



POPULATION-ADJUSTED COVID-19 DATA: AN ANALYSIS OF AFRICA

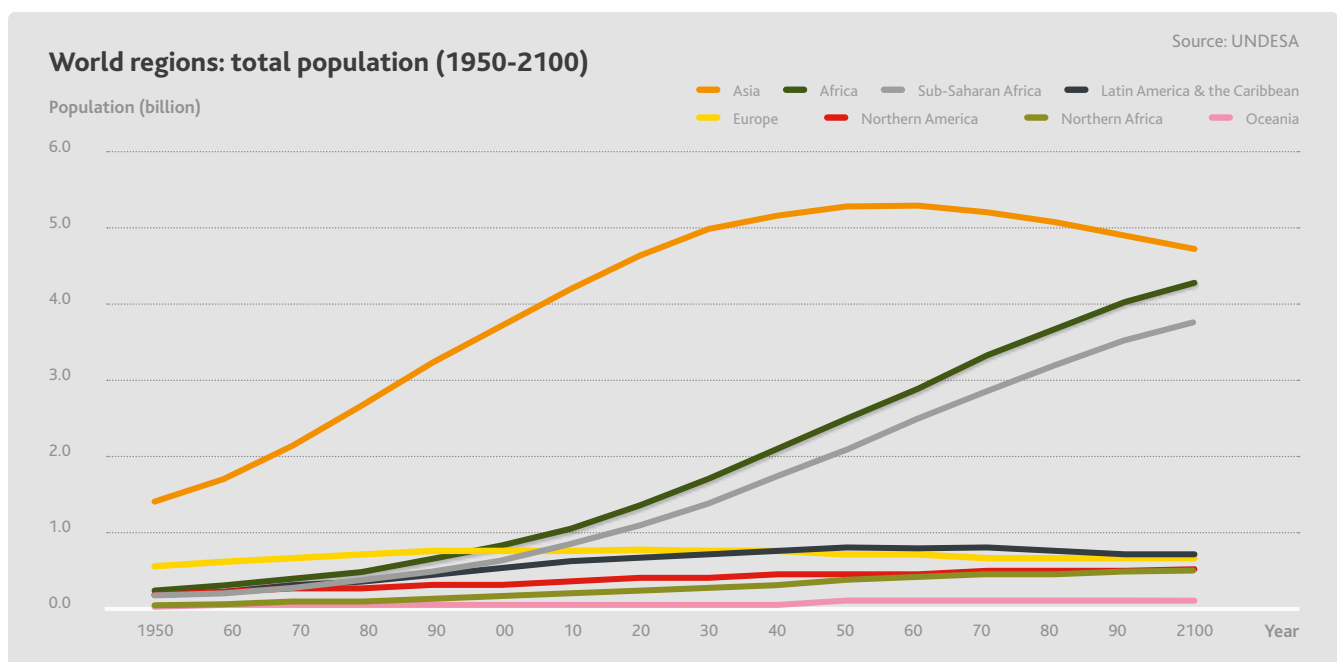
By Camilla Rocca, Head of Research

Population-adjusted analysis of COVID-19 active cases, while not capturing the speed at which the pandemic spreads, is a useful indicator of the relative strain put on countries from a public service delivery perspective. For instance, while the worst hit countries in terms of raw numbers of confirmed cases are South Africa, Egypt, Nigeria, Ghana and Algeria, the countries bearing the biggest burden in terms of both adjusted total confirmed and current active cases are relatively small, island states, and South Africa. This finding offers insights on the shared challenge these countries are facing, but also on the need for tailoring continental support to the specific features and capacity needs of these diverse contexts. It also highlights the importance of strengthening statistical

capacity on the continent as a fundamental tool for ensuring accurate policies and effective public service delivery that leaves no one behind – key pillars of governance.

Africa's second largest and fastest growing demography

From 1950 to date, Africa's population has grown steadily, gradually outnumbering Europe to reach 1.3 billion in 2020. It now represents the world's second largest population compared to other world regions, after Asia. Current predictions estimate that Africa's population will continue to expand, reaching 4.3 billion in 2100.



Although Africa's rate of growth is set to decline gradually, the continent's population is already the fastest growing in the world and will remain so until 2100. In 2020, Europe is the only continent with a negative population growth rate, but between 2060 and 2070 it will be joined by Asia and Latin America.

Africa's population growth is driven mainly by sub-Saharan Africa, while in Northern Africa* the population has increased only marginally since 1950. From 1950 to 2020, the population of sub-Saharan Africa increased from approximately 0.2 billion to 1.1 billion people, while in Northern Africa, the population increased from 0.05 billion to 0.2 billion. Between now and 2100, the population of sub-Saharan Africa is expected to increase to 3.8 billion, while in Northern Africa it should increase to 0.5 billion.

A diversified continental picture

Africa's population of 1.3 billion is spread throughout the continent, with striking differences in countries' population sizes. Nigeria has the largest population in Africa, with over 206 million, and Seychelles has the smallest, with about 98,000. Seven countries in Africa have a population larger than 50 million. These seven countries alone account for over 51.0% of the total population of the 54 African countries. Seventeen countries on the continent have a population smaller than 5 million.

African countries with populations larger than 50 million

Nigeria	206,139,587
Ethiopia	114,963,583
Egypt	102,334,403
Democratic Republic of Congo	89,561,404
Tanzania	59,734,213
South Africa	59,308,690
Kenya	53,771,300

5 African countries with the largest total populations

Cities with populations larger than countries

In 2019 nearly 43.0% of Africa's population live in urban areas, including in mega cities with populations often bigger than those of some countries. Cairo is home to 20.5 million inhabitants in 2019 and Lagos to 13.9 million. In 2020, 35 African countries have a population smaller than that of Cairo, and 28 have one smaller than that of Lagos.

African countries with populations smaller than 5 million

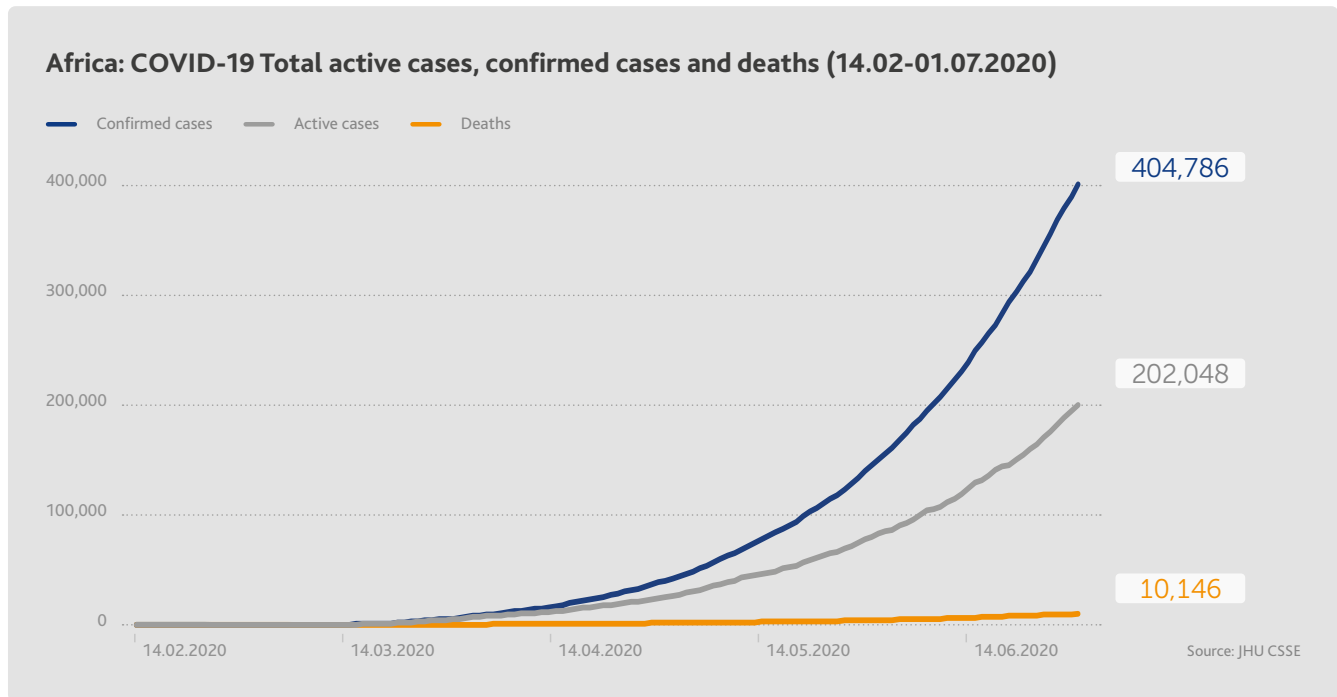
Central African Republic	4,829,764
Mauritania	4,649,660
Eritrea	3,546,427
Namibia	2,540,916
Gambia	2,416,664
Botswana	2,351,625
Gabon	2,225,728
Lesotho	2,142,252
Guinea-Bissau	1,967,998
Equatorial Guinea	1,402,985
Mauritius	1,271,767
Eswatini	1,160,164
Djibouti	988,002
Comoros	869,595
Cabo Verde	555,988
São Tomé & Príncipe	219,161
Seychelles	98,340

5 African countries with the smallest total populations

* According to UNDESA, Northern Africa is composed of: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia, Western Sahara.

COVID-19 total confirmed cases: a steep upward curve with South Africa the worst hit

The total number of confirmed COVID-19 cases in Africa (the total of all active, recovered and death cases), remains relatively low compared to other world regions (404,786 as of 1 July 2020), although there has been a steep increase since the first case was registered in February 2020.



South Africa is the hardest hit country in terms of the raw number of total confirmed cases, followed by Egypt. Both countries also register the highest number of deaths across the continent. Nigeria has the third highest number of confirmed cases, whereas Algeria has the third highest number of deaths.

5 African countries with the highest raw number of confirmed cases, including deaths

Country	Confirmed cases	Deaths
South Africa	151,209	2,657
Egypt	68,311	2,953
Nigeria	25,694	590
Ghana	17,741	112
Algeria	13,907	912

5 African countries with the lowest raw number of confirmed cases, including deaths

Country	Confirmed cases	Deaths
Eritrea	203	0
Burundi	170	1
Seychelles	81	0
Gambia	49	2
Lesotho	27	0

Using raw numbers of cases is standard practice in COVID-19 trackers and analyses as they are the most accurate measure to provide an overview of the status of the pandemic as it progresses.

Population-adjusted COVID-19 data: small island states bear the heaviest burden

Raw numbers of COVID-19 cases, while useful in tracking the pandemic, might not provide enough information in terms of how countries are affected by COVID-19 in real terms, especially from a public service delivery perspective, a key pillar of governance. The same number of cases in countries with differing population sizes would result in a different level of strain being put on health services and resources and would demand different levels of engagement in terms of policy response.

When analysing total confirmed and current COVID-19 active cases (the total number of confirmed cases minus recovered and deaths) against country populations the picture changes, and patterns emerge. Globally, highest per capita cases are often found in states with smaller populations where testing may lead to more detected cases.

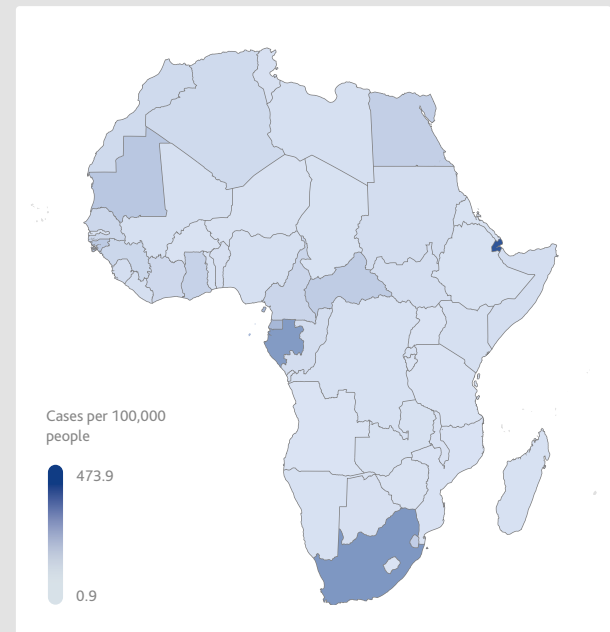
This is reflected in the population-adjusted COVID-19 confirmed cases. Djibouti and São Tomé & Príncipe top the list of the 5 countries with the highest number of total confirmed cases of COVID-19 per 100,000 population, with South Africa being third, but with almost half the rate of Djibouti. Besides South Africa, all countries are all relatively small in terms of size and population.

This also resonates with the population-adjusted analysis of COVID-19 active cases in Africa. Uganda is the only country in both the list of 5 countries with the lowest number of confirmed and active cases per 100,000. This could be attributed to the early and strict containment measures taken by the government.

The country with the biggest burden in terms of having to respond to current active cases is São Tomé & Príncipe, followed by Gabon. South Africa is third, with a similar rate to Gabon. With the addition of Cabo Verde and Equatorial Guinea, four of the five countries with the highest incidence of active cases per 100,000 population are among the smallest and least populated countries in Africa.

Besides this, two of these, São Tomé & Príncipe and Cabo Verde belong to the category of Small Island Developing States (SIDS), meaning that they are already facing specific challenges related to capacity, resources and vulnerability to external dependence.

Africa: Confirmed cases of COVID-19 per 100,000 people (01.07.2020)



Source: MIF based on JHU CSSE and UNDESA

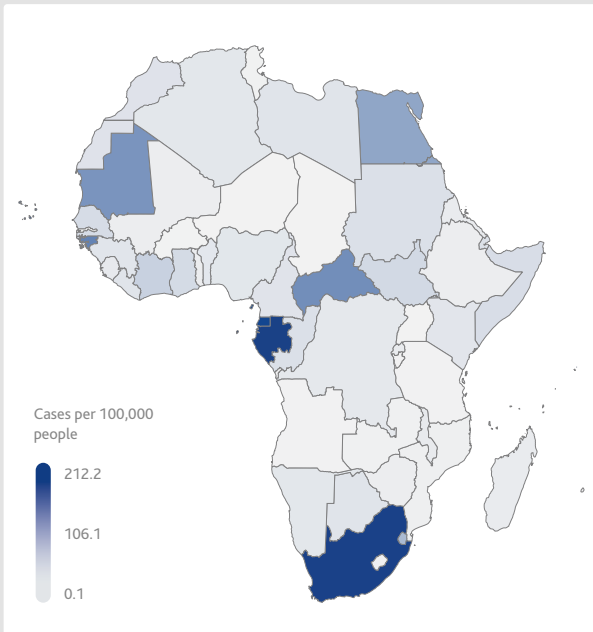
5 African countries with the highest number of total confirmed cases of COVID-19 per 100,000 people

Djibouti	473.9
São Tomé & Príncipe	325.8
South Africa	255.0
Gabon	242.3
Cabo Verde	220.7

5 African countries with the lowest number of total confirmed cases of COVID-19 per 100,000 people

Uganda	1.9
Burundi	1.4
Lesotho	1.3
Angola	0.9
Tanzania	0.9

Africa: Active cases of COVID-19 per 100,000 people (01.07.2020)



Source: MIF based on JHU CSSE and UNDESA

5 African countries with the highest number of active cases of COVID-19 per 100,000 people

São Tomé & Príncipe	212.2
Gabon	131.7
South Africa	126.5
Cabo Verde	104.9
Equatorial Guinea	103.6

5 African countries with the lowest number of active cases of COVID-19 per 100,000 people

Mauritius	0.4
Burkina Faso	0.3
Niger	0.3
Uganda	0.2
Chad	0.1

For example, South Africa has almost more than 17 times the capacity in terms of medical doctors per 10,000 people than São Tomé & Príncipe.

Medical doctors per 10,000 people (2017)



São Tomé & Príncipe 0.53

South Africa 9.05

Source: WHO

A general lack of data and weak statistical capacity

The capacity of African countries to address healthcare challenges remains hindered by a lack of data coverage, stemming from weak statistical capacity. Quality statistics are essential for all stages of evidence-based decision-making and policy formulation, particularly in healthcare.

Patchy civil registration and vital statistics (CRVS) systems are the chief obstacle to efficient health policies. Civil registration constitutes the only robust means by which countries can maintain continuous and complete records of vital events such as births and deaths. A civil registration system is a critical element for establishing the legal identity of individuals, providing them with access to public services and securing basic human rights and is therefore essential for accessing healthcare. When this capacity is weak, countries 'drive blind' as they are designing and monitoring policies based on the wrong number and composition of constituencies they are supposed to serve.

The Ibrahim Index of African Governance (IIAG) indicator *Civil Registration* measures the existence of a functioning birth and death registration system and the ability of citizens to obtain birth and death certificates in a reasonable period and at no charge. The 2017 African average score for the IIAG indicator *Civil Registration* is 60.4, having only increased by +0.7 since 2015, the first year with data available from source. In 2017, only Algeria, Cabo Verde and Namibia score 100.0 in this indicator, while Angola (12.5), Cameroon (12.5) Somalia (12.5) and Equatorial Guinea (0.0) all score under 25.0.

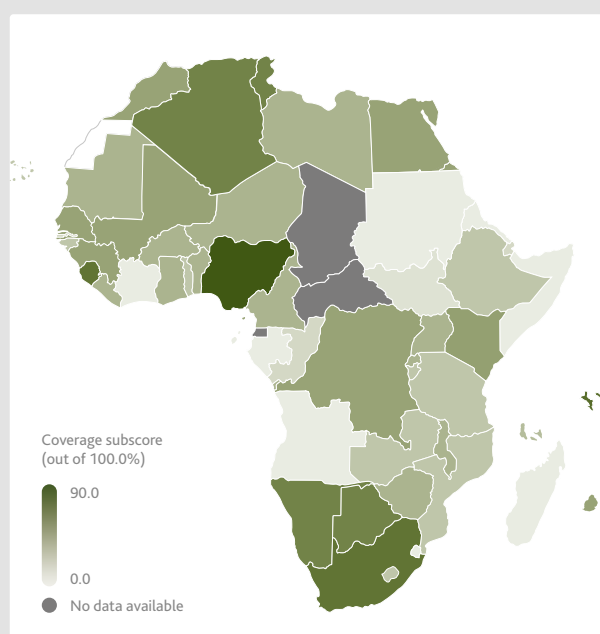
The Coverage of Birth and Death Registration dataset from UNStats paints a similarly bleak picture. Of the 42 African countries with their latest observation in the last ten years

of available data (2009-2018), only eight have a birth registration system with a coverage rate higher than 90.0%. These are: Cabo Verde, Congo, Egypt, Gabon, Mauritius, São Tomé & Príncipe, Seychelles and South Africa. Of the 16 African countries with data on death registration coverage, only three cover 90.0% or more of the population (Egypt, Mauritius and Seychelles).

The Open Data Inventory (ODIN) dataset also includes a *Population & vital statistics* data category, with the African average coverage subscore down by -9.9 percentage points since 2015, the fourth largest deterioration across all data categories during the four years with available data (2015-2018). In 2018, African countries, on average, meet only 37.5% of ODIN's criteria for data coverage in the case of *Population & vital statistics*. Only four African countries in 2018 met 80.0% or more of ODIN's data coverage criteria for the *Population & vital statistics* data category: Nigeria (90.0%), Seychelles (87.5%), South Africa (80.0%) and Sierra Leone (80.0%). But eight African countries met none of the criteria: Angola, Côte d'Ivoire, Gabon, Madagascar, São Tomé & Príncipe, Somalia, Sudan and Eswatini.

The COVID-19 crisis is a challenge that Africa will continue to face for some time. Besides the pandemic containment efforts, which require standard measures to be adopted globally, the continental support to country responses must be tailored to the unique features and challenges of a very diverse set of countries. The importance of population size in relation to health capacity is a key variable when planning for allocation of resources in the fight against COVID-19 and should not be overlooked. The majority of countries currently bearing the largest burden in terms of population-adjusted cases present similar vulnerabilities linked to their relatively small size and some being island states, requiring specific support and attention. At the same time, South Africa, the second largest economy on the continent and also among the countries with the highest per capita COVID-19 cases requires ad hoc measures to address its needs and challenges. On top of this, strengthening basic civil registration and statistical capacity on the continent must be a priority as quality statistics are key to ensure effective public service delivery that leaves no one behind – a key pillar of good governance.

African countries: Population & vital statistics coverage subscore (2018)



Source: MIF based on ODIN

Sources:

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