



# THE COVID-19 PANDEMIC: A FOCUS ON VACCINE NATIONALISM AND VACCINE MANUFACTURE IN AFRICA

Author:

**Bakani M. Ncube**

BPharm (Hons), MPharm Candidate, Mandela Rhodes Scholar

Research Analyst: DFS Africa Strategic Implementation Unit

[Bakani@developmentfinancesummit.com](mailto:Bakani@developmentfinancesummit.com)

Contributing Editors: Olukayode Afolabi & Olakunle Olaniyi-Edwards

 **DFS Africa**

Worldwide, millions of people have been infected with COVID-19 and some have subsequently lost their lives due to the pandemic. As a result, there have been increased and ongoing global research efforts to develop quality-assured, safe and efficacious vaccines for this novel coronavirus (1). However, when COVID-19 vaccines started receiving marketing authorisations from stringent regulatory authorities, challenges related to the manufacture and distribution of the vaccines emerged. We witnessed several countries pushing for first access to a supply of these products and the hoarding of components for vaccine production increased (1). This situation whereby countries prioritise their own vaccine needs instead of pursuing a coordinated global approach is referred to as vaccine nationalism (1,2). Vaccine nationalism is not something new. We saw a similar trend during the 2009 H1N1 influenza pandemic and prior to that, polio and smallpox vaccines only became available in low-income countries after wealthier nations had secured sufficient stocks for themselves (2,3). In the 1980s, the H.I.V epidemic resulted in the rapid research and development of antiretrovirals yet these took ten years to become available in Sub-Saharan Africa (4). With the current COVID-19 pandemic, billions of vaccine doses were pre-ordered by the richest countries in the world and in some cases, these doses were enough to vaccinate their populations several times over (2,4). For instance, the United States of America (USA), the United Kingdom, Japan and the European Union struck deals to receive the first doses of vaccines in the absence of vaccine effectiveness data. They spent billions of dollars on deals with vaccine manufacturers such as Pfizer Inc, Johnson & Johnson (J&J), and AstraZeneca Plc, and the USA single-handedly committed close to US\$11 billion for vaccine development, testing, manufacture and stockpiling (5). Currently, booster shots are being purchased by high income countries such as Canada who recently made a deal with Pfizer to receive 35 million doses of the booster in 2022. What is interesting to note is that these booster shots may arrive before a significant number of people worldwide have received their first COVID-19 vaccine shot (4,6).

This nationalistic behaviour leads to global competition for vaccines as well as the inevitable and exponential rise in vaccine prices (2). When a few countries receive the majority of the product supply, the pandemic is prolonged resulting in the ongoing disruption of the world economy, battered supply chains and weaker demand (2,4). In addition, vaccine nationalism and global competition negatively affect the management of the pandemic as they lead to unequal vaccine allocations and prevent those

## Previous Examples of Vaccine Nationalism

**H1N1**  
Vaccine

**Polio**  
Vaccine

**Smallpox**  
Vaccine

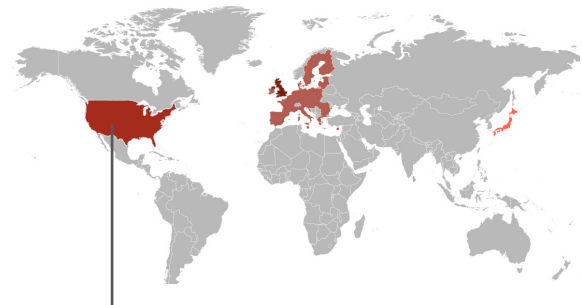
Vaccines only became available in low-income countries after wealthier nations had secured sufficient stocks for themselves (2,3)

**In the 1980s, the H.I.V epidemic resulted in the rapid research and development of antiretrovirals**



Took ten years to become available in Sub-Saharan Africa (4)

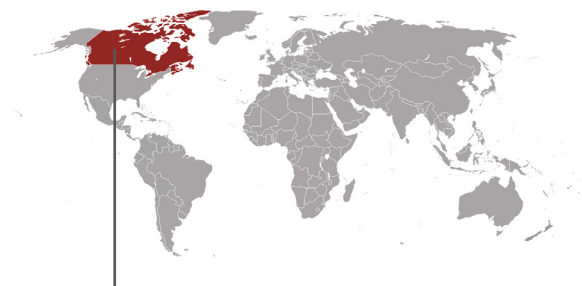
**Billions of Covid-19 vaccine doses were pre-ordered by the richest countries in the world.**



USA single-handedly committed close to US\$11 billion for vaccine development, testing, manufacture and stockpiling (5)

USA, UK, Japan and the EU struck deals to receive the first doses of vaccines in the absence of vaccine effectiveness data.

**Booster shots are being purchased by high income countries.**



Canada recently made a deal with Pfizer to receive 35 million doses of the booster in 2022

most in need from accessing the COVID-19 vaccine. The inequitable allocation of vaccines results in vulnerable people in some countries receiving the vaccine after low risk individuals in other countries – a scenario that leads to preventable deaths (1). Vaccine nationalism also has a negative economic impact and estimates show that it could cost the global economy about US\$1.2 trillion per annum in GDP terms (1,2). If low-income countries cannot access COVID-19 vaccines, the world stands to lose approximately US\$153 billion per annum of GDP (1). In essence, the ongoing transmission of coronavirus anywhere in the world results in continued global trade and travel disruptions and we will also see the emergence of new variants of the virus that could potentially render existing vaccines less effective (4). This is already happening as the AstraZeneca Plc vaccine developed in collaboration with the University of Oxford is known to be largely ineffective in preventing mild disease from the South African COVID-19 variant. This is a strain that has reached over 40 countries including the USA and United Kingdom. Therefore, when low-income countries do not get access to vaccines, they inevitably pose a risk to the whole world and serve as a source of virus mutations (3). Ultimately, all countries will benefit economically if low-income countries have access to COVID-19 vaccines and high-income countries are envisaged to get back an estimated US\$4.80 for every US\$1 spent on vaccine supply (1). In the words of World Health Organization (WHO) Director-General Dr. Tedros Adhanom Ghebreyesus, “Vaccine nationalism only helps the virus” (2).

Against this backdrop, the question then becomes how do we overcome vaccine nationalism or protectionism and ensure that everyone has equitable access to COVID-19 vaccines? This article aims to answer this question by presenting two strategies that have and are currently being used or implemented. The first strategy to improve access to vaccines is optimising vaccine distribution in low-income countries and the second is to establish vaccine manufacture in Africa. In the long run, such investments in equitable access and vaccine development are economically beneficial especially when we consider that current spending on vaccine development and allocation by the world’s wealthiest countries is relatively small compared to the economic loss associated with the COVID-19 pandemic. It therefore makes business sense for these countries to make sizeable investments in vaccine development and distribution. Such an approach forms the basis for improving global collaborative efforts and it needs to be sustained over time and beyond election cycles.

## Negative economic impact of vaccine nationalism

**US\$1.2**

Trillion per annum of GDP

### Cost to the global economy

#### Low-Income Countries



**US\$153**

Billion per annum of GDP

**Loss to the global economy if they cannot access COVID-19 vaccines**

#### High-Income Countries



**US\$4.80**

for every US\$1 spent on vaccine supply

**Envisaged to get back on vaccine supply**

“**Vaccine nationalism only helps the virus**”

- Dr. Tedros Adhanom Ghebreyesus

Director-General, World Health Organization (WHO)

## Two strategies that have and are currently being used or implemented

**1**

To improve access to vaccines is optimising vaccine distribution in low-income countries

**2**

To establish vaccine manufacture in Africa

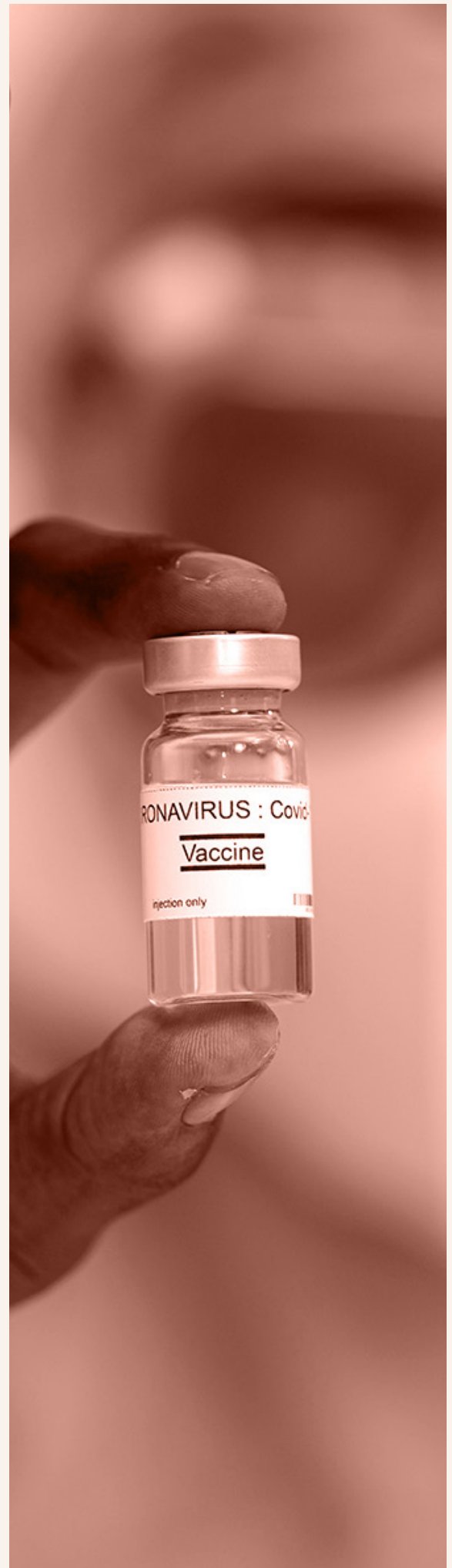


# Strategies to Improve Access to COVID-19 Vaccines

## 1. Optimising Vaccine Distribution in Low-Income Countries

When the pandemic started, the world's goal was to create an effective vaccine and when this goal was attained, the focus shifted towards getting the vaccine to the people who most need it (7). This is an undertaking that required the creation of an extensive global supply chain (7), that could also counter vaccine nationalism and ensure fast and fair access to COVID-19 vaccines for all countries (5,7,8). In line with the foregoing, the COVAX global vaccines facility was established. COVAX is a programme coordinated by the WHO, GAVI, and the Coalition for Epidemic Preparedness Innovations (CEPI) (3,5,7,8). It is designed to pool funds from high-income countries and non-profit organisations for COVID-19 vaccine development and to equitably distribute these vaccines worldwide (4,5,7). The idea is that wealthy countries purchase COVID-19 vaccines through this facility while low-income countries receive financial assistance (7). COVAX is one of the pillars of the Access to COVID-19 Tools (ACT) Accelerator programme that aims to ensure that vaccines, treatments, diagnostics and other healthcare resources are widely available to fight the pandemic. The ACT-Accelerator programme was launched by the WHO, European Commission and France in April 2020 (5,8,9). COVAX aims to deliver 2 billion quality-assured, safe, efficacious and approved COVID-19 vaccines by the end of 2021, which, according to GAVI, should sufficiently protect high risk and vulnerable populations, including frontline healthcare personnel (5,7,8).

In Africa, vaccine supply deliveries under the COVAX scheme started in February 2021 and most countries on the continent have signed up and received COVID-19 vaccines (10,11). COVAX aims to supply Africa with 600 million doses – an amount that is enough to vaccinate 20% of the population (10). Evidently, there is a clear limit on access to vaccines and conversations on vaccination beyond the COVAX scope need to continue between high-level African stakeholders. These stakeholders are the COVID-19 African Vaccine Acquisition Task Team (AVATT), Africa Medical Supplies Platform (AMSP), Africa Centres for Disease Control and Prevention (Africa CDC), African Export-Import Bank (Afreximbank), and the African Union (AU) and its member states (12). So far, 41 African countries have received 18 million vaccine doses through the COVAX programme. Even with these initial supplies, Africa lags

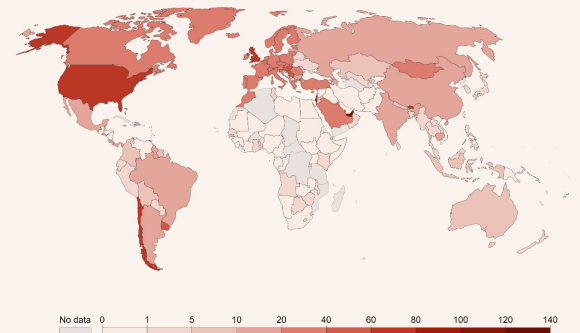


behind the rest of the world as it has administered only 2% of all vaccine doses administered worldwide (10). Figure 1 illustrates the COVID-19 vaccine doses administered per 100 people and Figure 2 highlights the number of people fully vaccinated against COVID-19. Both figures show data that was correct on 26 April 2021. WHO has also reported that Botswana, Eswatini, Ghana, Rwanda, Senegal, Togo, and Tunisia have exhausted their initial COVAX supplies and they are now waiting for more. It is expected that these additional supplies will become available in early May to mid-June (10). Due to spikes in COVID-19 cases in India, the Indian government has restricted vaccine exports which has caused this current lack of supply from the COVAX programme (10). In addition, some African countries have received vaccine donations from China, Israel, Russia, the United Arab Emirates and India to increase the number of people vaccinated on the continent (3,10). Experts contend that vaccine diplomacy has undermined the efforts of the COVAX initiative as bilateral donations made by countries with vaccines may have geopolitical motives instead of goals to improve public health. This situation has caused countries without political clout to lack access to vaccines (4). China is one of the countries engaging in vaccine diplomacy as Beijing can use vaccines as “an instrument for foreign policy to promote soft power and project international influence” (13). From the get-go, China has emphasised repeatedly that its vaccines are for sharing, especially with low-income countries (13). As the Western world participates in vaccine nationalism, there are new positioning possibilities for global powers as countries such as China and Russia enhance their relationships with low-income countries through global health and vaccine diplomacy.

According to the WHO, COVAX is funded by governments, vaccine manufacturers, organisations and individuals and intends to guarantee countries access to the largest portfolio of vaccine candidates in the world. The pooling of financial and scientific resources enables participating countries to insure themselves against the failure of any individual vaccine candidate and it also allows them to secure successful vaccines in an economical and targeted manner (8). Over 150 economies representing close to two thirds of the global population have signed up for COVAX (8), and the initiative has received considerable support with countries emphasising the need for solidarity to tackle the pandemic (8). Gavi has also highlighted that COVAX is the best way to end the acute phase of COVID-19 (2). However, COVAX has been weakened by wealthy nations stockpiling anticipated vaccine supplies and vaccine

### COVID-19 vaccine doses administered per 100 people, Apr 23, 2021

Total number of vaccination doses administered per 100 people in the local population. This is counted as a single dose and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).



Source: Official data collected by Our World in Data - Last updated 27 April 09:10 (London time) [OurWorldInData.org/coronavirus](https://OurWorldInData.org/coronavirus) · CC BY

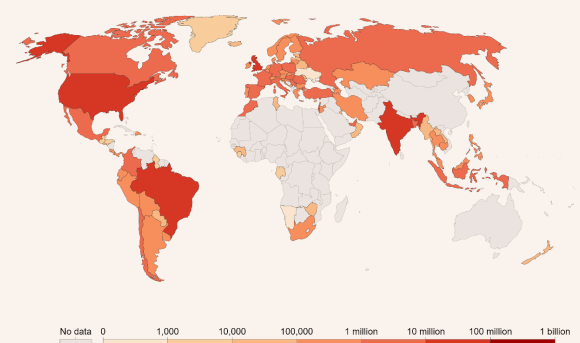
**Figure 1:** COVID-19 vaccine doses administered per 100 people, 26 April 2021 (14)

Beijing can use vaccines as

“an instrument for foreign policy to promote soft power and project international influence”

### Number of people fully vaccinated against COVID-19, Apr 26, 2021

Total number of people who receive all doses prescribed by the vaccination protocol. This data is only available for countries which report the breakdown of doses administered by first and second doses.



Source: Official data collected by Our World in Data - Last updated 27 April 09:10 (London time) [OurWorldInData.org/coronavirus](https://OurWorldInData.org/coronavirus) · CC BY

**Figure 2:** Number of people fully vaccinated against COVID-19, 26 April 2021 (14)

nationalism (4). Despite the considerable progress that COVAX has reported, pandemic-related disruptions are going to continue as a significant number of the world's poor are unlikely to be vaccinated in 2021 (2). Until a global recovery is secured, high-income countries and regions such as the USA, UK and EU are estimated to lose about US\$119 billion per annum. This amount is significantly more than the US\$25 billion that is required to supply vaccines to low-income countries (2).

Vaccine distribution to and in low-income countries can be further optimised by pooling commitments from pharmaceutical companies to boost the production, availability and accessibility of COVID-19 vaccines. Fortunately, this is happening through COVAX and Moderna is the latest vaccine manufacturer to support the scheme. The other manufacturers supporting COVAX and Gavi are Sanofi, GlaxoSmithKline, Pfizer, and Novavax (15). Secondly, in-country infrastructure needs to be strengthened as we note that even when vaccines are made available and supplied to a country, distributing them and vaccinating people is a challenge. For example, the Democratic Republic of Congo received 1.7 million vaccine doses from the United Nations Children's Fund (UNICEF) and they returned 1.3 million of them for redistribution to other countries on the continent (16). This was due to the country, which received the vaccines two months ago, lacking a plan to support a vaccination campaign of this magnitude and they also had insufficient numbers of vaccination sites. In one week, the first dose of the vaccine had only been administered to 1700 people (16). Thirdly, more national and regional partnerships need to be established between stakeholders from the private, public and plural sectors to expedite vaccine roll-out in Africa. The Vodacom Group and the African Union Development Agency New Partnership for Africa's Development (AUDA-NEPAD) have partnered to do just that and created the mVacciNation platform. The partnership also intends to establish digital infrastructure to manage COVID-19 vaccinations in all African countries and in Mozambique, Tanzania and Nigeria it will manage infant inoculations. Hopefully, this will boost digital transformation on the continent and build a more resilient post-COVID world (17). Another partnership that can be emulated is that of the South African government awarding tenders to Biologicals Vaccines Institute of Southern Africa Ltd. and Imperial Logistics Ltd. to import COVID-19 vaccines, and DSV Healthcare Ltd. to store and subsequently distribute the doses nationwide (18). Lastly, African countries can ensure and optimise equitable distribution and allocation of vaccines in the short term by holding high income

**1.7 million**  
Vaccines received  
from UNICEF

1.3

Returned to be  
redistributed to  
other countries  
in Africa

0.4

**Democratic Republic of Congo**





countries accountable. African countries can also support international movements such as the proposed international treaty for pandemic preparedness and response. Existing global health instruments, e.g. the International Health Regulations, are envisioned to form a foundation for the development of the pandemic treaty. The treaty aims to “foster an all of government and all of society approach as well as strengthen national, regional and global capacities and resilience to future pandemics” (9). The treaty is also expected to enhance international cooperation and increase mutual accountability, transparency and shared responsibility within the international system. The intention is to bring about improvements in alert systems, data sharing practices, research and development activities, and medical product/health technology production and distribution (9).

---

The treaty aims to  
**“foster an all of government and all of society approach as well as strengthen national, regional and global capacities and resilience to future pandemics”**

---

## 2. Vaccine Manufacture in Africa

The global vaccine manufacturing market is valued at US\$34 billion and of this, Africa accounts for only 4% (US\$1.3 billion) (19). Evidently, Africa’s capacity to produce vaccines is low and the continent is reported to produce less than 1% of its routine vaccines with practically no outbreak vaccine manufacturing in place (11,19). These figures are concerning especially when we consider that the continent consumes about 25% of global vaccines by volume (11,19). In addition, African pharmaceutical companies that actively manufacture vaccines are consolidated in five countries with only a few of them carrying out value-adding upstream manufacturing activities. Table 1 lists these vaccine manufacturers and their product portfolio. Research and development (R&D) on the continent is also limited and it has a narrow disease focus. Moreover, the continent lacks a developed input supply base for vaccine raw materials (e.g. vials and bioreactor bags) which, if not addressed, could impede resilience and self-sufficiency (19). Due to these and other factors, Africa is over-reliant on imports which exposes the population to supply chain and public health risks – a situation made evident by the ongoing challenges related to access to COVID-19 vaccines. Despite the limited capacity to manufacture vaccines, momentum and development in this regard is increasing. For instance, the African Union has set up a number of initiatives to expand the continent’s pharmaceutical production capacity including the implementation of the 2007 Pharmaceutical Manufacturing Plan for Africa (PMPA) (19).

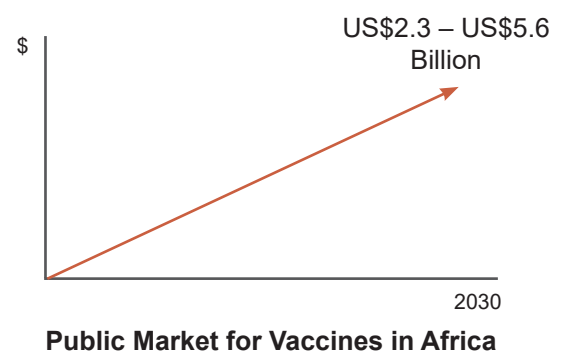
Country	Manufacturer	Products
Senegal	Institut Pasteur Dakar	Yellow Fever
Egypt	Egy Vac (Vacsera)	BCG-T, Tuberculin, Tetanus, DTP, Typhoid, Cholera
Tunisia	Institut Pasteur Tunis <sup>1</sup>	BCG
South Africa	Biovac	BCG, Measles, Pneumococcal conj, Hepatitis B, Hexavalent Vaccine, DTP, Polio, Hib and HepB
South Africa	Aspen Pharmacare	COVID-19 candidate
Morocco	Institut Pasteur Morocco	BCG, DT, Yellow Fever, Typhoid Fever, Influenza, Rabies
Nigeria	Innovative Biotech	HIV
Algeria	Institut Pasteur Algeria	Rabies
<sup>1</sup> Very small scale API manufacturing <b>NB:</b> Three manufacturers that have plans to produce vaccines have been excluded from this table. These manufacturers are EPHI (Ethiopia), Biovaccines (Nigeria), and Innovative Biotech (Nigeria).		

**Table 1:** Africa’s vaccine value chain players by country, 2020 (19)

Global protectionism and vaccine nationalism during the current pandemic make a strong case for Africa to build and invest in its own robust healthcare systems as well as expand its vaccine manufacturing capacity (19). The latter could contribute to public health by ensuring a secure and sustainable supply of routine vaccines and a better outbreak and pandemic response. In addition, local vaccine manufacture can result in the development of products that suit the African context and its specific disease burden. It also gives the continent better control over its public health and vaccine supply chains, ultimately improving sovereign security (11,19). Furthermore, African economies stand to benefit from vaccine manufacture as there will potentially be an increase in high-skilled employment and an indirect development of the pharmaceutical industry and manufacturing sector (11,19). Moreover, vaccine manufacturing may decrease the strain on trade balances through import substitution and ease forex requirements in some countries over the long term (11,19). However, the benefits of Africa producing vaccines are not guaranteed. Governments need to critically analyse the trade-offs and potential costs of vaccine manufacture as well as consider alternative methods to access vaccines and compare these with the current model of importing vaccines (19).

In addition to COVID-19 and vaccine nationalism, the discussion about Africa manufacturing vaccines has been re-triggered by:

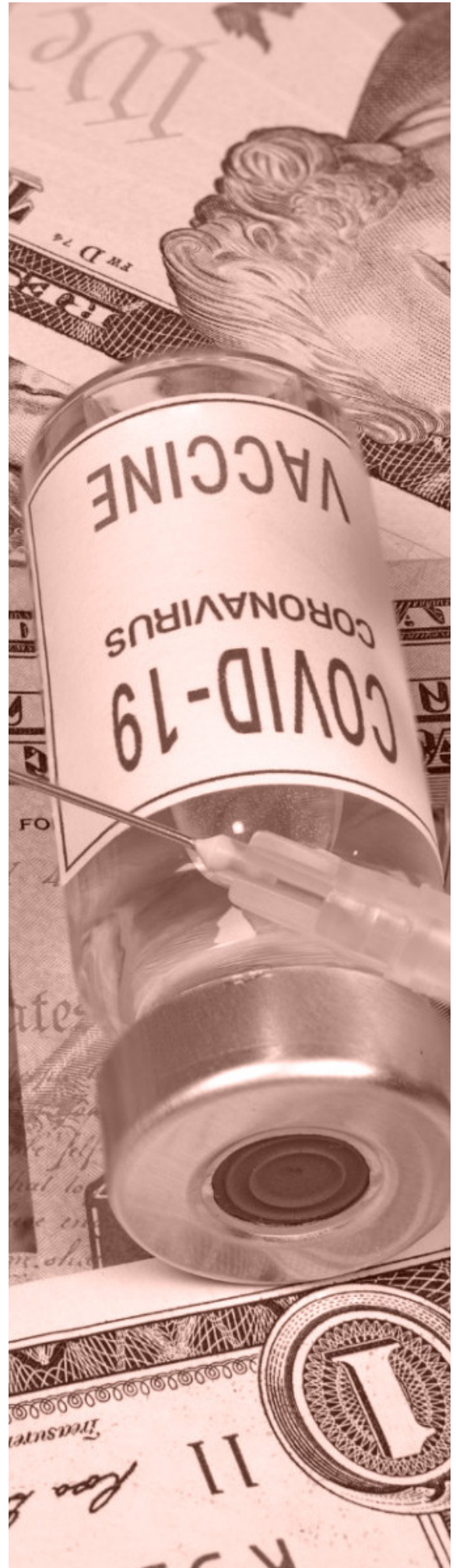
1. Rapidly growing demand for vaccines. It is estimated that by 2030, depending on the scenario, the public market for vaccines on the continent could be worth US\$2.3 – US\$5.6 billion due to Africa's population growing faster than other regions. The ongoing gaps in immunisation coverage in several African countries also guarantee a market and demand for these products (11,19).
2. Changes in manufacturing economics due to new technologies. Across the biopharmaceutical process, there is a rapid expansion of technological innovation which could result in lower-scale production technologies that are suited for an African business model. Small-scale technologies, high-density bioreactors, and yield-boosting innovations in fill-and-finish steps are helping the unit economics of smaller manufacturers (11,19).
3. A more supportive regulatory and political environment. Over the last year, the regulatory and



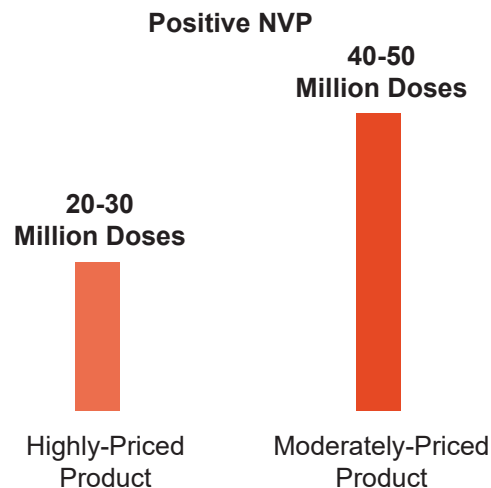


political support needed for vaccine manufacture in Africa has strengthened and an increasing number of African and global leaders are now committed to vaccine manufacturing in Africa. Regionalisation and cross-continent vaccine market integration has also continued to strengthen. These factors have been helped by the recent establishment of the African Continental Free Trade Area (AfCFTA) and the robust harmonisation provided by the African Medicines Regulatory Harmonisation (AMRH) initiative which is proposed to serve as the foundation for the African Medicines Agency's establishment (11,19). More countries in Africa also now have, or are actively working towards, WHO maturity level 3 status for their national regulatory authorities (19).

Obviously, there are costs involved in the establishment of vaccine manufacturing in Africa and viable business models are therefore required to develop sustainable capacity. Initially, companies may seek national or donor subsidies and grants, and in the long term they should aim to be financially sustainable (19). Vaccine manufacturers on the continent could also benefit from being matched with a wide range of funders, including those whose missions do not only revolve around commercial returns e.g. development finance institutions, donors, governments and impact investors. Such funders may provide support by de-risking investments over time horizons; alternatively, they can provide short-term and partial subsidies. Additionally, vaccine manufacturers may want to explore non-traditional financing mechanisms such as public-private partnerships and joint ventures as these have had success in Africa and in other emerging economies (11,19). Furthermore, costs may be kept low by incorporating recent advancements in technological innovations into the vaccine production process and establishing regional pharmaceutical hubs to manufacture globally competitive products that achieve the required scale (11,19). Also, there is a need for vaccine manufacturers on the continent to have a solid grasp of the factors that impact production costs. This should allow manufacturers to develop a viable business case to expand manufacturing capacity. The factors that affect the cost of production include the vaccine technology platform (egg-based, bioreactor-based, mRNA-based), scale, value chain steps, country specific structural and productivity factors, and process innovations. Taking into consideration these cost factors, Weighted Average Cost of Capital (WACC) based on current market prices, manufacturing setup, and volume may be combined successfully in different ways



(19). For example, a bioreactor-based vaccine may be produced by a manufacturer end-to-end using traditional technology and a median-to-top quartile productivity performance. This potentially allows the manufacturer to yield a positive net present value (NPV) after 20-30 million doses if they were manufacturing a highly-priced product and if they manufactured a moderately-priced product, they would turn NPV-positive after 40-50 million doses. Manufacturers are therefore encouraged to provide a business case based on the factors mentioned and use innovative and relevant technology (11,19). Other potential cost considerations for vaccine manufacturers in Africa are:



1. Vaccines produced on the continent will initially cost more than competitively supplied current products. This is expected as the industry will still be growing and it would not have yet attained substantial scale. Therefore, the industry requires funders and purchasers to provide additional support and grants to subsidise vaccines produced in Africa while the emerging industry develops. Such a setup has been reported in other vaccine manufacturing countries like Brazil and India.
2. Vaccine production in Africa presents a potential risk to global R&D efforts. This risk may be greater for R&D efforts intended to address the specific challenges that Africa grapples with and we may observe a reduction in such efforts as the continent begins an independent vaccine manufacturing agenda. African leaders therefore need to consider vaccine manufacture on the continent as an addition to the global efforts that seek to address Africa's health security needs. Close collaborations with global efforts cannot be overemphasised (19).

To develop a successful vaccine manufacturing industry in Africa, concerted effort is required that will address short and long-term constraints (11,19). These constraints are related to agenda setting and coordination, infrastructure, regulatory systems strengthening and harmonisation, technical know-how, access to finance, and demand volume and certainty (11,19). Despite these constraints, which undoubtedly need to be addressed, a number of African manufacturing expansions have been announced to combat the COVID-19 pandemic and these are briefly outlined in Table 2. Countries and vaccine manufacturers are called to urgently share their know-how so that vaccine production and distribution can be scaled up and done equitably. To achieve the foregoing, more voluntary licensing

**Bioreactor-based vaccine, traditional technology, a median-to-top quartile productivity performance**

	Country	Manufacturer	Plans
Deals in Place	South Africa	Aspen Pharmacare	Aspen is leveraging its existing sterile injectables plant to manufacture the J&J COVID-19 vaccine.
	South Africa	Biovac	Biovac announced its deal to manufacture United States of America based Immunity-Bio's second generation COVID-19 vaccine candidate. Manufacture will include the drug substance. The COVID-19 vaccines are intended to be used as a stepping stone to establish an inoculation export industry.

**Table 2:** Announcements of vaccine manufacturing expansions in Africa (19).



with technology transfer needs to happen. This involves a vaccine patent owner licensing another manufacturer, usually for a fee, to produce its vaccines. However, such agreements tend to compromise equitable access as they are often exclusive and lack transparency. A more transparent method, proposed by Costa Rica and started by WHO in 2020, invites vaccine manufacturers to share licenses through a globally coordinated mechanism called the COVID-19 Technology Access Pool (4). Alternatively, intellectual property rights on COVID-19 products can be waived through a World Trade Organization agreement as proposed by India and South Africa. This would enable countries to have more leverage in their negotiations with vaccine manufacturers and also level the playing field (4). However, even when the world is facing a pandemic, governments and vaccine manufacturers are in favour of upholding patent protections. For instance, philanthropist Bill Gates argued that the COVID-19 vaccine recipe should not be shared: “It’s not like there’s some idle vaccine factory, with regulatory approval, that makes magically safe vaccines” (6). Factory owners have responded to this viewpoint by highlighting that they do in fact have the production capacity and are prepared to retrofit their facilities and commence with vaccine production if allowed to (6). These factories are based in different regions and include Biolyse Pharma (Canada) and Incepta (Bangladesh), and firms in Pakistan and South Korea have also expressed interest in vaccine or vaccine component production (6).

To achieve success, there is a need to articulate a clear and unifying vaccine manufacturing strategy across the continent with defined roles and responsibilities for all stakeholders at the national, regional and continental level (11,19). The strategy should also have a clear process on access in the face of a future pandemic, especially if funds are obtained from national/supranational institutions or donors. This is because as the continent strengthens its manufacturing capacity, certain countries in Sub-Saharan Africa may still have limited access to products based on their ability (or lack thereof) to pay and there is a possibility that vaccines, in the face of a future pandemic, will go to richer African countries. In addition, supporting policies need to be developed which will enable vaccine manufacturing. For example, tariffs on raw material inputs can be reduced like in India and governments can also introduce market access requirements to incentivise technology transfer like in Brazil (19). Furthermore, collaborations with global organisations, international institutions and governments are key to strengthen regional manufacturing and enhance the sector’s know-how. It is commendable that such




---

Bill Gates argued that the COVID-19 vaccine recipe should not be shared:

**“It’s not like there’s some idle vaccine factory, with regulatory approval, that makes magically safe vaccines”**

---





collaborations are taking place and on 13 April 2021, the African Union Commission announced the signing of a memorandum of understanding with CEPI which seeks to enhance R&D of vaccines as well as manufacturing in Africa through strengthened ties between the organisations and Africa CDC (20).

In conclusion, to successfully combat the COVID-19 pandemic, there is a need for proactive actions which include mandatory lockdowns, the wearing of masks and frequent handwashing. There is also a need to vaccinate populations as we battle with successive waves of the infection and the emergence of new COVID-19 variants (21). However, vaccines are a scarce resource and vaccine nationalism has inevitably been on the rise, posing a threat to public health and the world economy. Therefore, the distribution of COVID-19 vaccines needs to be optimised in order to ensure equitable access to these products. Additionally, the availability and accessibility of vaccines can potentially be boosted by investing in vaccine manufacture in Africa. In the long run, such investments in equitable access and vaccine development are economically beneficial especially when we consider that current spending on vaccine development and allocation by the world's wealthiest countries is relatively small compared to the economic loss associated with the COVID-19 pandemic. Now more than ever, there is a need for global collaboration.



## References:

1. COVID-19 and the cost of vaccine nationalism | Gavi, the Vaccine Alliance [Internet]. [cited 2021 Apr 24]. Available from: <https://www.gavi.org/vaccineswork/covid-19-and-cost-vaccine-nationalism>
2. Coronavirus: What is vaccine nationalism, how it affects us? | World Economic Forum [Internet]. [cited 2021 Apr 24]. Available from: <https://www.weforum.org/agenda/2021/01/what-is-vaccine-nationalism-coronavirus-its-affects-covid-19-pandemic/>
3. How Africa Can Save the World From a Never-Ending Covid Pandemic - Bloomberg [Internet]. [cited 2021 May 6]. Available from: <https://www.bloomberg.com/news/features/2021-03-09/how-africa-can-save-the-world-from-a-never-ending-covid-pandemic?sref=nFJScCHK>
4. Opinion | W.H.O.'s Dr. Tedros: Covid Vaccine Promises Must Be Kept - The New York Times [Internet]. [cited 2021 May 6]. Available from: <https://www.nytimes.com/2021/04/22/opinion/who-covid-vaccines.html>
5. How will the WHO ensure everyone has access to a COVID-19 vaccine? | World Economic Forum [Internet]. 2020 [cited 2021 Apr 24]. Available from: <https://www.weforum.org/agenda/2020/08/world-health-organizations-gavi-vepi-global-covid-19-vaccine-distribution>
6. Factory Owners Around the World Ready to Manufacture Covid Vaccines [Internet]. [cited 2021 May 6]. Available from: <https://theintercept.com/2021/04/29/covid-vaccine-factory-production-ip/>
7. COVID-19: How can we make enough vaccine for 2 billion people? | World Economic Forum [Internet]. [cited 2021 Apr 24]. Available from: <https://www.weforum.org/agenda/2020/08/covid-vaccine-manufacture-distribute-2-billion-doses>
8. What is COVAX, the ambitious global plan for a coronavirus vaccine? | World Economic Forum [Internet]. [cited 2021 Apr 24]. Available from: <https://www.weforum.org/agenda/2020/09/what-is-covax>
9. No government can address the threat of pandemics alone – we must come together - GOV.UK [Internet]. [cited 2021 May 6]. Available from: <https://www.gov.uk/government/speeches/no-government-can-address-the-threat-of-pandemics-alone-we-must-come-together>
10. Covid-19 Africa: What is happening with vaccines? - BBC News [Internet]. [cited 2021 Apr 28]. Available from: <https://www.bbc.com/news/56100076>
11. Africa needs vaccines. What would it take to make them here? | McKinsey [Internet]. [cited 2021 May 7]. Available from: <https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/africa-needs-vaccines-what-would-it-take-to-make-them-here>
12. AMSP opens COVID-19 vaccines pre-orders for 55 African Union Member States – Africa CDC [Internet]. [cited 2021 May 6]. Available from: <https://africacdc.org/news-item/amsp-opens-covid-19-vaccines-pre-orders-for-55-african-union-member-states/>
13. China has promised millions of coronavirus vaccines to countries around the world. And it is ready to deliver them - CNN [Internet]. [cited 2021 May 6]. Available from: [https://edition.cnn.com/2020/12/01/asia/china-coronavirus-vaccine-diplomacy-intl-hnk/index.html?utm\\_source=Global+Health+NOW+Main+List&utm\\_campaign=6b6726a478-EMAIL\\_CAMPAIGN\\_2020\\_12\\_02\\_02\\_24&utm\\_medium=email&utm\\_term=0\\_8d0d062dbd-6b6726a478-2996305](https://edition.cnn.com/2020/12/01/asia/china-coronavirus-vaccine-diplomacy-intl-hnk/index.html?utm_source=Global+Health+NOW+Main+List&utm_campaign=6b6726a478-EMAIL_CAMPAIGN_2020_12_02_02_24&utm_medium=email&utm_term=0_8d0d062dbd-6b6726a478-2996305)

14. Coronavirus (COVID-19) Vaccinations - Statistics and Research - Our World in Data [Internet]. [cited 2021 Apr 28]. Available from: <https://ourworldindata.org/covid-vaccinations>
15. Moderna, planning big COVID-19 capacity upgrades, pledges 500M doses to COVAX | FiercePharma [Internet]. [cited 2021 May 6]. Available from: <https://www.fiercepharma.com/pharma/moderna-eyeing-3b-supply-for-2022-pledges-500m-covid-19-vaccine-doses-to-covax>
16. DRC to return AstraZeneca vaccines to Unicef | Nation [Internet]. [cited 2021 May 6]. Available from: <https://nation.africa/kenya/news/africa/drc-to-return-vaccines-3381408>
17. Vodacom partners AU in major vaccination rollout – CAJ News Africa [Internet]. [cited 2021 May 6]. Available from: <https://www.cajnewsafrica.com/2021/04/12/vodacom-partners-au-in-major-vaccination-rollout/>
18. South Africa Covid Vaccine Import Contracts Given to Private Companies - Bloomberg [Internet]. [cited 2021 May 6]. Available from: [https://www.bloomberg.com/news/articles/2021-04-23/south-africa-contracts-companies-to-import-covid-19-vaccines?cmpid=BBD042321\\_CORONAVIRUS&utm\\_medium=email&utm\\_source=newsletter&utm\\_term=210423&utm\\_campaign=coronavirus&sref=nFJScCHK](https://www.bloomberg.com/news/articles/2021-04-23/south-africa-contracts-companies-to-import-covid-19-vaccines?cmpid=BBD042321_CORONAVIRUS&utm_medium=email&utm_source=newsletter&utm_term=210423&utm_campaign=coronavirus&sref=nFJScCHK)
19. CDC A. Discussion Paper: Conference on Expanding Africa’s Vaccine Manufacturing. Theme: Africa’s Vaccine Manufacturing for Health Security. 2021.
20. Africa CDC. CEPI and the African Union join forces to boost African vaccine R&D and manufacturing. Africa CDC; 2021.
21. Africa Legal | Dr Skhumbuzo Ngozwana [Internet]. 2021 [cited 2021 Apr 24]. Available from: <https://www.africa-legal.com/news-detail/a-driver-of-growth/>





# DFS

## ADVISORY SERVICES

 DFS Africa

## THINK TALK REALIZE

DFS Africa is a platform dedicated to connecting projects and businesses in Africa to the right financing sources globally.

Our principals have a combined 50+ years experience of advising National Governments and Global Multinational Corporations in delivering Socio-economic and sustainable benefits across sectors such as Energy, Infrastructure, Technology and Agriculture.

## FOR MORE INFORMATION CONTACT US

### United Kingdom

Albert House 256-260 Old Street, London Ec1v 9dd

### Nigeria

13a Sola Oguntade Close Lekki Phase 1 Lagos, Nigeria

### South Africa

72 Steel Road Spartan, Johannesburg, South Africa

### Kenya

6 Gigiri Rd, Nairobi, Kenya

### Tanzania

Za Advisory Limited. 1st Floor, Infosys House. Mwindu Lane, Off Kinondoni Rd. Po Box 22711. Dar Es Salaam, Tanzania

**Phone:** +44 203 873 1061

**Email:** [dfs@developmentfinancesummit.com](mailto:dfs@developmentfinancesummit.com)

## WE ARE

DFS Africa provides expert support to individuals and organizations. We support our clients to implement growth strategy, unlock value from their operations and assets, as well as realize benefits from complex projects.

Our range of investment and business advisory services include:

- Project & Infrastructure Financing
- Advisory Services to Private Equity Management Firms
- Strategic Advisory Services
- Financial Restructuring
- Private Placement of Debt and Equity
- Merger & Acquisitions Advisory Services
- Valuations and Fairness Opinions

OUR COMPANY ON



[dfsafrica.org](http://dfsafrica.org)