Addressing vaccine inequity: African agency and access to COVID-19 vaccines

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Abstract
The COVID-19 pandemic has had global consequences, both from a health and economic perspective. The African continent, although affected at a relatively low level in terms of official deaths and infections, has not been spared. While many expected the COVAX program—a joint initiative between the World Health Organization, Gavi (formerly the Global Alliance for Vaccines and Immunization), the Coalition for Epidemic Preparedness Innovations, and other non-profits and largely funded by the European Union—to provide two billion vaccines to developing countries, it failed to deliver more than half of the promised doses. This is largely due to vaccine hoarding by Western countries, which prevented African countries from placing their vaccine orders. Yet, this setback has not led African institutions and actors to stay inactive. This commentary investigates the question of access to vaccines in Africa and the agency exercised by African actors in this process. It shows that despite evolving in a constrained environment, several African actors, both at the national and regional level, have exercised agency by using a range of specific actions to address vaccine shortages. In doing so, this commentary aims to unpack the modalities and actions that have been carried out and adds to a growing literature on African agency in global relations.

Keywords  Global health · African agency · Vaccine access

1 Introduction
The COVID-19 pandemic struck the world in 2019 and has had extremely severe global consequences, both from a health and economic perspective. The African continent, although affected at a relatively low level in terms of official deaths and infections, has not been spared: the continent entered a recession in 2020, its first in 50 years. Although exit from the recession was quick in 2021, the continent’s
economic recovery is still vulnerable (World Bank 2021). African countries reacted quite swiftly to the first wave of the pandemic, enacting both health and policy responses. Despite the various challenges attached to these measures, a number of countries implemented total or partial lockdowns, and several others implemented a range of fiscal and monetary policies (United Nations Sustainable Development Group 2020). These included social policies meant to assist households and help firms and companies avoid layoffs and policies meant to sustain employment.

It is, however, not possible yet to talk about a post-COVID era, as the continent has not recovered from the pandemic and is still in the midst of it. There is a strong recovery in other parts of the world, like the US and EU and this thanks to the deployment of vaccines. In the United States, China, and the European Union, a large majority of the population is vaccinated. However, this is not the situation elsewhere in the world—especially not in Africa, where many countries still face serious difficulty accessing vaccines (Africa CDC 2022). Yet sustained recovery or exiting this situation depends both on vaccine deployment and investment, especially in the pharmaceutical manufacturing industry. While the World Bank projects a rebound in economic activity between 2021 and 2022, this does not imply a full recovery (World Bank 2021). The latter might take more time given that the pandemic has eradicated much of the progress that was being made, causing an increase in poverty and a decline in per capita GDP to the levels of 2013. Many African leaders have also called for a new health paradigm. As called for by Dr. Moeti of the World Health Organization Regional Office for Africa and Dr. Nkengasong of the Africa Centres for Disease Control and Prevention (Africa CDC), the new public health order for Africa would push the continent to produce its own pandemic response and health security commodities, vaccines, diagnostics, and therapeutics and build stronger national public health institutions. These structures would enable rapid responses to public health crises and increase Africa’s health workforce. As a continent of 1.2 billion people, Africa only has about 1900 epidemiologists, despite needing at least 6000 in this pandemic context. Domestic investment is also needed. In 2001, African leaders met in Abuja and said they would commit 15% of national government budgets to strengthening healthcare. This investment target has not been met, which explains the strong reliance on partnerships and external resources to fund healthcare (Soule and Toulmin 2021a, b).

While many expected the COVAX program—a joint initiative between the World Health Organization, Gavi (formerly the Global Alliance for Vaccines and Immunization), the Coalition for Epidemic Preparedness Innovations, and other non-profits and largely funded by the European Union—to provide two billion vaccines to developing countries, it failed to deliver more than half of the promised doses. This is largely due to vaccine hoarding by Western countries, which prevented African countries from placing their vaccine orders (Amnesty International 2021; Watkins 2021). Yet, this setback has not led African institutions and actors to stay inactive. On the contrary, under the leadership of the Africa CDC, several initiatives have been taken to address this shortage, limiting the damage caused by the lack of access to vaccines.

This commentary investigates the question of access to vaccines in Africa and the agency exercised by African actors in this process. It answers the following
questions: How have African actors, both state and non-state, addressed the shortage of vaccines induced by access limitation? In what ways have they been able to exercise agency to address these shortages in a constrained environment?

The theoretical definition of agency used throughout this paper is that of Obadare and Willems. According to them, “agency isn’t just a reactive opposition, mere ‘reaction’ to the actions of other agents” (Obadare and Willems 2014). Agency should be understood as a pre-meditated and targeted social or political action that takes place in a particular context. It thus involves an intentional action that seeks to resist and impede the constraints of a restrictive environment in which African actors cannot perform or arrange their lives as they would like to (Obadare and Willems 2014). This definition, which includes the multiple facets of agency, is used throughout this paper, as it allows for a better and more nuanced understanding of the issues related to vaccine inequity and how—and with what impact—African actors have variously addressed it.

The methodology used for this commentary is based on primary sources, such as vaccination data from around the world, global economic databases, publications from multilateral organisations, interviews with African actors engaged in vaccination efforts and with African economists, and secondary sources, such as reports by international non-governmental organisations on vaccine inequity, journal commentaries, and blog pieces.

This commentary is organized as follows: The first section lays out the limitations faced by African countries in accessing and purchasing vaccines. The second section investigates how partners such as China have engaged in so-called “vaccine diplomacy” with African partners, both in terms of donations and purchases. The last section explores in an in-depth manner the various ways by which African actors (both state and non-state) have addressed access to vaccines for their populations. Through this discussion, this commentary contributes to widening a literature that tends to focus more on problems—e.g., lack of access to vaccines and Africa being the least vaccinated continent in the world—than on regional initiatives that have been carried out.

2 Vaccine hoarding and lack of technology transfer by Western countries

The emergency induced by the pandemic has led to the rapid development of COVID-19 vaccines since 2019. Many believed that the effective development of vaccines and provision of vaccines as quickly as possible to as many people as possible would be the most effective way out of the health and economic crisis. Several companies, such as Pfizer, Moderna, and AstraZeneca developed these vaccines at

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1 Besides this specific definition of agency, several authors have written on African agency in global politics (for instance, see Beswick and Hammerstad 2013; Bilgin 2008; Brown 2006; Brown 2012; Brown and Harman 2013; Bruijn et al. 2007). Further, there is a growing literature on African agency in Africa-China relations (see Corkin 2013; Gadzala 2015).
record speeds. Many expected these companies and developed nations to participate in ensuring fair access to all, especially developing nations (Amnesty International 2021). Several initiatives were launched as efforts to pool resources. The COVAX Facility, as one of the most anticipated initiatives, functions as a global procurement and distribution mechanism through which available doses can be allocated to participating countries, mostly developing nations. Its aim was to make two billion doses available by the end of 2021 (GAVI 2021). Yet by the start of September 2021, only 243 million doses had been delivered to developing nations. The differences are stark when compared to vaccine distribution in rich and wealthy nations. By mid-2021, though over three billion doses of COVID-19 vaccines had been administered across the world, most had gone to rich nations, such as the US, EU members, and Israel, which together only have 14% of the world’s population.

According to Strive Masiyiwa, a leading businessman from Zimbabwe in charge of vaccine procurement for the African Union, COVAX’s inability to deliver on its promises is due to vaccine hoarding by rich countries. According to him, there is a deliberate global architecture of unfairness: while COVAX’s goal was to provide enough vaccines to vaccinate 20% of the population in poor countries, the companies in charge of producing the vaccines have banded together with rich nations to provide the latter with 70% of the global vaccine distribution (Ndlovu 2021). Although negotiations have pushed COVAX’s coverage to up to 30% of the population, the program has only delivered a fraction of the doses it was supposed to (Merelli 2021). Although the African Union had the finance to purchase vaccines and was willing to pay upfront without asking for donations, all the capacity for 2021 had already been sold (Soule and Toulmin 2021a). According to an Amnesty report, as of September 2021, Pfizer had allocated 98% of Pfizer/BioNTech deliveries and Moderna had allocated 88% of its deliveries to high- and upper-middle-income countries. In the case of Johnson & Johnson, 79% of its deliveries to date have been to high- and upper-middle-income countries, though planned deliveries to the African Union will drop this percentage to 53%. Only AstraZeneca has respected its commitment: only 34% of its deliveries have been delivered to high- and upper-middle-income countries, and most of the doses that have made it to COVAX have been AstraZeneca vaccines. Companies like Pfizer and Moderna have also charged high prices for their vaccines and allocated most of their scarce stock to wealthier countries, often for significant profit (Amnesty International 2021).

According to Masiyiwa, COVAX’s decision to procure vaccines primarily from the Serum Institute of India is fraught because the risks associated with sourcing from just one facility were too high. Moreover, many pharmaceutical companies have actively obstructed efforts to share their technology. Their decision not to share intellectual property through mechanisms such as the proposed World Trade Organization Trade-Related Aspects of International Property Rights (TRIPS) waiver has contributed to what Africa CDC has dubbed “vaccine apartheid” or “vaccine famine,” i.e., discriminatory measures that favour...
rich nations (Merilli 2021). In November 2020, a group of UN human rights experts warned that industry and private benefit cannot be prioritized over the rights to life and health of billions (Office of the High Commissioner for Human Rights 2020). Yet states and governments in wealthy nations did not take concrete measures earlier on to ensure global access to COVID-19 vaccines, leaving decisions linked to distribution in the hands of businesses.

In addition to vaccine hoarding, large pharmaceutical companies also have not acceded to demands made by African countries and led by South Africa and India for technology transfer. Instead, Pfizer and BioNTech have signed agreements with African manufacturers to “fill and finish” vaccines. Under these agreements, manufacturers such as South Africa’s Biovac handle the final stages of manufacturing for COVID-19 vaccines to be supplied exclusively to African nations (Mukherjee 2021).

Although such deals could help increase supply to a continent where severe vaccine shortages have resulted in only about 4% percent of people being fully immunized as of the end of 2021, they come with caveats that will significantly limit their impact at a time when fast-spreading COVID-19 variants, such as the Delta variant, have driven a surge in infections and hospitalizations and sent the continent into the most devastating phase of the pandemic (Health GAP 2021). Further, in what global health activists have denounced as an initiative to derail the WTO TRIPS waiver, the US administration has announced a $200 million investment in Aspen Pharmacare to expand the capacity to fill and finish Johnson & Johnson doses (Health GAP 2021).

To address the vaccine shortages described above, the exercise of agency by African actors has been multi-fold and diverse.

3 Exercising agency to address vaccine inequity: a combination of rhetoric, supply diversification, and regional institutional initiatives

In addition to voicing complaints through specific and targeted rhetoric, African leaders have also carried out targeted and specific actions in the particular context of vaccine scarcity for their populations. This joins with Obadare and Willems’ definition of agency as not just reactive opposition or mere “re-action” to the actions of other agents but as pre-meditated and targeted social or political action that takes place in a particular context. The exercise of agency thus involves an intentional action that seeks to resist and impede the constraints of a restrictive environment in which African actors cannot perform or arrange their lives as they would like to (Obadare and Willems 2014). The following sections explore in detail the three types of actions deployed by African actors in this particular historical and structural context.
3.1 Denunciation campaigns and the use of calibrated rhetoric

In the literature on agency, one type of agentic action often carried out by civil servants is the use of informational tactics. These consist of presenting arguments in support of their cause so as to enhance the likelihood of persuasion. These tactics are often executed through association with supposedly independent actors and by making normative and moral arguments that justify their position through denunciation (Kaarbo 1998). They also often use highly moral rhetoric. For instance, to denounce vaccine hoarding by rich countries, leading African regional leaders have employed rhetoric that denounces “vaccine apartheid” and “vaccine famine.” This rhetoric has been particularly used and diffused in global media by Dr. John Nkengasong, the head of Africa CDC, and other regional and global leaders, such as Winnie Byanyima, the director of the Joint United Nations Programme on HIV/AIDS, and Dr. Tedros, the director-general of the World Health Organization. The large-scale diffusion of this calibrated rhetoric has been reprised in both national and international media (Reuters 2021; Byanyima 2021). As these messages have diffused and rich nations have agreed to donate some of their excess doses, African leaders have led another campaign to denounce the charity discourse displayed by mostly Western donors and emphasize the distinction between lack of access to vaccines and lack of access to purchase vaccines, the latter being one of the main reasons for Africa’s current under-vaccination. Led mostly by figures like Strive Masiyiwa, this denunciation campaign aims to highlight the continent’s initial capacity to purchase and its denied access to purchase due to unfair agreements between rich countries and vaccine manufacturers.

3.2 Supplying vaccines from other partners

Vaccine scarcity and the shortcomings of COVAX have led several African leaders to seek other supply sources. With China’s development of several vaccines, including Sinovac, African and Chinese leaders have proactively explored ways to supply African countries with Chinese-made vaccines. As of March 2022, African countries have purchased 196 million doses from China, which has pledged an additional 69 million doses as donations (Bridge Consulting 2021). Senegal, one of the first countries to receive 300,000 vaccines as a donation from China, was able to start its vaccine rollout following the purchase of the first batch of 200,000 vaccines from Sinopharm (Bridge Consulting 2021). President Macky Sall became the first West African leader to publicly get vaccinated with a Chinese vaccine. China has supplied vaccines to 46 different African countries. For China, the objective is two-fold: first, to keep Xi Jinping’s initial promise to make the vaccine a global public good and contribute to tackling the global pandemic (and to do so via donations); and second, as a way to sell vaccines produced by its manufacturers (Ministry of Foreign Affairs of the People’s Republic of China 2021).

When several African countries were grappling with brutal second and third waves of the pandemic, many expanded the range of vaccines used across the continent to include Sinopharm and CoronaVac, two Chinese-made vaccines. Beyond
direct donations from China amounting to US$15 m in November 2021, several African countries have decided to buy vaccines. Senegal and Zimbabwe started their vaccination campaigns in February 2021 after respectively receiving donations of 100,000 and 200,000 doses from Sinopharm via the Chinese government. Cameroon also began inoculating its population in April 2021 with a donation of 200,000 Sinopharm vaccines. Following these donations, Zimbabwe purchased additional doses. In Zimbabwe, more than 90 percent of COVID-19 vaccines have been supplied by China, and on July 8th, 2021, the country received another two million Sinovac vaccines (China Daily 2021). South Africa, Africa’s hardest-hit country in terms of COVID-19 cases and deaths, also approved the use of CoronaVac in July 2021 via the South African Health Products Authority. Further, the South African minister of health has decided to add CoronaVac to the country’s vaccination program (in addition to doses from Pfizer and Johnson & Johnson) (South African Health Products Regulatory Authority 2021).

Inequal access to vaccines highlights a lack of manufacturing factories for vaccine production on the African continent. In addition to supplier diversification, several African countries have decided to sign agreements with Chinese manufacturers to produce vaccines locally. Many African leaders have called for expanding investment in African health systems and increasing the capacity of African countries to manufacture vaccines on the continent. Manufacturing factories funded by China were launched in Egypt in 2021 with an estimated annual production capacity of 80 million Sinovac vaccines. In addition, another factory is being set up in Morocco via Sothema, a local pharmaceutical firm that has signed an agreement to start local monthly production of five million doses of Sinopharm. After it meets domestic demand, Egypt says it will look at exporting Sinovac to other African countries (Africa CDC 2021).

China is not the only partner providing support and supplies for vaccines and vaccine manufacturing on the continent. Several African countries, such as Guinea, have also turned to Russia to buy doses of the Sputnik V COVID-19 vaccine. Senegal succeeded in being the first African country to leverage support from European countries (Germany, France, and Belgium), the European Commission (via Team Europe), and other partners, including the United States and the World Bank, for the construction of a facility for manufacturing vaccines against COVID-19 and other endemic diseases. Overall, several efforts are being made to ramp up the production of COVID-19 vaccines in Africa. As of September 2021, at least twelve production facilities are being set up or are in the pipeline. These production facilities will manufacture vaccines including Pfizer, Johnson & Johnson, Sinovac, Sinopharm, and Sputnik V (Usman and Ovadia 2021).

The shortcomings of COVAX have also led African regional institutions to set up early on their own initiatives to address vaccine inequity.

### 3.3 Building parallel regional initiatives for alternative vaccine sourcing

As Dr. John Nkengasong put it in an interview, while the COVAX mechanism was being set up and hailed as the ultimate solution to providing vaccines to the
African continent, he cautiously spearheaded the formation of the African Vaccine Acquisition Task Team (AVATT) as a parallel yet complementary initiative. The initiative was not well received by foreign donors, who questioned the necessity of such an initiative since COVAX was already supposed to be the main mechanism (Soule and Toulmin 2021a). The launch of the task team also created a great deal of misinformation and confusion in the minds of ministers of health and finance in Africa, some of whom did not understand why they should also buy vaccines from AVATT. Yet as of October 2021, AVATT had secured 400 million doses of vaccines, whereas COVAX had supplied the continent with only 30 million doses for 44 countries—despite written notification that it would supply 350 million doses by then. The early establishment of AVATT despite contestation from external actors hence allowed African countries to secure vaccine supplies and to advance their vaccination campaigns.

Another regional initiative is the Africa Medical Supplies Platform (AMSP), a platform for ordering commodity supplies with standardized prices (Africa Medical Supplies Platform 2022). This initiative was also welcomed with criticism by foreign partners, who pointed to already existing platforms like the United Nations Children’s Fund’s platform for distribution, and interrogation by the World Bank, which questioned its necessity given that foreign partners are also able to supply African countries. The third regional initiative is the African Union COVID-19 Response Fund, which mobilizes resources and uses them to support countries most in need. Africa CDC launched the partnership to scale-up COVID-19 testing (African Union 2022). Resisting pushback from foreign partners has been a way to exercise agency and pursue the launch of Africa CDC’s initiatives. At the launch of the AMSP initiative, Africa—a continent of 1.2 billion people—had conducted only 350,000 COVID-19 tests. As of October 2021, the AMSP has allowed for the conduct of 90 million COVID-19 tests on the continent (Soule and Toulmin 2021a).

Other initiatives include associations with the private sector, such as the mVacciNation digital toolbox. Regional institutions including the African Union Development Agency (AUDA-NEPAD) established partnerships with Vodacom, MTN, Orange, and several African start-ups for the mVacciNation solution. The objective of this solution is to help African Union member states effectively manage their COVID-19 vaccine delivery programmes, monitor vaccination campaigns, and update digital records (African Union Development Agency 2022).

Despite the fact that the African continent is still largely under-vaccinated, these initiatives have allowed for the exercise of agency in a collective way and shown the advantages of coordinated collective regional efforts and leadership.

### 4 Conclusion

This commentary has investigated the question of access to vaccines in Africa and the agency exercised by various African actors in this process. It has shown that despite evolving in a constrained environment, several African actors, both at the national and regional level, have exercised agency by using a range of specific actions to address vaccine shortages. While Africa’s vaccine shortage has been
partially addressed, the continent is still the least vaccinated in the world. However, according to Dr. Ibrahim Mayaki, CEO of the African Union Development Agency, the important point is that these actors and the actions they have taken have given concrete substance to the concept of regional integration. Discussion and reflection on African integration usually revolves around investment in physical infrastructure, but in this particular situation and in response to the pandemic, discussion and reflection on African integration has been based on regional integration (Soule and Toulmin 2021c). The pandemic has thus shown that African countries can use the same kind of agency in other domains beyond immediate health issues and has also paved the way for new reflections for African institutions.

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