

### EMERGING MARKETS: Covid-19 Vaccination Strategies and Challenges

Our Covid-19 vaccination table includes updated information on the immunization strategies selected EMs are pursuing and the challenges they face.

Below are some of this week's key developments. Please do not hesitate to contact us if you want to discuss any of the countries mentioned in more detail.

Click on 'View PDF' to see the table.

### **HIGHLIGHTS**

#### Vaccine roll-out

- Africa is quickly falling further behind in the global vaccine race, with just over 1% of the population vaccinated to date.
- Colombia has reported a vaccine wastage rate of only 0.04% (or fewer than 800 doses out of 6.3mn administered so far), easing concerns about logistical difficulties affecting the vaccine roll-out, especially in more remote and/or higher temperature regions.
- In **Chile**, the medical union (*Colegio Medico*) has questioned the value of any local "vaccine passport" because the effectiveness of the widely-applied Sinovac vaccine at reducing transmission is relatively low at 60%.
- **Hungary**'s vaccine roll-out is slowing as the share of the population that has received at least one jab is approaching 50%. Public demand for AstraZeneca (AZ), Sinopharm and Sputnik V vaccines appears low.
- Indonesia's Health Minister reported high effectivity of China's Sinovac vaccine; according to Health Minister Budi Gunadi Sadikin, protection from death was 100%, while the risk of severe infections requiring hospitalization decreased by 96%.
- Poland will shorten the period between administering the first and second dose of Pfizer-BioNTech, Moderna and Vaxzevria vaccines to 35 days starting 17 May. Currently, the gap is 42 days for Moderna and Pfizer-BioNTech vaccines and 82 days for AZ.
- The **Thai** government is considering focusing its vaccinations on Bangkok and other major cities, both to help the economy and on the assumption that transmission risk is highest in these areas.

#### Vaccine procurement

 African countries that have received their first COVAX deliveries are expected to experience a supply gap as early as May or June as a result of India's export restrictions. Officials hope that the WHO's approval of the Sinopharm-produced vaccine may pave the way for COVAX to secure additional vaccine supplies from China.

- The first vaccines from **Argentina** and **Mexico**'s joint production of the AZ vaccine are expected to be ready by the end of May; the two countries in 2020 reached a production agreement to supply Latin America (except Brazil) with vaccines.
- In Brazil, 32.9mn doses of Covid-19 vaccines are expected to be delivered in May 27% more than in April. Uncertainty
  over the import of Coronavac's active pharmaceutical ingredient (IFA) from China, however, may affect the vaccination
  roll-out from June onwards.
- The World Health Organization approved **China's** Sinopharm vaccine for emergency use and is likely to do the same for Sinovac in the coming days. These approvals will clear the way for these vaccines to be included in COVAX.
- Nigeria announced plans to procure 29.6mn doses of the Johnson & Johnson (J&J) vaccine through the African Union's African Vaccine Acquisition Task Team (AVATT). This would be the first major batch of vaccines procured outside the COVAX framework, through which Nigeria had received an initial delivery of 3.9mn doses of the Astra Zeneca vaccine on 2 March. Unlike with COVAX, Nigeria will have to pay for procurements via AVATT.

#### Infections and new variants

- In **South Africa**, the first signs of a potential 'third wave' are emerging, alongside the first confirmed cases of the B.1.617.2 and B.1.1.7 variants. The same variants have also been detected in **Kenya** and elsewhere across Southern and Eastern Africa.
- Official infection rates across **sub-Saharan Africa** remain relatively low (not least due to limited testing), but concerns about an "India scenario" are emerging amid a proliferation of variants.
- **Taiwan** re-imposed limits on crowded gatherings amid fear that low vaccination rates could lead to renewed outbreaks. Indoor gatherings are limited to fewer than 100 people, while outdoor events are capped at 500 for four weeks beginning on 11 May.

#### Vaccine diplomacy

- Fosun Pharmaceutical, a privately-owned **Chinese** company, struck a deal to form a USD 200mn joint venture with **Germany**'s BioNTech to build a factory in China capable of producing 1bn doses of the Pfizer-BioNTech vaccine. The deal suggests that Chinese authorities may see non-Chinese mRNA vaccines as preferable to Chinese inactivated virus vaccines in the long run.
- **Peru**'s government has been lobbying the Joe Biden administration to release some of its surplus stock of vaccines to Peru; the surplus mainly comprises AZ vaccines that have not yet received FDA clearance.
- **Russia**'s Ministry of Health registered on 6 May an export-oriented Sputnik Light vaccine. A one-component vaccine will be produced by nine facilities in Russia and is expected to be rolled out by the end of 2021.
- The US government has announced its backing for an Intellectual Property (IP) protection waiver for Covid-19 vaccines at the World Trade Organization (WTO) – an initiative spearheaded by India and South Africa – but Europe's leaders have pushed for increased vaccine production and exports instead.

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### **Emerging Markets Covid-19 Vaccination Strategies and Challenges**

### Rating of countries' vaccine roll-out (as of 12 May 2020):



Between 0% and 1% of the total population have received at least one Covid-19 vaccine dose Between 1% and 10% of the total population have received at least one Covid-19 vaccine dose More than 10% of the total population have received at least one Covid-19 vaccine dose

	Vaccination strategy	Current state of vaccine roll-out	Procurement
Israel	Virtually all high-risk adults have been vaccinated.	Israel has the highest vaccination rate in the world, with more than 121 doses per hundred people. 59% of the population has been fully vaccinated. However, only 3% of Palestinians in the West Bank and Gaza have been vaccinated.	Pfizer-BioNTech – Israel is administering the Pfizer vaccine, in exchange for giving Pfizer extensive patient data. Moderna – Israel plans to vaccinate about 100,000 Palestinian workers with the Moderna vaccine. The Palestinian Authority has received more than 310,000 doses: 100,000 Sinopharm, 97,000 AZ, 70,000 Sputnik, 37,000 Pfizer-BioNTech and 2,000 Moderna.
UAE	Emirati citizens, their domestic workers, elderly, sick, and those in health and education are eligible for vaccination without appointment. Other residents eligible for vaccination free of charge.	As of 10 Mayr, about 11.2 mn shots have been administered (113% of population). The UAE has not reported how many are fully vaccinated since February. Third shots of Sinopharm drug are being given for those with low levels of antibodies. Dubai has emphasized the Pfizer vaccine, Abu Dhabi the Sinopharm vaccine.	<b>Sinopharm</b> and <b>Pfizer-BioNTech</b> are the two approved vaccines. UAE signed agreement to produce Sinopharm domestically.
Chile	Target to vaccinate 5mn people (ca. 26% of population) by end-Q1/2021 has been met. Next target is to vaccinate 15mn people (80% of population) by end H1/2021, which is on track; vaccinations currently being administered to people over the age of 35. Medical workers first to receive vaccinations, followed by elderly in care homes; over 65s; key workers in public bureaucracy; people with other co-morbidities.	Pfizer vaccinations started in late Dec but mass campaign using China's Sinovac vaccine started 3 Feb. As of 10 May, 8.6mn people (45.4% of population) have received one vaccine dose and 7.1mn (37.5% of population) have received a double dose.	Pfizer-BioNTech – agreement for 10mn doses; Sinovac – agreement for 60mn doses over three years; AZ – agreement for 14.4mn doses. COVAX – agreement for 8mn doses; first delivery of 160,000 AZ doses arrived late- April. CanSino – agreement for 1.8mn doses, with first delivery expected by end- May. Local regulatory approval for J&J and Sputnik V vaccines pending.
Hungary	Vaccination is available to all citizens as well as foreigners living in Hungary. Vaccinations (only with Pfizer-BioNTech vaccine) for 16-18-year- olds are also available as of 10 May.	Vaccination started on 26 Dec. As of 11 May, 4.35mn people (44.7% of population) have received at least one jab and 2.53mn (26%) got both shots. The pace of vaccination has been slowing down in May and demand for AZ, Sinopharm and Sputnik V vaccines is low.	Procurement contracts and deliveries as of 11 May via the EU's joint mechanism: AZ – 6.5mn doses (1.1mn delivered) Moderna – 1.7mn doses (432,200 delivered). Pfizer-BioNTech – 10.9mn doses (3.2mn delivered). J&J – 4.4mn doses (52,800 delivered). CureVac – 500,000 doses. National-level procurement: Sputnik V – 2mn doses (2mn delivered). Sinopharm – 5mn doses (3.3mn delivered).
Singapore	Currently, seniors, healthcare and frontline workers nominated by their employers are eligible for vaccination. The vaccination of those 45 years old is ongoing. By the second half of May, the government expects to start vaccinating those below 45.	As of 9 May, 3mn doses have been administered, of which 1.8mn (31%) have received one dose and 1.2mn (21%) have received both shots. The goal is to complete all immunizations by the end of the year.	The government has concluded agreements with three suppliers, with undisclosed quantities: <b>Pfizer-BioNTech</b> , <b>Moderna</b> and <b>Arcturus</b> . However, it is looking for additional supplies in anticipation of possible shortfalls.

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Poland	Adults of all age groups are allowed to register for a Covid-19 jab. Vaccination is available for employees of large companies (300+ people).	Vaccinations started on 27 Dec. As of 11 May, 10.4mn residents (27.2% of population) received a first jab and 3.5mn (9.3%) had both shots. Government aims to administer 14mn doses during Q2 (in total 20mn doses in H1). The pace of vaccination has been increasing in early May.	Procurement exclusively via the EU. Overall, around 100mn doses contracted. As of 11 May,16.8mn vaccine doses delivered. Expected delivery of at least 15mn shots within Q2.
Greece	Currently vaccinating people aged over 30. The government's target is to deliver 5.4mn vaccines in total by the end of May, meaning around a third of Greeks would have received at least one jab. It hopes that half the population will have received at least one dose by end-June.	As of 10 May, Greece had administered 3.7mn vaccines. Of those vaccinated so far, 2.5mn (23.4% of population) have received at least one jab, while 1.2mn (11.7% of population) have received both doses. The vaccination in the over 80 group remains relatively low – 63.1% of them have received at least one dose against an EU average of 78.7%.	Greece is using the <b>Pfizer-BioNTech</b> , <b>AZ</b> , <b>Moderna</b> , and <b>J&amp;J</b> jabs and is bound to the EU's procurement process. By end May, Greece expects to receive 2.1mn doses of the <b>Pfizer-BioNTech</b> vaccine, 450,000 of <b>AZ</b> , 345,000 of <b>Moderna</b> , and 300,000 of <b>J&amp;J</b> . For June, Greece is expecting 2.4mn from <b>Pfizer-BioNTech</b> , 308,000 from <b>Moderna</b> , 960,000 <b>J&amp;J</b> and roughly another 450,000 from <b>AZ</b> .
Czech Republic	Priority is given to frontline medical staff, followed by care home residents and employees; elderly; teachers; persons with chronic illnesses; critical infrastructure workers. On 10 May, vaccination opened for the 45+ age group.	Vaccinations started on 27 Dec. As of 11May, 2.7mn residents (27.5% of population) have received a first jab and 1.05mn (9.8% of population) got both shots. Nearly 79% of immunizations carried out with <b>Pfizer-BioNTech</b> vaccine; 10.9% with <b>AZ</b> ; 9.8% with <b>Moderna</b> and 0.4% with <b>J&amp;J</b> .	Procurement has been conducted exclusively via the EU. As of 11 May, 3.7mn doses of vaccines delivered. <b>Pfizer-BioNTech</b> and <b>Moderna</b> – 3.3mn delivered out of 12mn doses ordered <b>AZ</b> – 405,051 delivered out 3mn doses ordered. <b>J&amp;J</b> – 16,501 delivered out of 2mn doses ordered. <b>CureVac</b> – 1mn doses ordered.
Turkey	Vaccination program divided into four stages, starting with medical personnel, pharmacy workers and the over 65s, followed by members of the security forces, teachers, those working in the food industry and transportation, and then Stage 2, the 50-64 age group. On 19 Apr, Turkey began vaccinating Group B2 of Stage 2, comprising people in the 55-59 age group. Next will be Group B3 of Stage 2, those in the 50-54 age group.	Vaccine roll-out started on 13 Jan with Sinovac. On 2 Apr, vaccinations also began with the Pfizer-BioNTech vaccine. As of 11 May, 25.26mn doses had been administered, with 14.68mn (17.6% of population) people receiving a first dose and 10.58mn (12.7%) receiving two doses. However, a shortage of vaccine has meant that the pace of vaccination has slowed since the beginning of May.	Sinovac – approved by regulator and roll- out started; agreement for 100mn doses, of which 26mn delivered by 11 May. Pfizer-BioNTech – approved by regulator and roll-out started; agreement for 90 mn doses, with 4.5mn delivered by 11 May, another 25mn due by end-Jun. Sputnik V – approved by regulator; agreement for 50 mn doses with the first deliveries expected in Jun. Turkey has not joined COVAX.
Saudi Arabia	All Saudis over 16 are now eligible. Foreign workers in Saudis' homes, food services, and personal grooming will require vaccinations by mid-May to retain work permission. All public and private sector workers will require vaccinations to return to work.	Vaccinations reportedly started in Dec. As of 10 May,10.7mn doses have been administered (31.37% of population).	<b>Pfizer-BioNTech</b> and <b>AZ</b> approved for administration. <b>Sputnik V</b> – government has secured an unknown number of doses.

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Brazil	Phase 1: health workers; indigenous communities in demarcated territories; over 60s in care institutions; over 75s. Phase 2: 60-74s seniors. Phase 3: persons with comorbidities. Phase 4: education workers, homeless population, security and rescue forces, others.	Vaccinations started in January. As of 12 May, 16.68% (35.3mn) of population has received the first dose of Covid vaccine. Meanwhile, 8.3% (17.7mn) was vaccinated with both doses.	<ul> <li>AZ – 20,5mn doses expected to be delivered to the federal government in May, 108.4mn by June, 210.4mn by year- end.</li> <li>CoronaVac – 5mn doses expected to be distributed in May by São Paulo state health institute Butantan. 130 mn doses by year-end.</li> <li>Pfizer – 2.5mn doses expected to be delivered in May. 100 mn by year-end.</li> <li>J&amp;J – 38mn doses expected to be delivered in Q4.</li> <li>Sputnik V – On 26 April, ANVISA (health regulator) rejected governors' request to import the immunizer. Meanwhile, emergency use request still pending regulator's approval.</li> <li>India's Covaxin – purchase of 20mn doses but ANVISA approval yet to come.</li> <li>COVAX – minimum 10% of population quota (42mn) doses. WHO to provide 10- 14mn doses that will be distributed from mid-Feb to June. 2mn AZ and 842,000</li> <li>Pfizer doses to be received in May.</li> <li>ButanVac – 40mn doses are expected to be delivered from July and 100mn by year-end.</li> </ul>
Argentina	Health sector personnel first in line for vaccine, followed in descending order by over 70s; over 60s; security personnel; vulnerable and at-risk in 18-59 age range; education sector; and strategic or vulnerable groups. Government has reiterated promise to provide at least one vaccine dose to over 60s and other at- risk sectors by end-April; the recent regulatory approval of the Sinopharm vaccine for use in the over 60s should help but target depends on avoidance of supply bottlenecks.	Sputnik V vaccinations started on 29 Dec. As of 11 May, 7.8mn first doses have been administered (representing 17.3% of population) while 1.4mn people (3.2% of population) have received two doses.	Sputnik V – approved by regulator and roll-out started; agreement for 30mn doses; local production currently undergoing testing. AZ– contract for 23.6mn doses, though most of this to be produced locally in conjunction with Mexico. Sinopharm – agreement for 4mn doses, of which around 3mn have now been delivered. COVAX – approx. 1mn doses have been delivered; the government has been criticized for ordering only 20% of its Covax entitlement.
China	Authorities are assessing ways to raise the efficacy of Chinese vaccines, including through higher doses, a third shot, or mixing vaccines. Chinese companies are also testing new mRNA vaccines. The National Health Commission ordered local governments to halt compulsory vaccinations and other heavy-handed measures to encourage vaccination.	As of 10 May, 333mn vaccines doses administered (23.81% of population), including second doses, at average daily pace of 7.6mn doses over previous week. Goal to vaccinate 560mn people, or 40% of the population, by end-June is feasible at this pace.	Government has approved five domestic vaccines; <b>Sinopharm Beijing</b> , <b>Sinopharm Wuhan, CanSino</b> <b>Biologics,Sinovac Biotech</b> , and <b>Anhui</b> <b>Zhifei Longcom Biopharmaceuticals</b> . Sinopharm says it can produce 100mn doses per month beginning in April, and China aims to produce 3bn doses total in 2021.
India	From 1 May, everyone above 18 is eligible for vaccination. All import curbs on foreign vaccines have been lifted and import duties have been waived. However, the target to vaccinate all above 45 without comorbidities is yet to be realized.	Vaccine roll-out began 16 Jan. As of 10 May, around 167.3mn people have been vaccinated (12.6% of population). 1.3% of all (reported) infected patients are in the ICU, 0.39% on ventilators, and 3.7% on oxygen support. Out of a total of 718 districts in India, 180 have reported no new cases of infection in the last 7 days. India has halted AZ vaccine exports to cater to domestic demand. The export of drug Remdesivir and diversion of oxygen to any use other than medical has been banned.	All vaccines are now free to be used in India, whether Indian or foreign, as long as they have been certified as safe in the country of origin. Import duties have been waived. However, <b>Pfizer</b> wants an assurance of indemnity before it supplies doses to India. This is under negotiation. Russia's <b>Sputnik V</b> will also be available in June.

	Vaccination strategy	Current state of vaccine roll-out	Procurement
Mexico	Frontline medical workers first in line followed by the over 60s age cohort; plan to vaccinate all this sector by end-April pushed back to end-May. Original plan to vaccinate up to 35% of population by June could now be reset given slow start to vaccination campaign and supply difficulties.	Vaccinations started 24 Dec. Roll-out stalled mid-Jan to mid-Feb but subsequently resumed with new vaccines from wider array of suppliers. As of 10 May, 14.2mn people (11.1% of population) have received one dose of the vaccine, with 9.5mn people (7.4% of population) fully inoculated.	AZ – agreement for 77.4mn doses. US has supplied Mexico with 2.7mn doses from its AZ supply. Pfizer – 34mn doses ordered. CanSino – 35mn doses agreed. Sputnik V – agreement for 24mn doses, with local production expected soon. COVAX – 51.5mn doses agreed; Sinovac – agreement for 20mn doses. Sinopharm – agreement for 12mn doses though local regulatory clearance pending.
Colombia	Plan is to vaccinate 70% of the population (35mn people) by end-2021. Medical personnel first in line, followed by elderly and clinically vulnerable. Target is to vaccinate 26mn by end-July. Roll-out based on network of 3,000 vaccination centers.	Vaccination campaign started on 17 Feb with Pfizer vaccine. As of 9 May, 6.3mn doses administered (representing 12.6% of population), with 2.7mn people (4.7% of population) having received two doses. Government under pressure over slow start to vaccination campaign, though daily vaccinations have accelerated over April and into early May.	Pfizer-BioNTech – agreement for 10mn doses. AZ – 10mn doses agreed. J&J – agreement for 9mn doses; local regulatory clearance granted. Sinovac – agreement for 7.5mn doses. Moderna – agreement for 10mn doses but arrival not expected until mid-2021. COVAX – agreement for 20mn doses.
Russia	Vaccination available to all citizens. Immunization target: 68.6mn people. In some regions, authorities are offering financial incentives for elderly to get vaccinated.	Vaccinations started in early Dec. As of 11 May, an estimated 13.5mn residents (9.2% of population) received at least one jab and 8.9mn (6.0% of population) were fully vaccinated.	Russia relies solely on its own <b>Sputnik V</b> vaccine. Two more domestic vaccines - <b>EpiVac</b> and <b>CoviVac</b> have been approved by the country's regulators, but their production volumes are low. The export-oriented one-jab Sputnik Light vaccine approved on 6 May. Its roll-out is expected until the end of 2021.
South Korea	First doses will be distributed to medical workers and elderly. Government has signed preapproval agreements for enough doses to vaccinate entire population. By 13 May, appointments will open for the following: all citizens 60 and above, teachers for Pre-K to 2 <sup>nd</sup> Grade, essential workers and military personnel under 30. 261 vaccination sites are available nationwide as of 6 May.	Vaccination campaign started on 26 Feb. As of 9 May, 1% of the population (506,274 people) have been fully vaccinated; 7% of the population (3.17mn people) have received at least one dose. The goal is to achieve herd immunity (70% vaccination rate) by November 2021. Authorities state that they have procured vaccines to inoculate 79 million people, but most of these are to be delivered later in the year creating a shortfall currently.	Government was slow to conclude purchasing agreements, believing it could wait due to low case numbers. AZ: 20mn doses; Pfizer-BioNTech: 20mn doses; Moderna: 40mn doses; J&J: 6mn doses; COVAX: 20mn doses. Novavax: production began in April 2021, 20mn doses scheduled to roll out by September 2021.
Indonesia	Frontline healthcare workers estimated at 1.3mn have been vaccinated first, followed by security personnel, then 17mn teachers; working age 15 – 59 will are also now being vaccinated, ahead of the elderly simultaneously. Vaccines procured by central government and distributed; free, not mandatory. Government is allowing the private sector to purchase vaccines for their employees, which could start by June.	Second phase of vaccination has started, focusing on the elderly and the active workforce. As of 11 May, 13.6mn (5% of population) have received at least one shot, while 8.8mn (3.2%) have received their second shot. Delays in AZ deliveries has led to uneven daily vaccination rates.	Sinovac – 125mn doses; Pfizer- BioNTech – 100 mn doses; Novavax – 100mn doses; COVAX initiative – 100mn doses; AZ – 100mn doses; private sector importation unknown
Peru	Phase 1 focused on medical and other frontline emergency personnel, including election staff. Phase 2 focused on over 60s, those with co- morbidities, and indigenous population. Caretaker government has revised down its original goal and now wants 4.65mn people vaccinated by 28 July when handover to new government is scheduled; government also says it will leave sizeable stock of vaccines for incoming government.	Nov 2020 political crisis interrupted procurement process, but caretaker government accelerated procurement efforts from early 2021. Vaccinations using Sinopharm vaccine started 9 Feb. Pfizer vaccines now also being administered. As of 11 May, 1.4m first doses have been administered (representing 4.4% of population). 712,000 people (2.2% of population) have received two doses.	Sinopharm – contract for 38mn doses, 1mn of which have arrived. AZ – agreement for 14.4mn doses to arrive from Sep. Pfizer-BioNTech – original agreement for 20mn doses recently expanded to 32mn doses, of which around 3mn to arrive over May. COVAX – agreement for 13.2mn doses, of which around 400,000 doses have arrived. Ongoing talks with J&J (5mn doses), Russia's Gamaleya Institute (for 10mn Sputnik V doses), Moderna (12mn doses), Sinovac (7mn doses), and CureVac.

	Vaccination strategy	Current state of vaccine roll-out	Procurement
Malaysia	Frontline medical workers, police and army officials are being prioritized in the first stage of the vaccine roll-out. The second phase starting from 19 Apr and to run through August will involve senior citizens, high-risk groups with co- morbidities and the disabled. The third phase starting in May will cover all adults above 18.	As of 11 May, 1.13mn (3.5% of the population) have received their first dose of the vaccine. Malaysia is aiming to vaccinate 80% of its population.	Pfizer-BioNTech – 32mn doses secured; Sinovac – 12mn doses; AZ – 6.4mn doses via COVAX facility and another 6.4mn contracted directly; Sputnik V – 6.4mn doses; CanSino Biologics – 3.5mn doses
Thailand	In the first phase, the priority will be the elderly, frontline healthcare and social workers and those with co-morbidities. The second phase will focus on provinces with the highest Covid incidences. Government may allow private sector importation.	As of 9 May, 1.3mn (1.9% of population) of first doses have been administered, with another 0.52mn (0.7%) having been fully vaccinated.	Sinovac – 2mn, but the country is negotiating for an additional 6mn doses. AZ – 61mn (imported and local joint venture)
Philippines	Vaccine roll-out will prioritize healthcare workers; workers in education, social welfare agencies; law enforcement and military personnel; the poor; senior citizens; other vulnerable populations. Private sector is allowed to import vaccines, although some are required to make counterpart donations. The private sector importation may make up the bulk of Q2 and Q3 vaccinations.	As of 10 May, around 1.96mn (1.76% of population) have received a one dose while 0.4% are fully vaccinated.	Various vaccines totaling 40mn are expected through July: 13.5mn <b>Sinovac</b> , 1.2mn <b>Moderna</b> , 7.47mn <b>AZ</b> , 14mn <b>Sputnik V</b> ; 3mn <b>Novavax</b> and 1.5mn <b>J&amp;J</b> . Government claims to have ordered a total of 132mn doses through the next 12 months.
Kenya	Kenya plans to inoculate 50% of its 50mn population by June 2022. Priority to be given to frontline medical workers, essential workers (police, teachers, students, immigration officials), workers in hospitality sector, people with comorbidities, and those aged 58+, people in informal settlements.	First 1.02mn AZ/COVAX vaccine doses arrived 2 Mar; roll-out began 5 Mar. Vaccine doses have been distributed to regional depots in all 47 counties, but shortages reported in high-uptake areas like Nairobi. A second delivery of 2.5mn AZ/COVAX doses has been delayed due to India's export restrictions. As of 28 Apr, 1.59% of population had been vaccinated.	Kenya is heavily reliant on <b>COVAX</b> (total of 24mn doses expected through 2021). India previously donated 100,000 AZ shots; the government plans additional acquisitions from Pfizer and J&J, some under the African Union's African Vaccine Acquisition Task Team ( <b>AVATT</b> ) initiative.
Egypt	Medical staff and vulnerable populations are eligible.	Egypt has administered an estimated 1.1mn vaccines, representing 1.12 per 100 people. Reporting has been incomplete and sporadic. Egypt is charging patients for vaccinations, in contravention of global trends. Institute for Health Metrics and Evaluation at the University in Washington estimated last week that Egypt has undercounted Covid deaths by a factor of more than 12.	COVAX – agreement for 20mn doses of AZ vaccine. Sinopharm – agreement for 40mn doses; 350,000 reportedly received. Pfizer-BioNTech – contracts reportedly signed for 20mn. AZ – agreement for 30mn doses Sputnik V – 25mn have been secured. Egypt has also signed agreements to manufacture Sputnik V and Sinovac vaccines domestically, with production of 60mn doses of the latter promised to start in June 2021.
Pakistan	Vaccine registration for those above 40 opened on 27 April. Meanwhile, walk-in vaccination is available for those above 50. Those above 65 and frontline workers are still being vaccinated. The country is reporting a fall in positivity rates and a decline in new infection.	As of 10 May, 0.8% of the population had received at least one dose of the vaccine. 0.5mn doses of China's Sinopharm arrived on 1 Feb. 50,000 doses of Sputnik V were received by a private logistics firm. As infections rise, on 26 April China shipped 1mn doses as an emergency measure. Pakistan averaged about 118,748 doses administered each day. At that rate it will take 365 more days to administer enough doses to another 10% of the population.	Emergency use permission given to <b>AZ</b> , <b>Sinopharm</b> and <b>CanSino</b> . Both Chinese vaccines are currently undergoing clinical trials. Four more vaccines in the pipeline. The first batch of <b>COVAX</b> vaccines has been received.
Nigeria	Vaccination targets: 40% of population in 2021, 70% by end-2022. Healthcare personnel; people over 50; people with underlying health conditions to be prioritized. Most heavily affected states will be prioritized in allocation of doses.	First batch (3.9mn doses) of AZ vaccine supplied by COVAX arrived 2 Mar; vaccination campaign has commenced. As of 9 May, 1.67mn people (0.81% of population) had received their first jab.	20% of vaccines supposed to be supplied through the <b>COVAX</b> initiative. Government expects total of 58mn vaccine doses from COVAX (16mn) and the African Vaccine Acquisition Task Team (AVATT, 42mn). Government also expressed interest in procuring <b>Sputnik V</b> and/or <b>Sinovac/Sinopharm</b> vaccines.

	Vaccination strategy	Current state of vaccine roll-out	Procurement
South Africa	Plans to vaccinate 40mn people by Feb 2022; phase 2 expedited in response to third wave. Phase 1 (Feb-May): ca. 1.25mn frontline medical workers; Phase 2 (May-Oct): 16.6mn essential workers (mining, hospitality, media, taxi industry), people in institutions, over 60, with comorbidities; Phase 3 (Nov-Feb): 22.6mn remaining adult population.	Limited "implementation study" roll-out of J&J vaccine started on 18 Feb after last-minute pivot away from AZ vaccine due to concerns over efficacy against B.1.351 variant. J&J briefly suspended in Apr, while Phase 2 is due to start on 17 May. As of 10 May, 0.67% of population had been vaccinated.	Procurement lagging but 61mn doses in pipeline – from J&J and Pfizer. Deliveries ramping up from May but largest volumes due in Q3/4. J&J – 31mn (2.8mn expected in Q2) Pfizer-BioNTech – 30mn (starting Q2) Vaccine uptake from AVATT and COVAX allocations unconfirmed.
Taiwan	Priority groups (868,000 people): health care personnel; essential workers; nursing home staff; military; social welfare workers. Outside priority groups, individuals can obtain vaccinations through a self-paid program if they intend to travel abroad (excluding tourism).	92,000 people, or 0.4% of population, have received first dose by 9 May, including priority groups and a limited number of self-paid vaccines available to non-priority groups.	20mn doses ordered: <b>AZ</b> – 10mn doses and 5mn additional AZ doses expected through <b>COVAX</b> . <b>Moderna</b> – 5mn doses, but delivery dates are unclear. First batch of 200,000 AZ doses through <b>COVAX</b> arrived in early April.

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