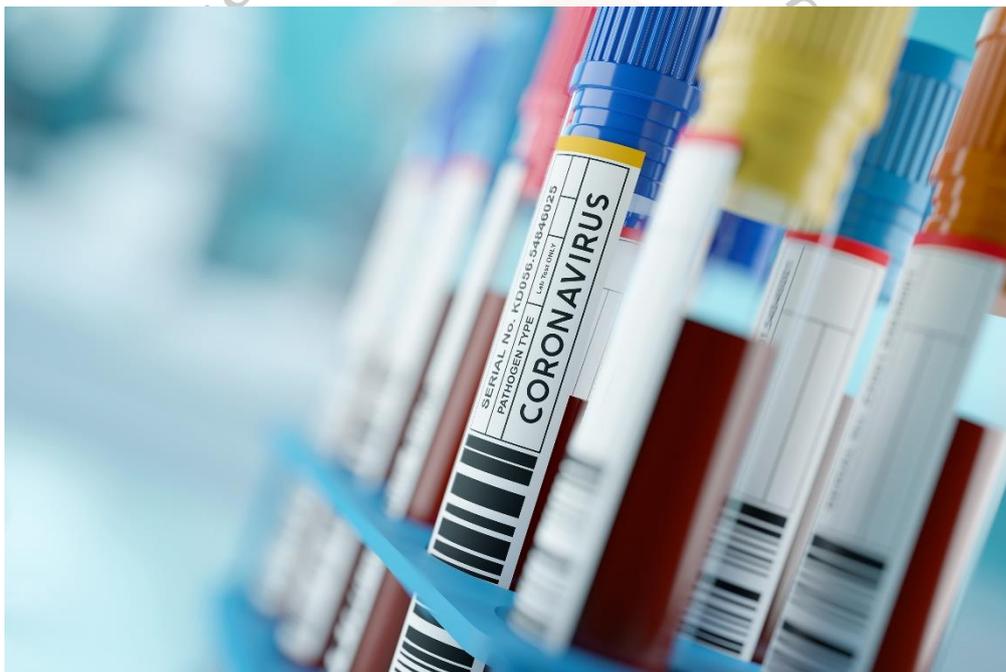




**World Customs Organization
East & Southern Africa Region
Regional Private Sector Group**

An overview of the Covid-19 vaccine uptake in Africa

September 2021



Region



About

This paper contains an overview of the current situation related to the Covid-19 vaccine uptake in Africa.

Africa is far from reaching its goals towards herd immunity and faces unique challenges. Fortunately, private-public partnerships, coordination, and cooperation among key stakeholders have proven to be critical factors in the success of vaccine rollout projects globally. Many innovative public-private partnership projects in Africa have been established and built to serve the continent and industry for years to come. In addition, the World Customs Organization (WCO) was quick to identify the key role that Customs Administrations must play, creating comprehensive online guidance on the processes and policies required to ensure that vaccines and ancillary products are distributed as quickly and as safely as possible.

Whilst there is no one size fits all solution to this challenge, there are several steps that can be taken. The WCO created a dedicated website to assist Customs authorities across the globe on the measures they need to take to facilitate the export and import of vaccines and related products. Entitled the *“Role of Customs in facilitating and securing the cross-border movement of situationally critical medicines and vaccines”* (WCO, 2021), the document lays out the steps that Customs Administrations and Ministries, Departments, and Agencies (MDA) need to take to ensure that efficient and optimized border processes are in place. These processes aim to assure safe and swift delivery of vaccines and associated products to their ultimate destination. Many of the steps needed were already covered in the existing global trade and customs tools and recommendations, such as the Immediate Release Guidelines (IRGs) and the Revised Kyoto Convention (RKC)¹.

Subsequently, this paper contains proposals to the World Customs Organization (WCO) to further promote the Covid-19 vaccine uptake and distribution and logistics efforts. In addition to the practical efforts of the WCO, there is a need, especially among African countries and regulatory authorities, to be made aware of the WCO tools and measures to facilitate a successful Covid-19 vaccine rollout. Furthermore, the WCO should help alter the mindset of vaccine hesitancy amongst citizens by voicing the need and benefits of being vaccinated.

1. The current situation around Covid-19 vaccine rollout in Africa

According to the World Health Organization (WHO), only 75% of Covid-19 vaccine doses received in Africa were administered. A total of 176,403,343 vaccine doses have been received in 52 of the 55 countries across Africa. Furthermore, 47 countries received over 65 million vaccine doses from COVAX, 22 African countries received more than 3 million vaccine doses from AVATT, and just over 108 million doses were received by 44 African countries bilaterally².

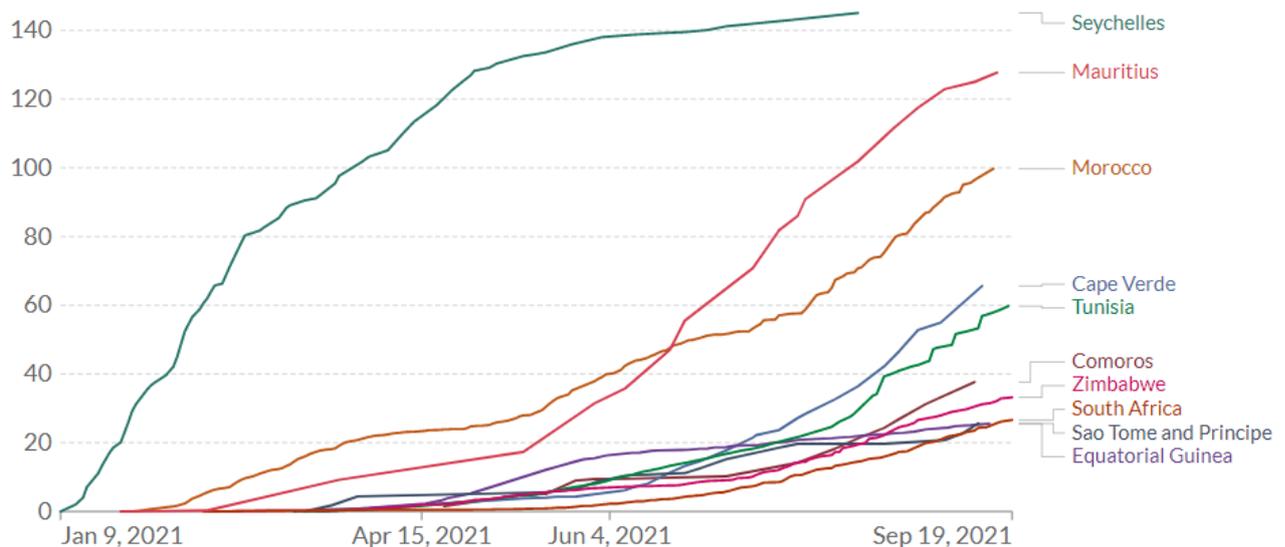
¹ World Customs Organization. 01/05/2021. [Role of Customs in facilitating and securing the cross-border movement of situationally critical medicines and vaccines. 2nd edition](#)

² World Health Organization. 20/09/2021. [Africa COVID-19 Vaccination Update](#)



Regrettably, these figures portray the unfortunate reality which low-income countries face in their fight for herd immunity. According to the WHO, the target of fully vaccinating 10% of the total population in Africa by the end of September has not been achieved. Unless supplies drastically improve, there will be some distance still to be gained to reach this target. Currently, around 3% of Africa's population is fully vaccinated, compared to 54% in high-income countries such as the US and 65% in the UK. Furthermore, WHO data shows that only 12 African countries have hit the target of a 10% fully vaccinated population. Many of the larger countries with the poorest populations are lagging far behind.³

Figure 1: The top 10 countries measured by the number of Covid-19 vaccine doses per 100 people in Africa as of 21 September 2021⁴:



Source: [Our World in Data](#)

2. Reasons for the lack of supply of Covid-19 vaccines in Africa

Initially, most African countries received their Covid-19 vaccines under the COVAX scheme, primarily sourced from the Serum Institute of India (SII), currently the world's largest Covid-19 vaccine producer. However, India was forced to restrict and ban exports of the vaccine due to a surge in positive cases, which halted overall production. While some producers were still in the development phase of producing vaccines, wealthier nations signed prospective deals for vaccine supplies. This approach ultimately made it exceptionally harder for the COVAX scheme, the African Union, and other countries to secure vaccine supplies.

In early September 2021, a COVAX statement on supply forecasts for the rest of this year and early 2022 indicated that it was reducing its estimate of the number of doses it expects to receive. This

³ Peter Mwai. 10/09/2021. [Covid-19 Africa- What is happening with vaccine supplies?](#)

⁴ Statista. [Number of administered coronavirus \(COVID-19\) vaccine doses per 100 people in Africa as of September 11, 2021, by country](#)



change was due to various reasons, including export restrictions and ongoing uncertainty around the resumption of exports from the Serum Institute of India (SII), a key supplier for COVAX. Challenges in scaling up the capacities of manufacturing sites that supply COVAX specifically affect the supply of Johnson & Johnson (J&J) and AstraZeneca (AZ) vaccines. Additional challenges include the lengthy time taken and the likelihood of obtaining regulatory approval for candidates produced by Novavax, SII-Novavax, and Clover, with WHO Emergency Use Listing (EUL) or approval by a Stringent Regulatory Authority (SRA) required for the supply to COVAX participants⁵.

Apart from these obstacles, most African countries face unique challenges, further hampering their chances of securing sufficient Covid-19 vaccine supplies. Most of the vaccines received in Africa consist of donations from international or neighbouring countries close to reaching their expiry date. Obstructed distribution capabilities, characterized by limited financial and infrastructural resources, have forced many African countries to dispose of these vaccines, as they could not administer them in time. This situation has become especially evident considering the unique storage, temperature requirements, and travel requirements. In addition, many rural communities are situated far away from available commercial storage and distribution facilities and infrastructure. Other challenges include the effects of some African countries not preparing adequately enough before obtaining the vaccines and vaccine hesitancy among African citizens⁶. In addition, some countries did not have sufficiently documented operational procedures on hand and did not include the private sector at early planning stages and other rollout management planning.

3. Africa moving in the right direction

It is worth mentioning the milestones that Africa was able to overcome due to strong cooperation and coordination among all key stakeholders, especially with the help of the WHO and WCO. Thus, for example, a solution exists even though a recurring Covid-19 vaccine supply imbalance exists between wealthy and unwealthy countries. In addition, the adaptation of modern, digital risk-based customs and related clearance processes has helped some countries ensure that essential medical supplies, personal protection equipment (PPE), and essential goods reach their destination on time. Furthermore, at the same time, the digital management of clearance processes protected the health of Customs officers, transporters and importers and exporters alike by avoiding unnecessary physical contact (Steven Pope, DHL 2020).

Intellectual property rights and patents may potentially hinder the timely provisioning of affordable medical products to patients. In addition, developing countries may face institutional and legal difficulties when using flexibilities available in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). A particular concern for countries with insufficient or no manufacturing capacity is the requirements of Article 31*bis* and, consequently, the cumbersome and lengthy process for importing and exporting pharmaceutical products. Subsequently, India and South Africa requested a waiver from the implementation, application, and enforcement of Sections 1, 4, 5,

⁵ COVAX. 8/09/2021. [COVAX Global Supply Forecast](#).

⁶ BBC News. 8/06/2021. [Covid-19 vaccines: Why some African states can't use their vaccines](#)



and 7 of Part II of the TRIPS Agreement in October 2020⁷. At a Council for Trade-Related Aspects of Intellectual Property Rights (TRIPS) meeting on 20 July 2021, WTO members agreed to continue considering the proposal for a temporary waiver of certain TRIPS obligations in response to Covid-19 and other related proposals. The next formal meeting of the Council is scheduled for 13-14 October 2021⁸.

In addition, the WHO and COVAX urge countries with enough supplies to meet domestic needs, to give up their place in the queue for COVAX supplies, make supply schedules transparent, and continuously expand, accelerate, and systemize vaccine dose donations⁹. Furthermore, in early August this year, it was announced that another 400 million J&J vaccine doses were secured via AVATT to the African Union Member states and the Caribbean¹⁰. Another milestone is developing the first technology transfer hub for mRNA vaccines in Africa, established in South Africa¹¹.

Furthermore, in South Africa, mobile clinics helped to increase the Covid-19 vaccine uptake. Mobile vaccination efforts are widely occurring, and more are planned to reach specific populations, including underserved, high-risk groups, essential workers, and rural communities. These mobile sites have been strategically placed to reach the most vulnerable people, those travelling periodically to the city and queuing to receive social grants, for example¹². Another recently launched initiative was the new Transnet health train, which focused on bringing Covid-19 vaccines to remote communities and those with limited medical resources¹³.

These and many more success stories during and after the pandemic could not have been possible without establishing key private-public partnerships, especially in terms of cold chain innovation for Covid-19 vaccine transport and distribution across Africa. An example of innovations is the Africa Centre of Excellence for Sustainable Cooling and Cold Chain (ACES). This project operates out of the University of Rwanda. It aims to establish and maintain an effective African cold chain that will link the continent's logistics providers and farmers with experts and investors. Another success story comes from the previously devastating Ebola outbreak, where the "Arktek's Cold Storage Device" was created and introduced to Sierra Leone in 2014. The device is small and compact and acts like a super-thermos that can maintain temperatures of up to -80°C - without using any batteries, electricity, or solar panels, making it ideal for transporting vaccines to far-to-reach communities¹⁴.

PEG Africa, which builds solar-powered off-grid solutions for the rural West African market, collaborates with Power Africa, a public-private partnership facilitated by international agency USAID, (to provide solar-powered systems to off-grid clinics in Africa. In addition, a Nigerian start-up company called Grid designed solar-powered smart cold boxes and is in the process of acquiring Performance,

⁷ World Trade Organization. 2/10/2020. Council for Trade-Related Aspects of Intellectual Property Rights. Waiver from certain provisions of the TRIPS Agreement for the Prevention, Containment and Treatment of Covid-19. [Communication from India and South Africa.](#)

⁸ World Trade Organization. 20/07/2021. [TRIPS Council agrees to continue discussions on IP response to COVID-19](#)

⁹ COVAX. 8/09/2021. COVAX Global Supply Forecast.

¹⁰ reliefweb. 5/08/2021. [Africa announces the rollout of 400m vaccine doses to the African Union Member States and the Caribbean](#)

¹¹ World Health Organization. 17/09/2021. [Towards Africa's first mRNA vaccine technology transfer hub](#)

¹² DW News.16/09/2021. [COVID-19 in South Africa: Mobile clinics used to increase vaccine uptake](#)

¹³ SACoronavirus. 20/08/2021. [Inside South Africa's new vaccine train](#)

¹⁴ Leah Ngari. [Public Private Partnerships Driving Cold Chain Innovation for COVID Vaccine Transport in Africa](#)



Quality, and Safety (PQS) certification from the WHO. These initiatives will serve the continent long after the pandemic is managed¹⁵.

4. What is left to do?

The WCO has achieved progress in establishing and promoting a Covid-19 vaccine action plan, and the information has been vital, and the application of the suggestions is very successful. Countries have managed to align themselves with the proposed measures and reap the benefits of establishing stronger coordination with relevant regulatory and government agencies, prioritizing and facilitating the clearance of situationally critical medicines and controlling and safekeeping Covid-19 vaccines, including correct temperature storage. Furthermore, in terms of border management, especially for landlocked countries such as those in Africa, establishing coordination groups and promoting strategic communication between stakeholders helped expedite vaccine rollout efforts and prevent the illicit trade of vaccines or the risk of counterfeits.

It has also clearly been demonstrated the advantages of implementing the recommended standards and practices, and policies as envisaged by the Revised Kyoto Convention, the Immediate Release Guidelines, and the Trade Facilitation Agreement. However, stakeholder management, digitalization, coordinated border management, and risk-based controls are essential elements of ensuring that border processes are as simple and effective as possible and one of the critical potential hindrances to the continuation of the implementation.

As we have seen from the success stories originating from private-public partnerships, it would be beneficial to promote further the importance of taking the Covid-19 vaccine and establish innovations and techniques that could further facilitate vaccine uptake in low-income countries. In addition, efforts should establish more mobile vaccine clinics to reach rural communities that cannot afford to travel to commercial establishments offering vaccines in urban areas.

The battle for herd immunity in Africa is still far from over. Therefore, the WCO must continue with capacity-building efforts in terms of facilitating Covid-19 vaccine rollout projects. The WCO must ensure that the necessary tools and information regarding customs and trade facilitation reaches all ears, especially considering that many African countries are still to carry out huge vaccine rollout projects in the months to come. With their unique challenges, many African countries struggle to get the correct and necessary information and resources needed to expedite or adequately plan and manage such a project. In addition, many citizens are unaware of or are hesitant to take the Covid-19 vaccine. Thus, using WCO leaders to promote the administration of Covid-19 vaccines and the associated benefits will help increase vaccine uptake.

It is also vital to continue voicing the milestones and the lessons learned from those countries which used the WCO measures to facilitate their vaccine rollout. Successful implementation of COVID-19 vaccinations also requires accurate and synchronized logistics supply chains and patient management. Target images include maximum safety for patients, targeted prioritization of risk groups, fastest

¹⁵ Leah Ngari. [Public Private Partnerships Driving Cold Chain Innovation for COVID Vaccine Transport in Africa](#)



possible implementation of vaccinations and related campaigns, and minimal additional burden for medical staff. Some success factors for consideration include:

1. Patient management

- Coordinated outreach to the population based on defined criteria (national vaccination strategy)
- Online appointment scheduling
- (Digital) registration process (e.g., via personal QR code)
- Traceability of vaccines administered at a personal level
- Reliable scheduling for a second vaccination

2. Logistics supply chain

- Guaranteed compliance with cold chain
- Best-practice processes and experienced staff
- Complete data transparency and documentation on real-time stock levels and location
- Security measures along the supply chain
- Minimal transfer points (error potential) and clear responsibilities
- Reliable delivery options within given time frames
- Optimal alignment with medical process and flexibility to adapt to changing medical requirements

Ultimately all efforts should be pulled together to spread knowledge about the disease, the vaccine, and how to effectively carry out a vaccine rollout so that no more lives are lost and precious vaccines destroyed or allowed to expire

The Covid-19 pandemic has shown that customs and regulatory authorities can no longer work in isolation and silos. Working collaboratively to overcome the challenges of expediting the clearance of essential medical equipment and supplies is necessary. This approach has been a major topic of discussion for some time. However, despite positive overtures from countries and international organizations, the discussion never extended beyond initial exploration in many countries. The African Medicines Regulatory Harmonization (AMRH) initiative is one good example of an attempt to increase access to good quality and safe medicines through harmonizing medicine regulations. The WHO is the initiative's lead partner on developing common technical standards, tools, and processes in line with international standards such as those of the International Conference on the Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use.

The pandemic has given everyone involved in global trade the opportunity to accelerate necessary change with demonstrable results. The WCO – engaging with stakeholders such as the WHO, WTO, and ICC – has set out the map of a journey that can only continue and accelerate with the involvement of all key stakeholders to ensure movement in the right direction.