COVID-19 VACCINATION & AFRICA



- Current Vaccine facilities set up by multilateral organizations in Africa include:
 - COVAX Facility
 - Africa Union's Vaccine Acquisition Task Team (AVATT)
- Number of African countries that have expressed interest to participate in the Facilities:
 - COVAX 42 countries
 - AU 16 countries
- So far only 7 countries in Africa have started administering the COVID-19 vaccine: Algeria, Egypt, Guinea, Mauritius, Morocco, Rwanda and Seychelles
- Of the 1.44M+ doses administered in Africa, 1.39M (96%) were administered in Morocco
- Africa intends to vaccinate at least
 20% of its population by the end of
 2021 and more than 60% by 2023
- Key vaccines ordered for use in Africa include: AstraZeneca, Pfizer– BioNTech, Johnson & Johnson, Sputnik, Sinopharm and Moderna

25.3M+

Global COVID-19
Active Cases

374k+

Africa COVID-19
Active Cases

2.2%

Global Mortality Rate 2.6%

Africa Mortality
Rate

\$3-\$10

Average Cost
Range of COVID19 Vaccine in USD

US \$10B

~1.6B Doses

Cost in USD expected to cover 60% vaccination of Africa's 1.37B Population

173M+

Total COVID
Vaccines
Administered Globally

78

Countries Currently Administering COVID Vaccines -Globally 1.44M+

Total COVID Vaccines Administered – Africa Countries Currently

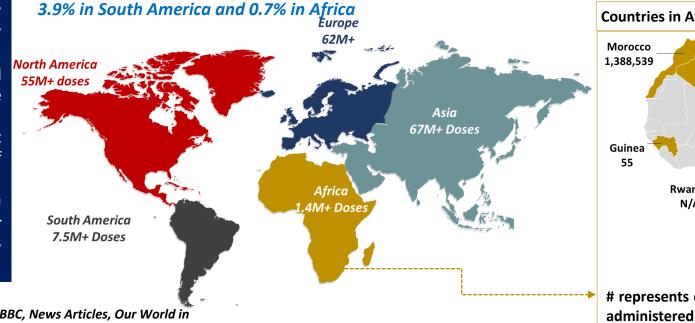
Administering COVID Vaccines - Africa

20%

% of Africa's
Population Expected
to be vaccinated in
2021 (~600M Doses)

Vaccines Administered by Continent

Of the 173m+ doses administered, 34.8% have been administered in Asia, 31.9% in Europe, 28.7% in North America,



Data as of 14 Feb 2021

Sources: WHO, Africa CDC, Reuters, Bloomberg, BBC, News Articles, Our World in Data, Gates Foundation, Rockefeller Foundation, MCL Analysis

Contact: info@maitri-group.com; www.maitri-group.com

Countries in Africa Administering the COVID-19 Vaccine

Morocco
1,388,539

Algeria
30

Egypt
1,315

Mauritius
207

Seychelles
51882

CHANNELS AFRICAN COUNTRIES ARE USING TO ACCESS



COVID-19 VACCINES

Majority of African Countries intend to access the COVID-19 vaccine through four key channels: COVAX, AVATT (AU Initiative), Direct Government Purchases and Private Purchases; An estimated \$10bn is required to fully vaccinate 60% of Africa's population

 Set up by GAVI, WHO, UNICEF, the Coalition for Epidemic Preparedness Innovations, and others

- In Africa the facility seeks to distribute vaccines to 42 African nations
- 92 low income countries around the world will receive COVID vaccines for free under the Advance Market Commitment (AMC) program; while 98 higher income countries will get vaccines under the Self Financing Program (SFP)
- COVAX has raised \$2.4bn so far and estimates it needs to raise an additional US\$ 6.8b in 2021
- African governments are independently purchasing COVID-19 vaccines directly from the manufacturer or bilaterally from individual countries e.g. India, China, Russia
- Doses purchased directly from various vaccine manufacturers arrived as early as Dec 2020 for Guinea
- Key engaged vaccine manufacturers include: Pfizer, AstraZeneca, Sinopharm and Sputnik

600M+ doses to
Africa by end of
2021; 20% of
Africa's population

1.4B+

670M+

doses

secured;

distributed

in 2021 and

2022

needed)

(of 1.6B

Estimated Number of Doses Ordered in Africa

Acquisition Task Team (AVATT)'s initiative aims to provide vaccine access to the 55 countries under AU

The African Export-Import Bank will facilitate payments by providing

facilitate payments by providing advance procurement commitment guarantees of up to **US\$2bn** to the manufacturers on behalf of the Member States

The Africa Union's African Vaccine

- So far, 16 countries have expressed interest in the initiative for 114m doses
- Vaccines will be distributed in 2021 and 2022
- The key vaccine suppliers are: Pfizer, AstraZeneca (through Serum Institute of India) and Johnson & Johnson
- 400m of these secured doses are from AstraZeneca

Private sector organizations and donor funds are contributing to the purchase of vaccine through funds disbursement as well as through direct purchase of the vaccines for some African countries

 Notable organizations that are doing this include: Russia's Alrosa, Gates Foundation, Rockefeller Foundation, MTN, among many others

?

Data as of 14 Feb 2021 Sources: WHO, Africa CDC, Reuters, Bloomberg, BBC, News Articles, Our World in Data, Gates Foundation, Rockefeller Foundation, MCL Analysis

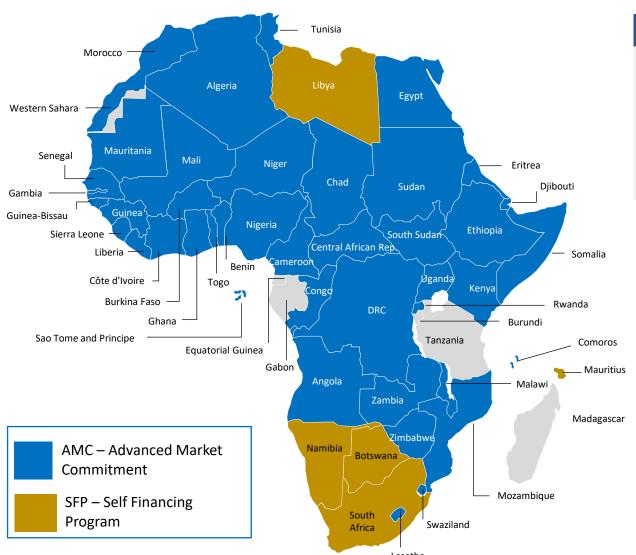
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PURCHASES

COVAX FACILITY & AFRICA



Under the COVAX Initiative 42 African countries will receive COVID vaccines for free under the AMC program while 5 higher income countries will get vaccines under the self financing program; Tanzania, Burundi have announced they no plans to purchase the COVID-19 vaccine



COVAX Advance Market Commitment (AMC) Program

- In Africa 42 countries will participate in the COVAX initiative under the AMC category
- Countries under the COVAX AMC program will receive the vaccines free of charge, majority of these countries are also looking at administering the vaccine free of charge to its citizens
- To support the program, GAVI and others are aiming to raise at least US\$ 2B

COVAX Self Financing Program (SFP)

- In Africa 5 countries will participate in the COVAX initiative under the AMC category. They include: Libya, Namibia, Botswana, Mauritius and South Africa
- Under the SFP Program, the World Bank and Afreximbank will be financing the purchase
- Afreximbank announced that it would provide advance procurement guarantees
 of up to USD 2bn to vaccine manufacturers, upon receipt of firm orders from
 Member States
- Under the plan, countries would have to pay a 15% deposit on any order to take advantage of the financing. They would then repay Afreximbank via quarterly instalments made over five to seven years, using their own resources, World Bank loans or funds from other sources

Data as of 14 Feb 2021

Sources: WHO, Africa CDC, Reuters, Bloomberg, BBC, News Articles, Our World in Data, Gates Foundation, Rockefeller Foundation, MCL Analysis

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COVID-19 VACCINATION PLAN IN AFRICA



In Africa, only 7 countries have officially started administering the COVID-19 vaccine. With majority of countries receiving the vaccine by Q1 2021, we expect an increase 40 countries that would have started administering the COVID-19 vaccine. Priority will be given to health sector workers and other essential

workers like teachers

1.4m+

Estimated Total
COVID Vaccines
Administered to Date

Morocco – 1,388,539 Seychelles – 51,882

Mauritius – 207

Egypt - 1,315

Data as of 14 Feb 2021

Guinea - 55

Algeria – 30

Rwanda – began on 14/02/21 and has 1,000 doses of

Moderna in this initial phase

600M+

Doses secured to be delivered by the COVAX facility

88M+

Doses to be distributed in the COVAX First Round (H1 2021

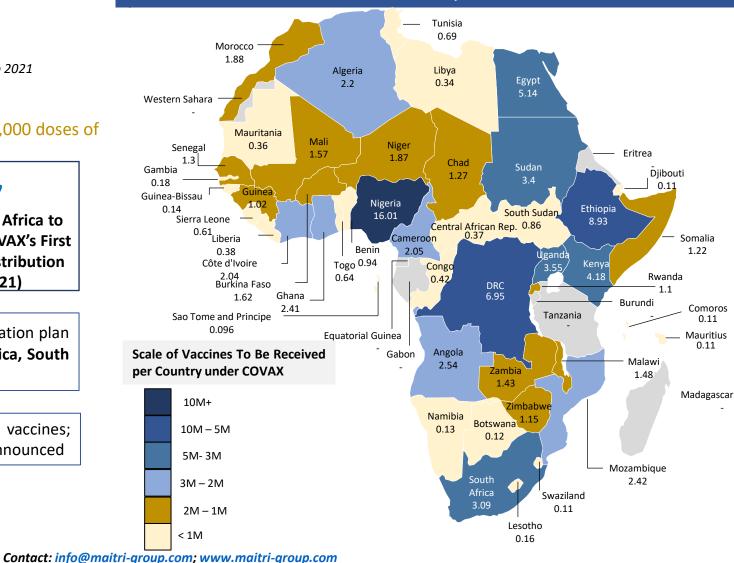
47

Countries in Africa to receive in COVAX's First Round of Distribution (H1 2021)

Among the **16 countries** participating in the **AU's AVATT** vaccination plan some include: **Burundi, Kenya, Lesotho, Namibia, Nigeria, South Africa, South Sudan, Zambia and Zimbabwe**

Countries like Kenya have allowed private sector to directly import vaccines; although the price at which such vaccines are be sold has not been announced

Countries to Receive COVID-19 Vaccine in H1 2021 under COVAX Initiative (No of Doses in Millions)



Data as of 14 Feb 2021

Sources: WHO, Africa CDC, Reuters, Bloomberg, BBC, News Articles, Our World in Data, Gates Foundation, Rockefeller Foundation, MCL Analysis

COVID-19 VACCINE DELIVERY TIMELINES IN AFRICA



Country/Month& Year	D -2020	J - 2021	F - 2021	M - 2021	A - 2021	M - 2021	J - 2021
Guinea							
Egypt							
Mauritius							
Morocco							
Seychelles							
Algeria							
Rwanda							
Angola							
Kenya							
Zimbabwe							
South Africa							
Malawi							
Nigeria							
Mali				•	•		
Cote d'Ivoire				•			
Uganda				•	•		
Benin				•——	•		
Botswana				•			
Burkina Faso				•			
Cameroon					•		
Chad				•			
Congo							
DRC					•		
Djibouti					•		
Ethiopia					•		
Gambia				•			
Ghana				•			
Guinea-Bissau				•	•		
Lesotho				•	•		
Liberia				•			
Libya							
Mauritania				•			
Mozambique					•		
Namibia				•			
Niger							
•					•		
Senegal Siorra Loona					•		
Sierra Leone							
Somalia				•			
South Sudan							
Sudan					•		
Togo Zambia				•			

Key Assumption: For countries receiving the first batch of vaccines from COVAX facility in late February or Early March, they will subsequently commence administration by either late March or Early April, unless stated otherwise

By end of H1 2020, over 40 African countries will have either commenced vaccination trials on received samples or have officially started administering the COVID-19 vaccine to its citizens



Signifies expected start month of the vaccination campaign in the respective country



Signifies expected start months of the vaccination campaign in the respective country (i.e. vaccination expected to start in late March or in April)

Sources: WHO, Africa CDC, Reuters, Bloomberg, BBC, News Articles, Our World in Data, Gates Foundation, Rockefeller Foundation, MCL Analysis

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