana and the global information communication technology and regulatory technology solutions company Global Voice Group for capacity-building support in using mobile positioning data for statistics on tourism, population estimation, internal migration, and information communication technology. Facilitated additional partnership between Statistics Botswana and Flowminder to further advance the work.
- 5. Burkina Faso:** Worked with partners through GRID3 to produce datasets featuring high-resolution modelled population estimates and maps to complement the country's 2019 census results.
- 6. Cabo Verde:** Convened a high-level dialogue with stakeholders from the Ministry of Finance and Planning, Instituto Nacional de Estatística Cabo Verde – INECV, the UN Resident Coordinator's office, and the UN country team to identify priority COVID-19 challenges, data gaps, and sectors requiring major data and technology interventions. Country needs were articulated around addressing policy priorities and data gaps on climate change and environment using earth observation capabilities, strengthening the administrative data system, and achieving inclusive data through the Global Partnership Inclusive Data Charter. Through the Administrative Data Collaborative, the Global Partnership worked with the National Statistics Institute to distill their needs and broker collaborations with other statistics agencies and multilaterals to strengthen the country's administrative data records capacity. Also, the Global Partnership is facilitating partnerships with a number of technical partners — including the global supercomputing and AI company NVIDIA, GRID3, and Space4Climate — to respond to capacity and data challenges with respect to climate action and environment sustainability, with an ambitious program being developed.
- 7. Central African Republic (CAR):** Brokered a partnership with GRID3 to provide capacity development in GIS for mapping, which is crucial for CAR's coming census. Also facilitated a needs identification process within the Dataset Records for Central African Institute of Statistics, Economic and Social Studies and brokered a partnership that is enabling NVIDIA to provide technical, technology infrastructural support, and training to build the statistics office's capacity.
- 8. Ghana:** Brokered a partnership between Ghana and Esri to provide access to the latter's platform, tools, data, free ArcGIS license, technical support, and capacity to develop a COVID-19 monitoring dashboard and information hub. Location-based data services company Fraym provided geospatial data and technical support. Also facilitated a needs identification process with Ghana Statistical Services and brokered a partnership that is enabling NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO. Facilitated a peer learning event between Mauritius and Ghana on how best to extract vulnerability data from their household survey.
- 9. Guinea:** Facilitated enhancing the country's existing Esri dashboard by brokering a partnership with GRID3, enabling the collection of additional location-based population data. Connected focal points at the National Health Security Agency's COVID-19 committee with Esri to create a COVID-19 dashboard. Guinea also participated in Senegal's urban data workshops to understand how the Global Partnership is supporting Senegal. Also brokered a partnership that is enabling NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 10. Kenya:** Facilitated a partnership between the Government of Kenya and Esri to develop a food staples app to collect food and market data required for decision-making in the country's Food Security War Room. Linked the Ministry of Gender to a group of technical partners, including Esri and Women in GIS, to design a gender-based violence data dashboard. Brokered a partnership between Omdena, a collaborative platform for building AI solutions to real-world problems, and the Kenyan Red Cross Society to identify and forecast the impact of desert locusts on food security, bringing together data scientists to support this task by developing AI models. Also brokered a partnership that is enabling NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 11. Madagascar:** Supported identifying capacity gaps in the National Institute of Statistics and brokered a partnership with GRID3 to provide capacity focused on ArcGIS, an Esri subscription toward building the COVID-19 dashboard.
- 12. Mali:** Facilitated a partnership between GRID3 and Mali to build the NSO's capacity in the use of gridded population data for the upcoming national population census (2022–23) and to further support the NSO to monitor food security data using GIS technology.
- 13. Mauritius:** Facilitated identifying capacity needs in GIS and geospatial data production and brokered a partnership with GRID3 to address these gaps through capacity-building.
- 14. Namibia:** Responded to a request from the National Statistics Office, which had joined a COVID-19 peer exchange, to assist in brokering partnerships with the GRID3 consortium (focusing on Flowminder and Esri) to develop a COVID-19 data hub. Brokered a relationship between the Sustainable Development Solutions Network and the High-Level Scientific Panel on COVID-19 from the universities to strengthen its approach on developing a contact tracing app for COVID-19 tracking; and also with Facebook for access to its publicly available population estimate and mobility data as well as have conversation on fake news modeling. The Namibian Statistics Agency also worked with Surgo Foundation and Qatar Computing Research Institute to incorporate their data and models into the country's COVID-19 data hub. Also brokered a relationship between the NSA and the UN Resident Coordinator's office, which helped to further elevate the role of the NSO; facilitated the admission of the NSO into relevant subcommittees of the Presidential Task Force on COVID-19; provided major funding to the NSA for the national household and jobs survey on COVID-19 impact, in addition to funding from the German Agency for International Cooperation. Also facilitated a peer exchange between Namibia and Ghana to learn from Ghana's COVID-19 socioeconomic impact survey in partnership with UNICEF and the World Bank. Later supported a similar survey in Namibia.
- 15. Nigeria:** Facilitated a collaboration between the Nigeria Bureau of Statistics (NBS) and GRID3 to support the development of a robust COVID-19 data hub using data pipelines from the National Centre for Disease Control. Additional partnerships were brokered to feed into the data hub between Flowminder and the Nigeria Presidential Task Force on COVID-19 and between NBS and Qatar Computing Research Institute to incorporate mobility insights; and between Surgo Ventures and NBS to embed Surgo's Africa COVID-19 Community Vulnerability Index and support small-area vulnerability modeling. Collaborations were also facilitated between HACE Nigeria and NBS to support access and use of education data and between representatives of the Researchers Group at the University of Ibadan, Sustainable Development Solutions Network Nigeria, and Facebook to access and use additional datasets for research.
- 16. Rwanda:** Connected with the African Centre of Excellence in Data Science at the University of Rwanda through a Global Partnership-facilitated webinar via Facebook, and the African Centre then requested data access. It signed a memorandum of understanding with Facebook to formalize the data partnership through which it could access additional data and technical support for its master's and Ph.D. programs in data science. Also brokered a partnership with NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 17. Senegal:** Facilitated consultations between Omdena and Initiative Prospective Agricole et Rurale, who agreed to host an AI data challenge to address ongoing agriculture-focused work in the country. Omdena worked with technical teams in Senegal to provide support in developing data-driven tools to predict crop yields all around the country to assure food security. Esri had already built a dashboard for Senegal while the NSO's COVID-19 focal point was linked with GRID3, and GRID3 carried out a needs assessment. Senegal then received GIS training with GRID3. Also brokered a partnership that is enabling NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 18. Sierra Leone:** Convened various government institutions to develop work plans for a COVID-19 data hub in partnership with GRID3. As part of the partnership, Esri granted free licenses to 15 institutions. Partnership was also brokered with NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 19. Somalia:** Brokered collaboration between GRID3 and Mogadishu- and Puntland-based NSOs to build GIS capacity. Puntland Stats officers have pivoted their training to support disaster risk monitoring, as they managed to do for Cyclone Gati. In talks with NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 20. Somaliland:** GRID3 supported the Hargeisa-based NSO in building GIS capacity with GIS training using GRID3 datasets and case-specific material. In talks with NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 21. South Sudan:** Enhanced conversation between GRID3 and UNFPA-South Sudan, which supports coordination between government departments in the country to generate hybrid census data for South Sudan.
- 22. Tanzania:** Introduced Twaweza and WorldPop as potential collaborators in data collection and aggregation for COVID-19 response in East Africa.
- 23. Togo:** Linked the statistics office's COVID-19 focal point with GRID3; the GRID3 training helped to improve the office's existing data dashboard. In talks with NVIDIA to provide technical, technology infrastructural support, and capacity training to the NSO.
- 24. Zambia:** Facilitated a consultation between the Zambia Statistics Agency and the GRID3 team, who supported them to consolidate various data sources and products into a data hub and is also assisting the agency with population, boundary, and settlements estimates in preparation for census.



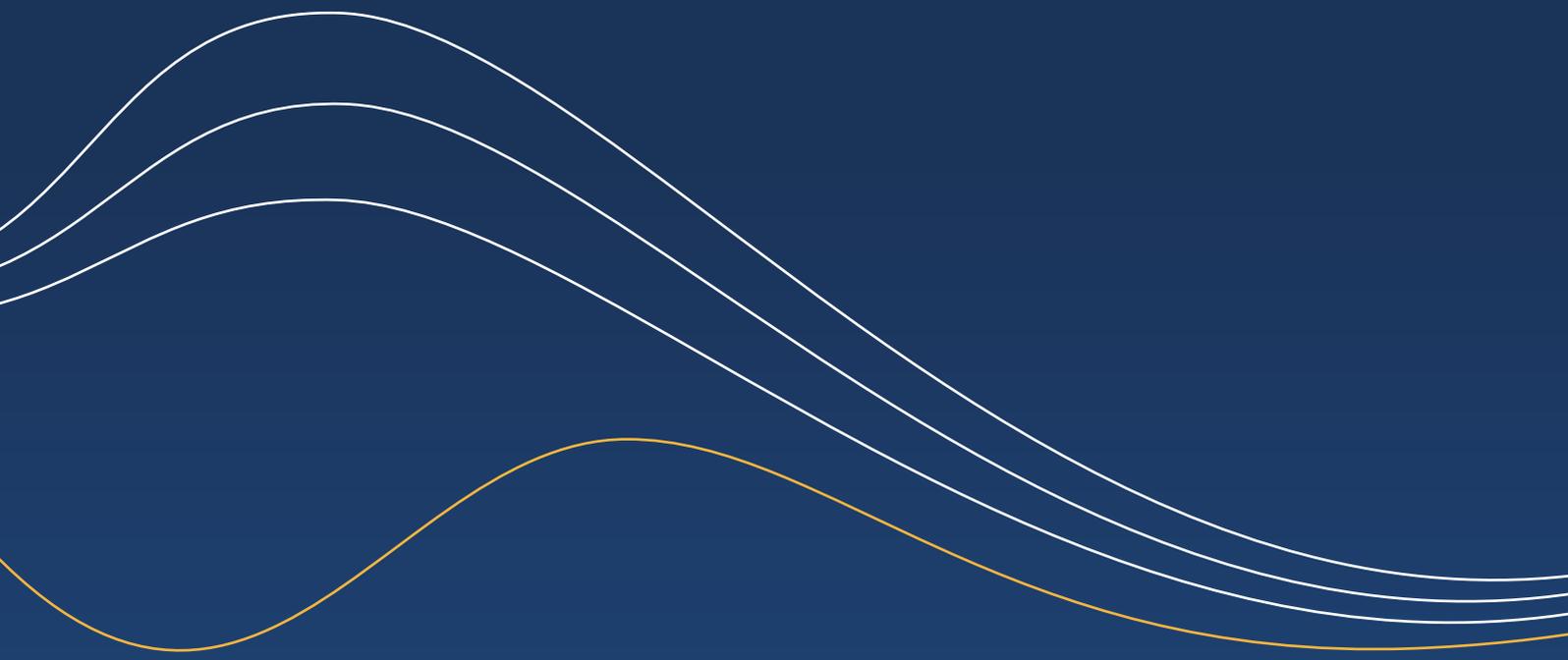
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## Annex B: Participating partners in Data for a Resilient Africa

	Organization	Sector
1	Africa Institute of Mathematical Sciences (AIMS)	Academia
2	African Centre of Excellence in Data Science, University of Rwanda	Academia
3	Agricultural and Rural Prospective Initiative, Initiative Prospective Agricole et Rurale (IPAR) Senegal	Civil Society
4	Burkina Faso National Institute of Statistics and Demography, L'Institut national de la statistique et de la démographie (INSD)	Government
5	Burkina Faso UN Resident Coordinator (RCO)	Multilateral
6	Cabo Verde National Institute of Statistics, Instituto Nacional de Estatística (INE)	Government
7	Cabo Verde UN Resident Coordinator (RCO)	Multilateral
8	Central African Institute for Statistics and Economic and Social Studies, Direction Générale de la Statistiques, des Etudes Economiques et Sociales (DGSEE)	Government
9	Community Leadership Institute West Africa	Civil Society
10	Esri	Private Sector
11	Facebook	Private Sector
12	Flowminder	Private Sector
13	FutureTech	Private Sector
14	Geo-Referenced Infrastructure and Demographic Data for Development (GRID3 Consortium)	Private Sector
15	Geography Department - Université Général Lansana Conté (UGLC-S), Guinea	Government
16	Ghana Health Service	Government
17	Ghana Ministry of Health (MoH)	Government
18	Ghana Statistical Service (GSS)	Government
19	Global Voice Group	Private Sector
20	GPSDD Administrative Data Collaborative	Multilateral
21	Guinea Ministry of the Environment, Water and Forests, Ministère de l'Environnement, des Eaux et Forêts (MEEF)	Government
22	Guinea National Geographic Institute, Institut Géographique National (IGN)	Government
23	Guinea National Health Security Agency, Agence Nationale de Sécurité Sanitaire (ANSS)	Government
24	Guinea National Institute of Statistics, Institut national de la statistique (INS)	Government
25	Guinea National Statistics Directorate, Direction Nationale de la Statistique (DNS)	Government
26	HACE	Civil Society
27	International Labour Organization (ILO)	Multilateral
28	Kenya Ministry of Agriculture, Livestock and Fisheries (MoALF)	Government

29	Kenya National Bureau of Statistics (KNBS)	Government
30	Kenya State Department of Gender, Ministry of Public Service, Youth and Gender Affairs	Government
31	Kenyan Red Cross Society	Multilateral
32	Madagascar National Institute of Statistics, l'Institut National de la Statistique (INSTAT)	Government
33	Malawi Ministry Of Gender, Social Welfare And Community Development	Government
34	Mali National Institute of Statistics, Institut National De La Statistique (INSTAT) Bamako	Government
35	MTN Nigeria	Private Sector
36	Namibia High-Level Scientific Research Group (HLSRG)	Academia
37	Namibia Statistics Agency (NSA)	Government
38	Namibia UN Resident Coordinator's Office	Multilateral
39	Nigeria National Bureau of Statistics (NBS)	Government
40	NVIDIA Corporation	Private Sector
41	Office for National Statistics (ONS)	Government
42	Omdena	Private Sector
43	Puntland Ministry of Planning, Economic Development and International Cooperation – Department of Statistics	Government
44	Qatar Computing Research Institute	Academia
45	Researchers Group at the University of Ibadan, Nigeria	Academia
46	Senegal Center of Ecological Research, Centre de Suivi Ecologique (CSE)	Academia
47	Senegal Department of Planning and Environmental Watch, Direction de la Planification et de la Veille Environnementale (DPVE)	Government
48	Senegal National Agency of Statistics and Demography, Agence Nationale de Statistique et de la Démographie (ANSD)	Government
49	Senegal Water Resources Management and Planning Department, Direction de la Gestion et de la Planification des Ressources en Eau (DGPRE)	Government
50	Sierra Leone Directorate of Science, Technology and Innovation (DSTI)	Government
51	Sierra Leone Ministry of Communication and Information (MoCI)	Government
52	Sierra Leone Ministry of Health and Sanitation (MoHS)	Government
53	Sierra Leone News Agency (SLENA)	Media
54	Somalia Ministry Of Planning, Economic Development and International Cooperation (MoPEDIC)	Government
55	Somalia National Bureau of Statistics	Government
56	Somaliland Central Statistics Department (CSD)	Government
57	Somaliland Directorate of National Statistics (DNS) of the Ministry of Planning, Investment and Economic Development (MoPIED)	Government
58	South Sudan Ministry of Health (MoH)	Government
59	South Sudan National Bureau of Statistics (NBS)	Government
60	Space4Climate (S4C)	Civil Society
61	Statistics Botswana	Government

62	Statistics Finland	Government
63	Statistics Mauritius	Government
64	Statistics Norway	Government
65	Statistics Sierra Leone (Stats SL)	Government
66	Surgo Ventures	Civil Society
67	Sustainable Development Solutions Network (SDSN)	Academia
68	Togo African Geospatial-Intelligence Agency (AGIA)	Government
69	Togo Ministry of the Environment, Sustainable Development and Nature Protection (MEDDPN)	Government
70	Togo National Agency for Environmental Management, Agence Nationale de Gestion de l'Environnement (ANGE)	Government
71	Togo National Institute of Statistics and Economic and Demographic Studies (INSEED)	Government
72	Twaweza	Civil Society
73	UNEP-DHI Centre on Water and Environment	Multilateral
74	United Nations Economic Commission for Africa (UNECA)	Multilateral
75	WorldPop	Academia
76	Zambia Statistics Agency (ZamStats)	Government



**Global Partnership**  
for Sustainable Development Data



United Nations  
Economic Commission for Africa