BREAK COVID NOW

The Gavi COVAX AMC Investment Opportunity

ONE WORLD PROTECTED

JANUARY 2022

GAVI, THE VACCINE ALLIANCE

GAVI COVAX AMC

We saw first-hand the lifesaving impact of Gavi-managed vaccine stockpiles when Ebola cases started to rise in eastern DRC during the 12th and 13th outbreaks in 2021. Vaccines were rapidly deployed to the region and the end of the outbreaks came faster. In the same vein, the Gavi-administered COVAX Facility has created a new paradigm that has shortened the time to access life-saving vaccines in Africa and has set the tone for the international solidarity that is essential for global recovery.

Félix Tshisekedi
President of the Democratic Republic of the Congo and Chair of the African Union

Gavi
The Vaccine Alliance

CONTENTS

Foreword 4

Summary 10

The road so far 14

The Gavi COVAX AMC: learning and adapting 23

It's not over: the world urgently needs to break COVID now 39

How can the Gavi COVAX AMC meet the global challenge? 47

Funding the Gavi COVAX AMC 63

Looking ahead: preparing for future pandemics 79

Annexes 83

1. List of 92 AMC-eligible economies and role of India 83
2. Over 1bn doses delivered to 144 countries 85
3. Monitoring, evaluation and learning 88
4. Over US$ 10bn pledged to the Gavi COVAX AMC 90
5. Access to COVID-19 Tools Accelerator & COVAX 96
6. Dose donations 100

Endnotes 103

FOREWORD

The world stands at yet another crisis point in our fight against COVID-19. The tidal wave of infections sweeping around the globe driven by the Omicron variant has demonstrated that no one is safe until everyone is safe. Once again, we need to act quickly to get ahead of the virus.

It is a remarkable achievement that more than half of the world's population has received at least one dose of a COVID-19 vaccine. The first safe and effective vaccine was approved less than a year after the first genome of the virus was published. To date, 33 COVID-19 vaccines have received regulatory approval from at least one Stringent Regulatory Authority. This is a tribute to the power of science and the commitment of the pharmaceutical industry in collaboration with governments around the world.

But there is so much more to do to ensure all of the world is protected. More than three billion people, many in the world's lowest-income countries, remain unvaccinated. Without a renewed global push, the world could be facing a seemingly endless cycle of resurgences and new variants, with devastating consequences for health and prosperity.

COVAX, the vaccines pillar of the Access to COVID-19 Tools Accelerator (ACT-A), was launched in April 2020, one month after the World Health Organization (WHO) had characterised COVID-19 as a pandemic, and backed by more than 190 participating economies to drive equitable access to COVID-19 vaccines.

The Gavi COVAX Advance Market Commitment (AMC) was established within COVAX to provide an essential lifeline to 92 eligible lower-income economies and secured US$ 10 billion from donors in record time, with COVAX locking in over 1.7 billion doses of COVID-19 vaccines and reserving them for AMC-eligible economies.

By mid-January 2022, COVAX had delivered more than one billion doses of life-saving COVID-19 vaccines to 144

1.7BN

COVAX has been able to lock in over 1.7 billion doses of COVID-19 vaccines and reserve them for AMC-eligible economies

COVAX has delivered one billion doses of life-saving COVID-19 vaccines to 144 participating economies

participating economies, including more than 870 million to AMC economies. The Gavi COVAX AMC has shown that a truly global and multilateral solution is the only way to get significant numbers of vaccines into the arms of the world's lowest-income, exceeding our original target of making sufficient vaccines available to vaccinate 20% of the population of AMC countries by the end of 2021.

Amidst supply shortages, export bans, delays to regulatory approvals, intense competition for vaccines and logistical challenges in many countries struggling with the pandemic, that is a major achievement. But it took much longer to get there than we had originally anticipated. For much of 2021, many lower-income countries were left behind as deliveries of COVID-19 vaccines ramped up elsewhere. Gavi has therefore conducted intensive examinations of the key problems and pressure points, and built the lessons learned into how we adapt internally and work with our partners.

We are at an inflection point in the pandemic. The constraints in the supply of vaccines are finally beginning to ease. Deliveries, including through crucial dose donations, are now rapidly increasing. Yet countries' capacity to deliver these vaccines varies, and some will need urgent additional support to tackle the pandemic.

This means COVAX needs to adapt and provide differentiated support in line with the national plans, priorities and preferences of each AMC country in the context of the global target of 70% coverage. Along with predictable and reliable supply, coordinated delivery support and financing will be required to help countries build capacity to get more shots into arms in time for Omicron and to be ready for the next variant. We must continue to build on our close partnerships with organisations such as the African Union's African Vaccine Acquisition Task Team (AVATT) and the ACT-A platform so that there is a coordinated response to the pandemic.

> **We established ACT-A to make sure that the most vulnerable countries would have access to vaccines, treatments and tests, and support to their health systems. We need to pursue all fronts in parallel and to win the vaccination battle: support to COVAX including by giving priority in the delivery queue; sharing doses when orders exceed the needs; complementing vaccines with other supplies and support on the ground; improving the supply chain and WTO rules for more local production. Our only way to success is determined multilateral action.**
>
> **Emmanuel Macron,** President of the French Republic

At the same time, the increased demand for booster doses in high-income countries in response to Omicron will create renewed pressure on global supplies once again. The Strategic Advisory Group of Experts on Immunization (SAGE) has already recommended that lower-income countries should follow suit by providing an additional dose across all COVID-19 vaccine types for some of their most at-risk populations.

The Gavi COVAX AMC must be financially equipped to help countries respond to the Omicron crisis and beyond, and mitigate the risks that individual countries cannot manage alone.

On average, a major new variant has been detected every four months since the WHO characterised COVID-19 as a pandemic. The next major variant to emerge could be both highly transmissible and cause more severe disease or greater evasion of vaccine immunity – particularly if large swathes of the world remain unvaccinated. Plans need to be resilient against multiple scenarios.

To get there, we must urgently secure at least US$ 5.2 billion of new funding for the Gavi COVAX AMC in 2022 to establish a Pandemic Vaccine Pool of a minimum 600 million additional doses, deliver catalytic investment to strengthen countries' delivery systems and finance essential costs to accompany dose donations.

As we have learned so far, the AMC must be able to order doses **now** so they can be available to lower-income countries as soon as they are needed. With a clear focus on providing support for the world's lowest-income countries to help them expand their coverage levels, the Pandemic Vaccine Pool would have sufficient flexibility to respond to the needs of individual AMC economies as they work toward meeting their own national vaccination goals, which currently range from less than 40% in some AMC countries to over 80% in others. Upfront funding would allow Gavi to lock in a range of doses from across the diversified AMC portfolio so that they could be deployed to respond to countries' needs, including new variant-adapted vaccines if required.

This increased supply predictability will also help COVAX work with countries to overcome the problems they are facing right now to deliver and administer doses. It will also provide a platform to drive further innovation so countries can expand their national vaccination strategies and ensure that no one, including those who were already marginalised or vulnerable prior to the pandemic, are left behind.

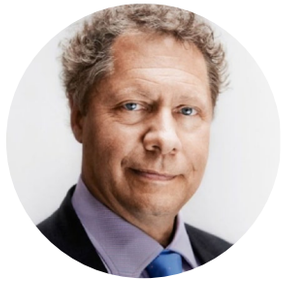
With additional funding for delivery and ancillary costs like syringes for dose donations, combined with cost-sharing contributions from countries through multilateral development banks (MDBs), COVAX could act as soon as possible in 2022 to both reserve doses for delivery on a more predictable basis through the remainder of the year and work with countries on strengthening their capacity to ensure shots get into arms.

COVAX was founded on the insight that an equitable global mechanism was needed to secure and deliver safe and effective COVID-19 vaccines to tackle the pandemic, thereby managing global risk. The last months have shown that this works, and that without coordinated global action, COVID-19 will continue to find its way around the world's defences.

If the world unites to ensure adults in lower-income countries are immunised at levels achieved in high-income countries, between 940,000 and 1.27 million deaths could be prevented in the next year, and the economic cost of the pandemic could be reduced by as much as half in some countries.

Our collective goal has never been so pressing. The clock is ticking on the task we have ahead of us, the opportunity we can seize. Join forces once again to break COVID now – and achieve one world, protected.

Professor José Manuel Barroso
Board Chair
Gavi, the Vaccine Alliance



Dr Seth Berkley
CEO
Gavi, the Vaccine Alliance

SUMMARY

> **COVID-19 has changed the world. It has cost lives, battered health systems and damaged livelihoods. But, through these challenges, we have seen the best of humanity exemplified through strong multilateral cooperation.**
>
> **Nana Akufo-Addo,** President of Ghana

In April 2020, Gavi and COVAX joined the Access to COVID-19 Tools Accelerator (ACT-A) to provide equitable global access to COVID-19 vaccines to tackle the pandemic. In June 2020, the Gavi COVAX Advance Market Commitment (AMC) was launched to finance equitable access in 92 lower-income countries. Since then, US$ 10 billion has been raised for the AMC to procure vaccines and support delivery. Despite a challenging supply situation, COVAX has now shipped one billion doses to 144 countries, including over 870 million to AMC economies.

Using donor funds, committed dose donations and support from multilateral development banks (MDBs), COVAX has secured over 2.8 billion doses for supply by mid-2022. Although COVAX will tailor its support in line with each country's national strategies and plans, this would allow AMC economies to achieve an average coverage level of around 45% by mid-2022 based on a two-dose vaccine regimen. Supply sourced bilaterally, including by our partner AVATT, the African Union's African Vaccine Acquisition Task Team, provides countries with further options.

As expected, COVAX has proved to be a crucial source of supply for low-income[1] economies, which have received 80% of their supply from the AMC. Many require urgent support to strengthen their capacity to deliver vaccines. COVAX has provided help to countries to scale up their national vaccination programmes by bundling together procurement financing with catalytic investments to strengthen delivery systems. This will continue to be a focus in the months ahead.

Risks to supply remain in 2022: based upon experience so far, there is significant risk of supply disruption related to export

80%

Low-income[1] economies have received 80% of their supply from the Gavi COVAX AMC

The Omicron variant increases pressure on supply and increases demand from lower-income countries

controls, manufacturing scale-up, and delays or failure of vaccine candidates to achieve regulatory approval. More than 100 countries are now recommending booster doses, with an acceleration of these programmes in light of the rapid spread of the Omicron variant. This increases pressure on supply and increases demand from lower-income countries, which are generally seeking to raise coverage to the levels already seen in higher-income countries. If new or adapted vaccines are required to protect against Omicron or other new variants, demand will be intense, and supply limited in the short term.

COVAX requires additional upfront financing of at least US$ 5.2 billion by the end of March 2022 to maximise its capacity to respond to the Omicron crisis and prepare for the next one by acting as a global risk aggregator on behalf of AMC countries – in support of each country's national plans and coverage targets. That funding would provide the Gavi COVAX AMC with the means to pursue a three-pronged strategy (see Figure 1):

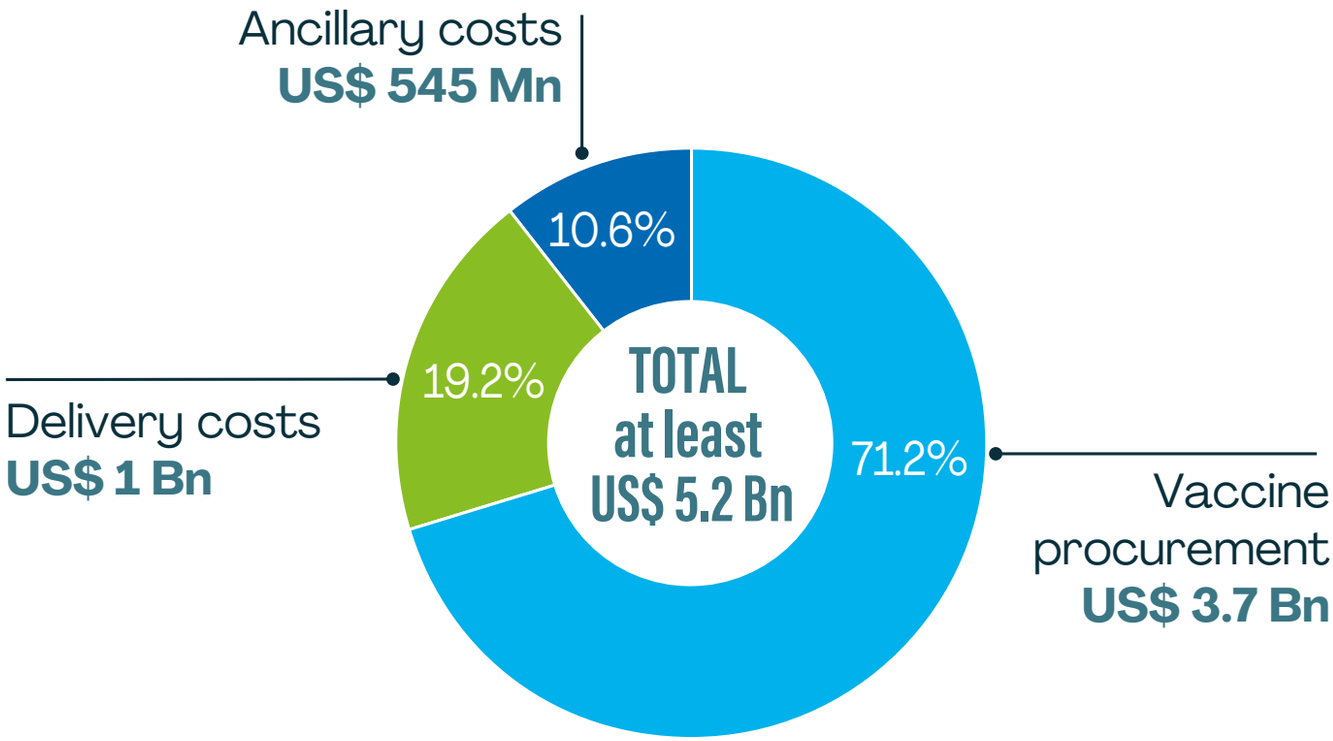
- to create a Pandemic Vaccine Pool of a minimum of 600 million additional doses at a cost of at least US$ 3.7 billion to increase coverage and mitigate against demand and supply risks;

- to fund critical ancillary costs of dose donations (syringes, safety boxes, no-fault compensation insurance, freight) at a cost of US$ 545 million; and

- to build on Gavi, the Vaccine Alliance's comparative advantages strengthening in-country delivery systems to get shots into arms, with at least US$ 1 billion for COVAX (US$ 600 million raised by Gavi, plus US$ 400 million that will be raised concurrently by UNICEF).

Figure 1

Breakdown of expenditures, totalling at least US$ 5.2 billion



In executing this approach in 2022, Gavi would aim to guarantee stable and predictable supply to AMC countries, expanding coverage and starting supply of boosters so that countries can achieve effective immunity. In doing this, the focus would be on the most vulnerable countries, and the 31 low-income economies within the AMC which will require the most support. COVAX's objective will be to ensure the most marginalised and vulnerable populations get the protection they need.

THE ROAD SO FAR

> **The global fight against the pandemic will be high on the agenda of the German G7 presidency. It's important not just to look after ourselves, but to ensure that the rest of the world is vaccinated too.**
>
> **Olaf Scholz,** Federal Chancellor of Germany and G7 President

At an early stage during the COVID-19 pandemic, it quickly became apparent that the global crisis would not be over until everyone in the world had access to COVID-19 vaccines. At the request of the international community, the COVAX Facility was launched at the UK-hosted Global Vaccine Summit in 2020 to accelerate the development and manufacture of vaccines, and to guarantee fair and equitable access for every country in the world.

Led by Gavi, the Vaccine Alliance (hereafter referred to as Gavi), building on two decades of experience reaching more than half the world – the most vulnerable – with the power of immunisation, alongside the Coalition for Epidemic Preparedness Innovations (CEPI), WHO and UNICEF, the COVAX Facility was charged with the procurement and equitable distribution of a diverse portfolio of safe and effective COVID-19 vaccines on behalf of more than 190 participating economies.

The Gavi COVAX AMC

Within COVAX, the Gavi COVAX AMC was established as an innovative financing mechanism to provide access to donor-funded doses of COVID-19 vaccines to 92 eligible lower-income economies (listed in Annex 1). COVAX's initial objective was to make 950 million doses from its portfolio available for supply to AMC countries by the end of 2021, enough to protect on average 20% of the population, starting with health care workers and the most vulnerable.

The first phase of the Gavi COVAX AMC began with seed funding of US$ 505 million enabled by the groundswell of

support at the June 2020 Global Vaccine Summit, hosted by the Government of the United Kingdom, which garnered pledges of US$ 8.8 billion for Gavi's 2021–2025 core programmes. A target was set to mobilise US$ 2 billion by the end of 2020 so that down-payments could be made to manufacturers to secure the first doses. With the support of governments and the private sector, this target was reached by the end of December 2020.

A second phase began in earnest with support from the G7 Summit in February 2021, and the launch of an Investment Opportunity hosted by the Government of the United States of America in April 2021. Further momentum was generated through the Global Health Summit on 21 May, co-hosted by the European Commission and Italy as chair of the G20, culminating in the Gavi COVAX AMC Summit on 2 June, hosted by the Government of Japan.

Additional funding secured in the third quarter of 2021 brought the total funds mobilised to more than US$ 10 billion. This funding has allowed the Gavi COVAX AMC to lock in a broad and diversified portfolio of 1.7 billion doses of vaccines for AMC countries. In addition, a further US$ 822 million was secured to help countries deliver these vaccines.

$10BN

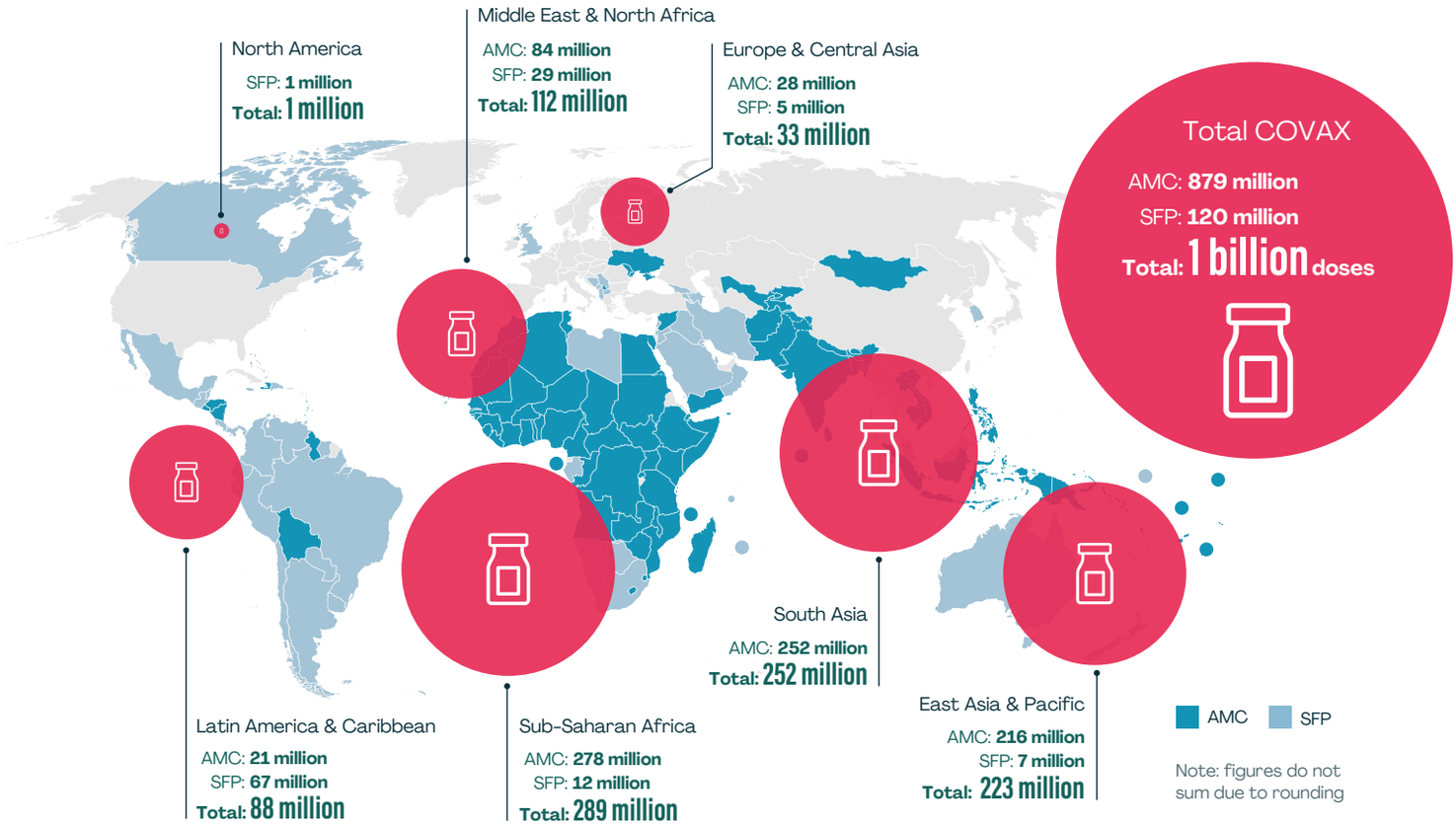
Funding secured in the third quarter of 2021 brought the total funds mobilised to US$ 10 billion

Achievements and challenges in 2021

Looking back at its first 18 months of operation, and in the face of significant challenges, the Gavi COVAX AMC has had some remarkable successes. It has demonstrated that a truly global solution – one which reduces individual risks for individual countries by pooling resources together – can deliver at scale for lower-income countries. Right from the start, backed by generous contributions from its donors, COVAX moved at record speed to construct a broad and diverse portfolio of COVID-19 vaccines.

Figure 2

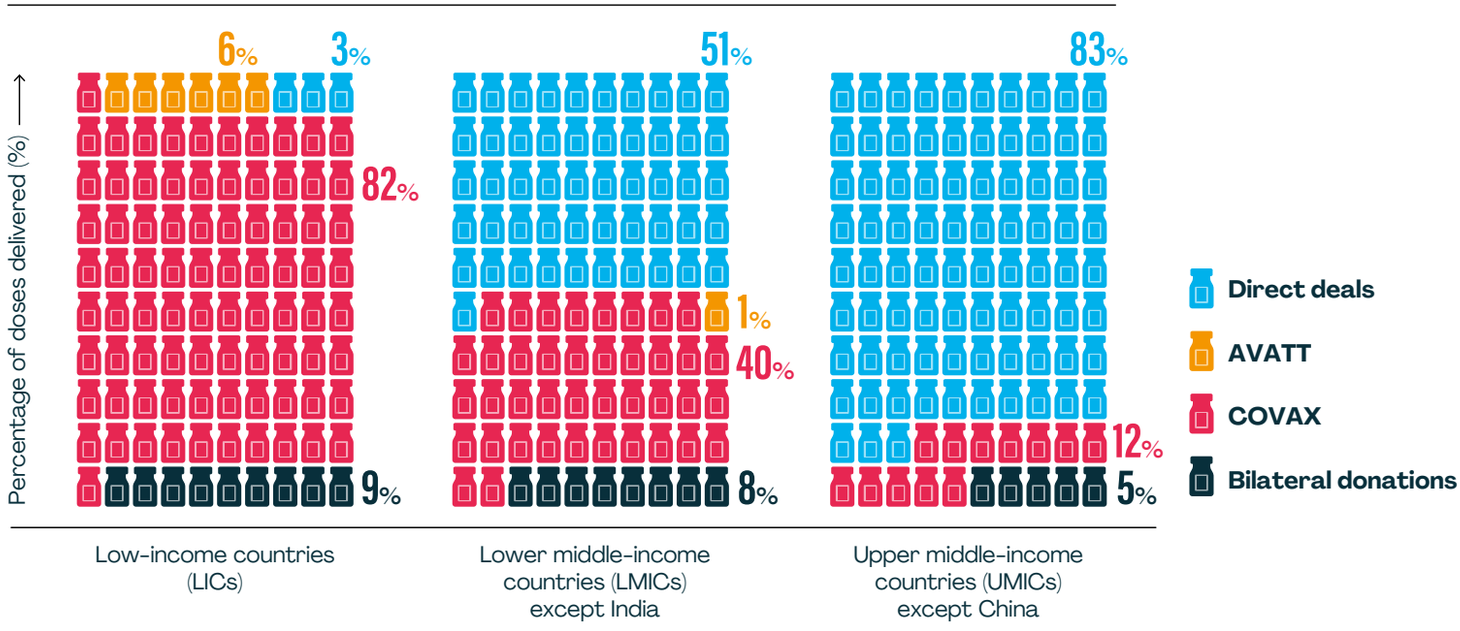
COVAX doses delivered by region



The first COVAX-supported doses were delivered within 39 days of the first COVID-19 vaccine administered in a high-income country. By mid-2021, over 80 AMC countries had requested 'early access' funding from Gavi to help catalyse their delivery systems. By the end of 2021, COVAX had made over 1.2 billion doses available for supply to AMC economies, beating its original targets. Today, over 870 million of those doses have been shipped to AMC economies (as set out in Figure 2 and Annex 2 in more detail). The Gavi COVAX AMC is now playing exactly the role that was envisaged in low-income countries where COVAX vaccines have represented 82% of all vaccines administered (see Figure 3).

Figure 3

Doses delivered by COVAX and other sources



Data source: UNICEF COVID-19 Vaccine Dashboard, 5 January 2022

But it has taken much longer to get to this position than COVAX had originally anticipated. Throughout much of 2021, COVAX was faced with a tremendous set of challenges, which meant we were unable to deliver on our initial goals and instead saw rising inequity between AMC economies and higher-income countries. Intense competition for vaccines led to delays in the delivery of early doses from the contracts COVAX had signed with manufacturers. Higher-income countries were better positioned financially and had a higher risk appetite, which enabled them to secure places at the top of production queues. Manufacturing problems and delayed regulatory approvals from key COVAX suppliers were compounded by an export ban from India - a historically reliable supplier of vaccines to lower-income countries - from

whom 45% of early Gavi COVAX AMC doses were contracted. Delivery funding from other sources did not materialise as rapidly or at the scale as originally anticipated. This background of uncertain supply meant that many AMC countries were unable to move fast to pump-prime their health systems to deliver mass COVID-19 vaccination campaigns, which has become a central issue in 2022.

Lessons and course corrections for 2022

Gavi and its COVAX partners have reflected in depth on our achievements and the challenges we have faced. The lessons we have drawn and the changes we will make outlined in this document provide the means for COVAX to support AMC countries build and deliver their own national vaccination targets in the context of the global target of 70% coverage. These lessons are set out in detail in the next section, but in summary:

- **Upfront funding will be required to secure the doses requested by AMC countries.** To avoid the inequities of 2021, immediate funding will be required to secure COVAX's place in the queue and have the flexibility to provide doses according to each AMC country's own national plan, priorities and preferences in support of the 70% coverage targets.

- **A diversified and reshaped portfolio will provide greater flexibility and protection against supply shocks.** With 18 months of experience in the COVID-19 market, Gavi has actively reshaped its portfolio to prioritise manufacturers with greater reliability, with a more diversified global footprint and more favourable contractual conditions.

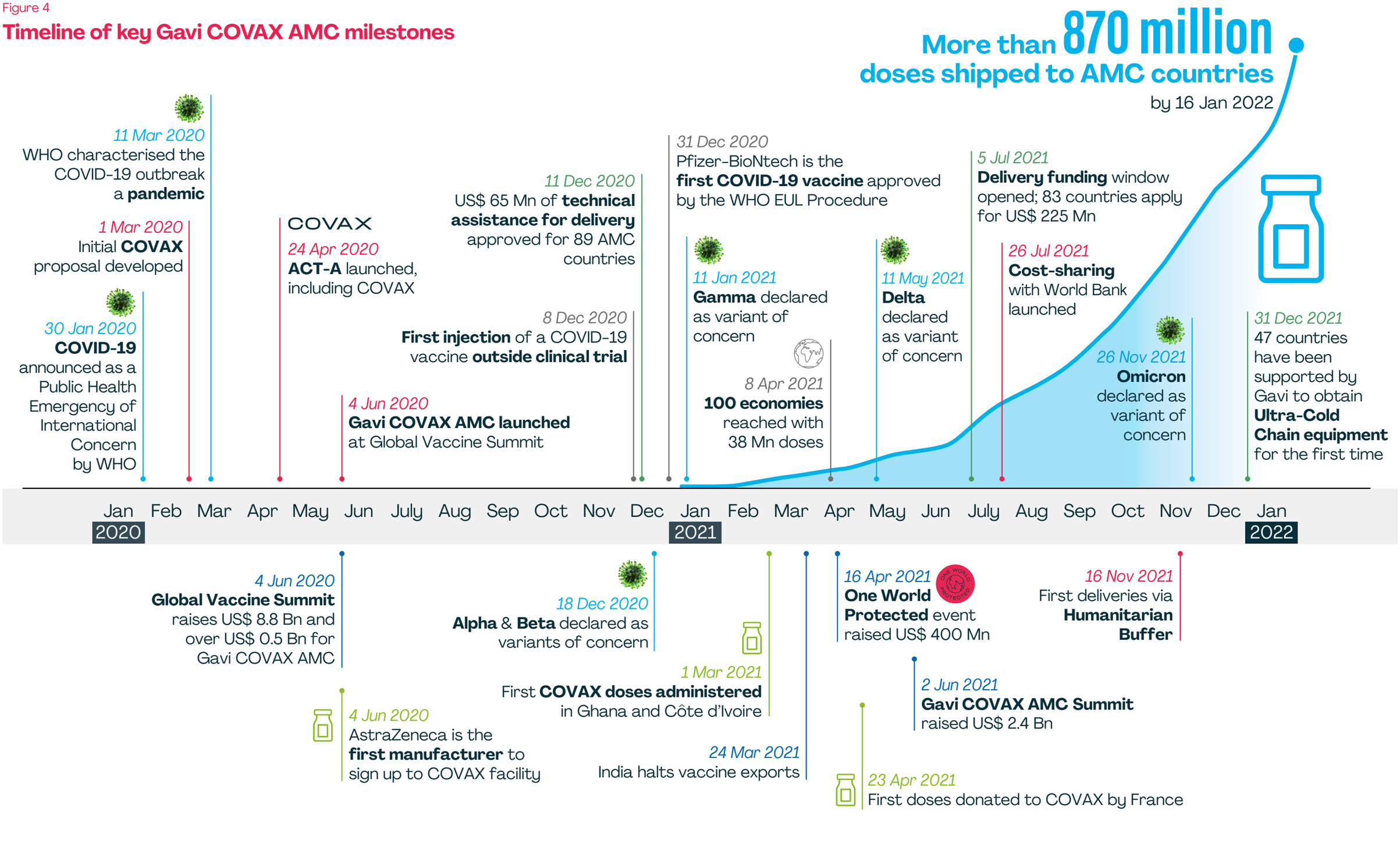
- **Enhanced support for delivery will enable countries to strengthen their delivery capacity.** Gavi, working alongside our Alliance partners, has recognised we need to provide greater support and additional funding to help AMC countries get shots into arms. We will particularly focus support on the 20-25 countries facing the greatest challenges and help them implement plans to accelerate uptake.

- **Working in close coordination with global and regional partners will be critical.** Gavi has closely coordinated our 2022 strategy with our partners in ACT-A. We have enhanced our relationship with key partners like the African Union's African Vaccine Acquisition Task Team (AVATT) so that we can provide AMC countries with a clear collective view of their supply picture.

- **Dose donations provide a life-saving mechanism.** Having access to significant numbers of dose donations was essential for COVAX in 2021. In 2022, Gavi will continue to adapt the dose-donation mechanism to take a long-term view and provide predictability for AMC countries.

Figure 4

Timeline of key Gavi COVAX AMC milestones



THE GAVI COVAX AMC: LEARNING AND ADAPTING

> **It is essential that universal and affordable access to COVID-19 vaccines be ensured, to defeat the virus and to revive global trade, investment and growth. The world must now ramp up vaccine production and ensure rapid distribution. While the support offered by some major nations is commendable, more needs to be done. Of vital urgency is the full funding of the COVAX Facility, including the provision of grants and concessional lending to enable the purchase of sufficient vaccines at fair prices.**
>
> **Imran Khan,** Prime Minister of Pakistan

Since the Gavi COVAX AMC was created, Gavi has been drawing lessons from our experience in designing and implementing a complex global financing mechanism under the most challenging of circumstances. The following lessons have driven changes to COVAX's operational model and will guide our approach to the AMC in 2022. More detail on Gavi's rigorous approach to monitoring, evaluation and learning is set out in Annex 3.

Upfront funding will be required to secure the doses requested by AMC countries

Moving at speed and early in the pandemic, high-income countries were able to achieve vaccine supply security for their own populations by ordering significantly larger volumes of multiple vaccines than they required. Orders were completed well in advance of regulatory approvals and by placing finance at risk to secure doses at the front of the queue. Many of those initial deals were concluded by the third quarter of 2020.

When the pandemic began, Gavi did not have those advantages. We lacked the mechanisms and had to work to increase our risk tolerance to allow donor finance to be placed at risk (particularly ahead of regulatory approvals).

$9.1BN

Donor agreements worth US$ 9.1 billion have been signed

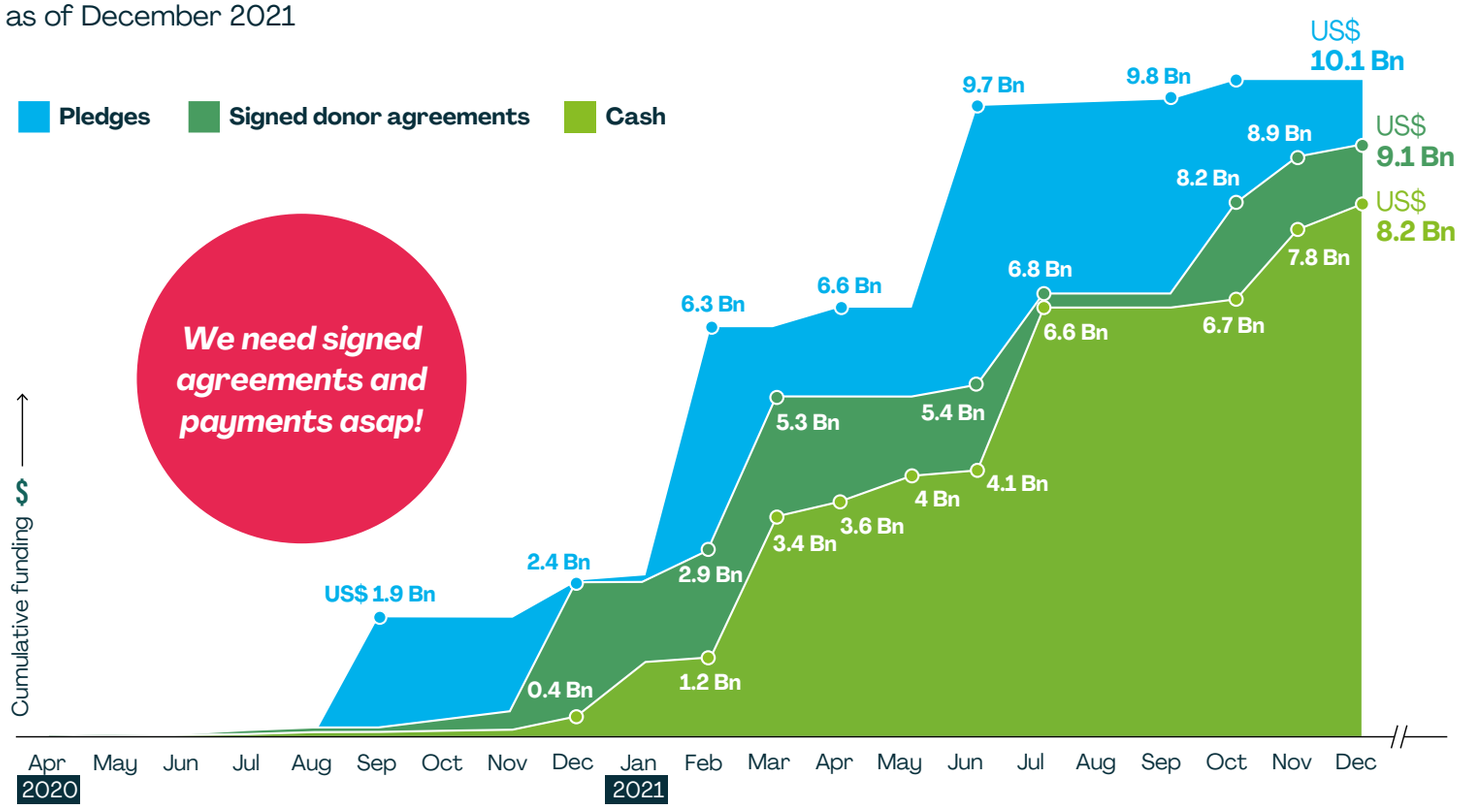
By December 2020, nine months after WHO had characterised COVID-19 as a pandemic, COVAX had only received US$ 400 million in cash. Gavi cannot sign deals that are not 100% backstopped by cash or irrevocable commitments, which placed us at a disadvantage to sovereign counterparts. This meant COVAX was not able to compete early on with high-income countries to secure early supply for AMC economies. This key issue was recognised quickly, and acceleration of cash payments has been consistently encouraged. Donor agreements worth US$ 9.1 billion have been signed, and COVAX has now received US$ 8.2 billion in cash (see Figure 5 and Annex 4 for a breakdown of donor commitments) enabling us to lock in 1.7 billion of AMC-funded doses for lower-income countries.

To avoid the inequities of 2021, early funding will be required this year to secure additional doses from our portfolio for AMC countries in time to contribute towards the global target for 70% vaccination coverage. Building on Gavi's tradition of developing innovative financial solutions, we have worked to develop a suite of mechanisms to allow donors to frontload pledges and commitments to help deliver this, with further details set out in the funding section of this Investment Opportunity.

Figure 5

Gavi COVAX AMC funding pledged and received

(**cumulative and overlapping, not stacked**)
as of December 2021



A diversified and reshaped portfolio will provide greater flexibility and protection against supply shocks

COVAX has used the US$ 10 billion of support provided by donors over the past 18 months to construct the largest portfolio of vaccines in the world. When the first deals were struck in 2020, it was impossible to know which vaccines would succeed and which would not. COVAX's early deals sought to mitigate risk through diversification by signing contracts with different manufacturers, with different types of vaccines produced in different parts of the world – but we also focused on working with Gavi's core suppliers with experience of delivering vaccines to lower-income countries.

Until the second half of 2021, COVAX was unable to obtain the volumes of early doses for AMC countries that we had hoped to secure. High-income countries were able to strike deals for early supply unavailable to lower-income countries and to COVAX. Export restrictions meant the largest available supply of doses for AMC countries – from India – were paused for over six months. And delays to regulatory approvals for vaccines also restricted early supply.

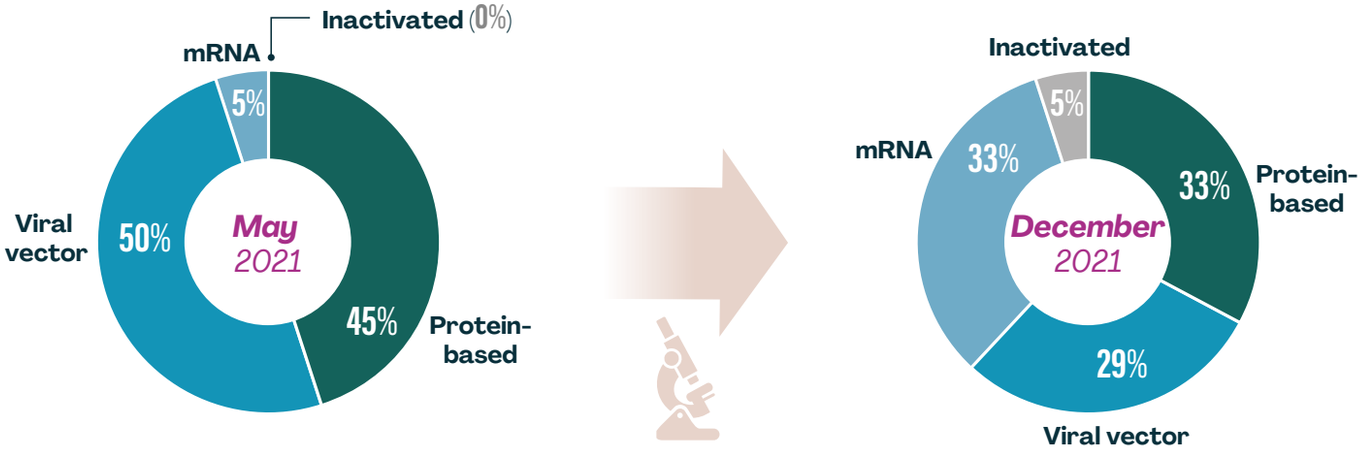
COVAX has actively sought to diversify its vaccine portfolio and has made significant changes to its composition (as set out in Figure 6) as the pandemic has evolved, guided by the following principles:

- optimising for price and value for money to maximise volumes for the portfolio (which has resulted in an average price per dose between US$ 5–7);
- prioritising earlier supply to achieve coverage targets as early as possible;
- optimising quality of protection by prioritising relatively more efficacious or effective vaccines, and/or manufacturers with variant-adapted vaccines under development;
- prioritising manufacturers that are expected, or have shown, to be reliable in delivering on supply commitments; and
- maintaining a diversified geographic footprint of COVAX's manufacturing network.

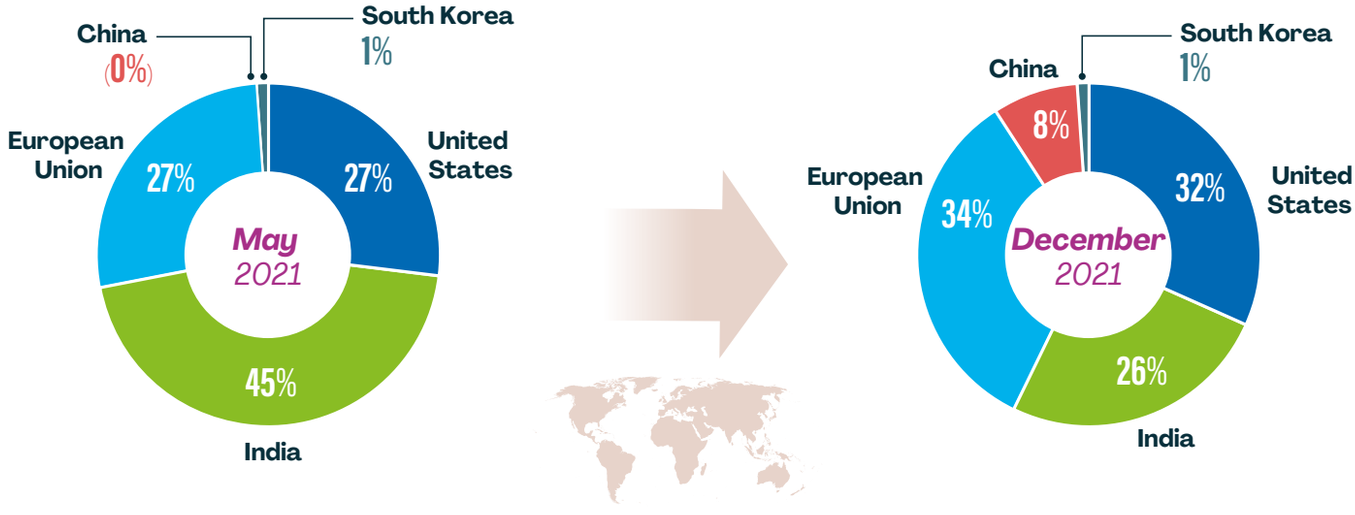
Figure 6

COVAX's active portfolio management over time to mitigate evolving supply and demand risks

COVAX AMC Portfolio Composition, by tech platform[1]



COVAX AMC Portfolio Composition, by manufacturing location[1, 2]



Notes:

[1] Volumes reflect firm order commitments (FOC) only. Volumes for J&J doubled to ensure comparability with two-dose regimen candidates.

[2] Manufacturing location based on best available information of manufacturing sites at time of publication. Subject to change based on future manufacturer plans.

In 2022, these efforts combined with upfront funding will offer us the opportunity to deliver a greater variety and scale of support for AMC countries – responding to their own plans, priorities and preferences in support of the 70% global coverage targets. Of course, in the longer term, simplicity in terms of reducing the numbers of vaccines in use in any one country will be key. But it is also critical that countries have the right vaccine for the right populations with characteristics that improve efficiency of delivery.

Civil society in Rwanda reaches 60,000 volunteers in ten minutes via ‘WhatsApp trees’

In Rwanda, COVAX had delivered 9 million of the 14 million total vaccine doses received by mid-December 2021. Ensuring access and driving demand for the doses has been high priority, with civil society playing an important role. The 40 member organisations of Rwanda’s Civil Society Platform and volunteers from the Rwanda Red Cross Society have been piloting ‘WhatsApp trees’ to mobilise volunteers and rapidly share key messaging about COVID-19. Province, district and village volunteers are provided with messaging instructions, which can be shared across the country by approximately 62,000 volunteers within ten minutes.

With 80% of the population reached by mobile phone, and smartphone penetration at 15%, information can be shared very rapidly in Rwanda. With wide geographical reach, the mobile messaging platform offers significant potential to support the uptake of COVID-19 vaccines. The use of innovative approaches by the Government of Rwanda, COVAX partners and civil society has resulted in vaccination rates of up to 100,000 doses per day, including the Pfizer vaccine despite challenging ultra-cold chain and other requirements.

Enhanced support for delivery will enable countries to strengthen their capacity to administer vaccines

Gavi's key comparative advantage is our 22-year history of helping the world's lower-income countries to introduce and deliver vaccines at scale. The Alliance brings together all the key stakeholders working in immunisation to provide countries with an integrated package of vaccine support, technical assistance and grants to strengthen their health systems. This has enabled countries to immunise almost 890 million children through routine immunisation and administer over one billion vaccinations through campaigns. We have learned how critical it is to have the funding for the procurement of vaccines bundled together with the catalytic financing needed to jump-start the deployment and delivery of national programmes.

And so in September 2020, months before a COVID-19 vaccine had received an Emergency Use Listing (EUL) from WHO, the Gavi Board made available US$ 150 million of core resources to provide technical assistance and cold chain equipment for countries to help prepare for COVID-19 vaccine distribution. The Alliance worked with AMC countries to ensure they all had technical assistance plans in place by December 2020, with over 400 WHO and UNICEF staff deployed to support planning and management of delivery. Alliance partners also engaged early to help countries address gaps in their cold chain, providing more than 6,000 fridges, freezers and cold rooms, building capacity within months in over 40 countries which previously were unable to store ultra-cold chain vaccines.

MDBs made significant funding available to many AMC countries, and this was originally expected to cover a large share of their delivery costs. However, the majority of this funding was allocated for vaccine procurement, and funding allocated to delivery was for the most part not immediately

drawn down. Therefore, the opportunity to bundle together procurement, technical assistance and early funding to strengthen delivery was being missed.

To address these financing gaps, donors provided Gavi with an additional US$ 822 million for delivery support. Within days of the Board's approval, Gavi opened a new funding window for COVID-19 vaccine delivery support (CDS), providing grants to help catalyse countries' delivery efforts. A total of 83 countries requested US$ 225 million in 'early access' funding made available through a streamlined application process, of which nearly US$ 200 million has been disbursed. This has been among the largest source of external delivery financing to date in many AMC countries and has helped support rapid scale-up in vaccine delivery.

In Q3 2021, Gavi opened a second 'needs-based' funding window for applications, with approximately US$ 400 million available for economies with the greatest needs and gaps in delivery financing, informed by regular country-level intelligence and analysis across Alliance partners. Countries have already submitted applications for another US$ 190 million of support, with 12 more applications received by end 2021. Gavi aims to make funding available for urgent needs within two weeks of countries applying.

The COVAX Humanitarian Buffer was set up as a safety net for more than 167 million people who would not receive vaccines via other sources

Gavi has also remained focused on delivering vaccines in some of the most challenging circumstances in the world. The COVAX Humanitarian Buffer was set up as a safety net for people living in humanitarian settings who would not receive vaccines via other sources – more than 167 million people worldwide. The Buffer is funded by up to 5% of the Gavi COVAX AMC's resources. It is now operational with the first applications approved by independent review, and doses supplied to almost 800,000 people in Iran displaced by regional conflict including in Afghanistan. Delivery through the Buffer is

facilitated by manufacturers agreeing to waive the indemnity on the vaccine for humanitarian agencies.

Gavi is also intensifying efforts to test, learn and scale evidence-based approaches to building vaccine confidence and uptake. This work is being led by the Vaccination Demand Hub, a global collective of partners working together to develop methodologies, evidence and tools to support country demand programming. In partnership with UNICEF, countries are supported to identify and address through innovative and tailored approaches the reasons for low vaccine uptake, which includes a focus on improving access for women and high-risk populations.

These collective actions have tripled the absorption capacity of AMC economies, but it's still not enough. In 2022, Gavi and our Alliance partners recognise that urgent further funding and coordination efforts will be required to reduce the continued disparities across implementing countries, with a core focus on the 20-25 lower-income countries facing the greatest challenges.

Togo digitises COVID-19 vaccine roll-out

"To be honest, I feared for my life when news of the first COVID-19 case was announced. In Africa, we don't always have access to great health care," said Sodji Evra, a young Togolese entrepreneur. But that was before he received two shots of the AstraZeneca vaccine, becoming one of the more than 1.2 million people in the country to be immunised against COVID-19. Togo took delivery of its first COVAX vaccines in March 2021 and local authorities moved quickly: By the end of May, 93% of the country's health care staff were fully immunised.

Gavi has supported the Ministry of Health in efforts to stem misinformation, disseminate fact-checked information and create demand for the vaccine. This support included technical assistance provided by Alliance partners to develop communications materials to provide information and to counter the many beliefs and rumours around COVID-19. Gavi has also provided resources to mobilise prefects, mayors, village chiefs, civil society organisations (CSOs), and religious and community leaders to address misinformation.

To mobilise Togo's adult population of 4 million people to get vaccinated at one of the country's nearly 70 vaccination centres, the government has pioneered new routes of access. Dialling *844# on a mobile phone initiates an SMS-based vaccination registration process; a web-based system also makes appointment-booking possible in less than five minutes. Vaccine certification has also gone digital: in June 2021, the government launched one of Africa's first digital vaccination passport systems – a QR-code system that improves access to state-run services and institutions, a nudge which appears to have elicited an uptick in vaccine uptake. "Doses are available for all vaccines, and it is free and safe," says Djibril Mohaman, who leads Togo's COVID-19 response. "Vaccination is the way out of this pandemic."

Working in close coordination with global and regional partners will be critical

Close collaboration with partners has always been at the core of Gavi, the Vaccine Alliance. In January 2020, months before the pandemic was declared, Gavi had already begun initial discussions with CEPI to facilitate a global COVID-19 vaccine effort. The Gavi COVAX AMC was launched at the UK-hosted Global Vaccine Summit in June 2020 with our Alliance partners, the World Health Organization (WHO) and UNICEF.

Throughout the pandemic, COVAX has developed its strategies, plans and funding in close coordination with the therapeutics and diagnostics pillars and the cross-cutting Health Systems Connector within ACT-A. The plan and goals set out within this Investment Opportunity are fully aligned with the ACT-A Strategic Plan and Budget launched in October 2021. More detail on the alignment is set out in Annex 5.

As the pandemic has evolved, regional cooperation has also become increasingly important. Initiatives such as the African Union's African Vaccine Acquisition Task Team (AVATT) have been established and work closely with COVAX to help countries reach their national vaccination targets. Gavi also works in collaboration with the Pan American Health Organization (PAHO) to procure and supply COVID-19 vaccines and related safety injection equipment to COVAX countries in Latin America and the Caribbean.

The African Union's African Vaccine Acquisition Task Team (AVATT) Initiative

To ensure widespread access to COVID-19 vaccines across Africa, the African Union launched the African Vaccine Acquisition Task Team (AVATT). AVATT aims to secure vaccine doses to complement initiatives such as COVAX and to attain a target immunisation of initially 60% but since revised to 70% of Africa's population. It has signed agreements with Johnson & Johnson and Moderna and aims to deliver more than 450 million vaccine doses through 2022 to the 39 African countries and 15 Caribbean countries that have joined the initiative. Partners in the initiative include the African Export-Import Bank (Afreximbank), the Economic Commission for Africa, the Africa Centres for Disease Control and Prevention (Africa CDC) and the World Bank.

COVAX, AVATT and the Africa CDC have developed a close partnership and share complementary goals to close the vaccine gap between AVATT members and higher-income economies. Regular engagements are held at the leadership and technical levels to align supply and shipment information, synchronise delivery funding, and coordinate technical assistance to countries. Joint action plans generate shared intelligence to unlock bottlenecks around vaccine uptake and to boost capacity. COVAX and the Africa CDC hold weekly meetings to align on the operational approach to vaccine delivery in countries.

Dose donations provide a life-saving mechanism

As COVAX started to roll out its ambitious plans to vaccinate the world, it came to face a daunting challenge. Mutations of the original COVID-19 virus made it clear that protecting the most vulnerable in each country would not be enough: more aggressive variants meant that significantly more doses would be needed to tame the pandemic. At the same time, outbursts of the disease accelerated competition to purchase and retain the vaccines that were being produced. As a result, doses became increasingly difficult to access, amid high demand, manufacturing bottlenecks and export restrictions.

COVAX needed to address the vital call to quickly raise the bar with coverage targets while facing these mounting supply constraints. In a few weeks, working against the clock with our donors, with support facilitated by Canada, an answer was found that would address the challenge: the Gavi COVAX dose sharing initiative. As early as December 2020, dose sharing principles were agreed. It opened the way for countries which had procured vaccines bilaterally to donate part of their supply to COVAX and help ensure equitable access for lower-income countries.

France became the first country to pioneer the new mechanism, under an agreement designed with “Team Europe” in coordination with the European Commission, European Union Member States, Norway and Iceland. The dose sharing initiative was joined by a number of countries from the G7, G20 and beyond, with world leaders making a series of bold announcements. AstraZeneca was the first manufacturer to commit to dose donations in June 2021. By the end of last year, three other major manufacturers had agreed to the scheme, enabling countries to safely donate vaccines from Johnson & Johnson, Moderna and Pfizer-BioNTech.

483MN

483 million additional donated doses are planned to be shipped in the first half of the year to help accelerate coverage

The dose sharing initiative is a life-changing demonstration of our collective ability as partners to address challenges as they arise. By January 2022, COVAX had already shipped almost 500 million donated doses – just under 50% of our total deliveries. A similar number is expected for first half of 2022 for a total of 968 million by the end of July (more details can be found in Annex 6). These are critical developments at a time when teams on the ground in countries need predictability in order to deliver the biggest vaccine ramp-up in recent history. This also means that lower-income economies are increasingly able to choose the types of vaccine that best suit their national preferences.

And we continue to adapt the dose sharing mechanism. It is becoming increasingly possible for all parties involved to take a long-term view on doses that will be donated; shelf lives are increasing; and early earmarking issues have largely been solved, in line, notably, with the African Union's request.[2]

And for each dose donated, we will need to secure a syringe, ensure shipping to destination, and pay into the insurance scheme of the No-Fault Compensation Programme. These costs, known as 'ancillary costs', are small for each jab, but quickly add up when donated doses reach the hundreds of millions. Already US$ 290 million of the US$ 10 billion secured in previous phases for the Gavi COVAX AMC have been used to cover these costs. For 2022, it will be critical to secure at least US$ 545 million to make sure that dose donations can continue to be delivered and save many lives.

IT'S NOT OVER: THE WORLD URGENTLY NEEDS TO BREAK COVID NOW

> **This pandemic requires global solutions. Together with COVAX, we can accomplish what no one country could accomplish alone – ensuring vaccines are shared equitably with those who need them most. Canada will continue to work with the COVAX Facility and encourages all to join forces to get through this pandemic and build a future that is healthier and safer for everyone.**
>
> **Justin Trudeau,** Prime Minister of Canada

For much of the past 18 months, COVAX has been focused on securing sufficient vaccines for AMC-eligible economies in the face of tremendous challenges and a heavily supply-constrained international market.

With the generous support of our donors through successive fundraising campaigns designed around the needs and priorities of recipient countries, the Gavi COVAX AMC now has a diversified portfolio of 2.8 billion doses currently forecast to be made available for delivery by mid-2022 – through a combination of contracted deals with manufacturers, confirmed dose donations and cost-sharing arrangements with MDBs.

Responding to Omicron, preparing for other variants and mitigating risks in 2022 and beyond

Despite all we have learned, the truth is that it is no less challenging to predict the path the pandemic will take in the coming months than it was when COVID-19 first emerged.

Cases of COVID-19 are yet again on a rising trend. The highly transmissible Delta variant out-competed earlier mutations and led to new waves of infection in many countries. Now Omicron is doing the very same thing, and cases are rising rapidly across lower-income countries.

Even before the discovery of the Omicron variant through the excellent work of South Africa's world-class scientists, the International Monetary Fund (IMF) had again revised its growth forecasts downwards in low-income countries "with the continuing slow roll-out of vaccines as the main factor weighing on the recovery."[3] The new wave of infections is causing further disruption to global supply chains.

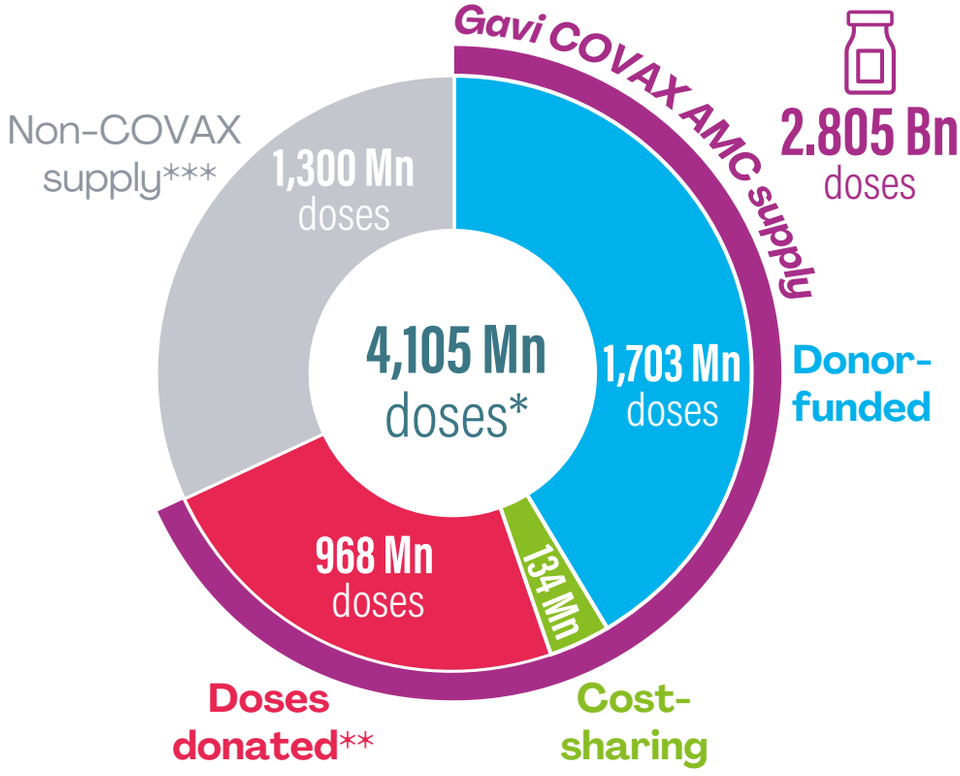
The pandemic has been a 'fragility multiplier', exacerbating the factors that drive displacement, including hunger, poverty, and sexual and gender-based violence, while trapping migrants and displaced people in ever more vulnerable situations due to closed borders. For example, women – who represent 39% of global employment – have accounted for 54% of overall job losses during the pandemic.[4]

WHO's global vaccination strategy recommends immunising 70% of the world population with COVID-19 vaccines by June 2022. The 2.8 billion doses that the Gavi COVAX AMC aims to have ready for supply by that date will provide AMC economies with a strong foundation on which to move towards the targets. Taking into account additional doses AMC economies have secured from bilateral deals, through regional arrangements such as AVATT, and recent dose donation pledges made outside of COVAX, WHO's target seems within reach.

WHO's global vaccination strategy recommends covering 70% of the world population with COVID-19 vaccines by June 2022

Figure 7

Doses forecast for supply to AMC 91 countries by mid-2022



As of December 2021

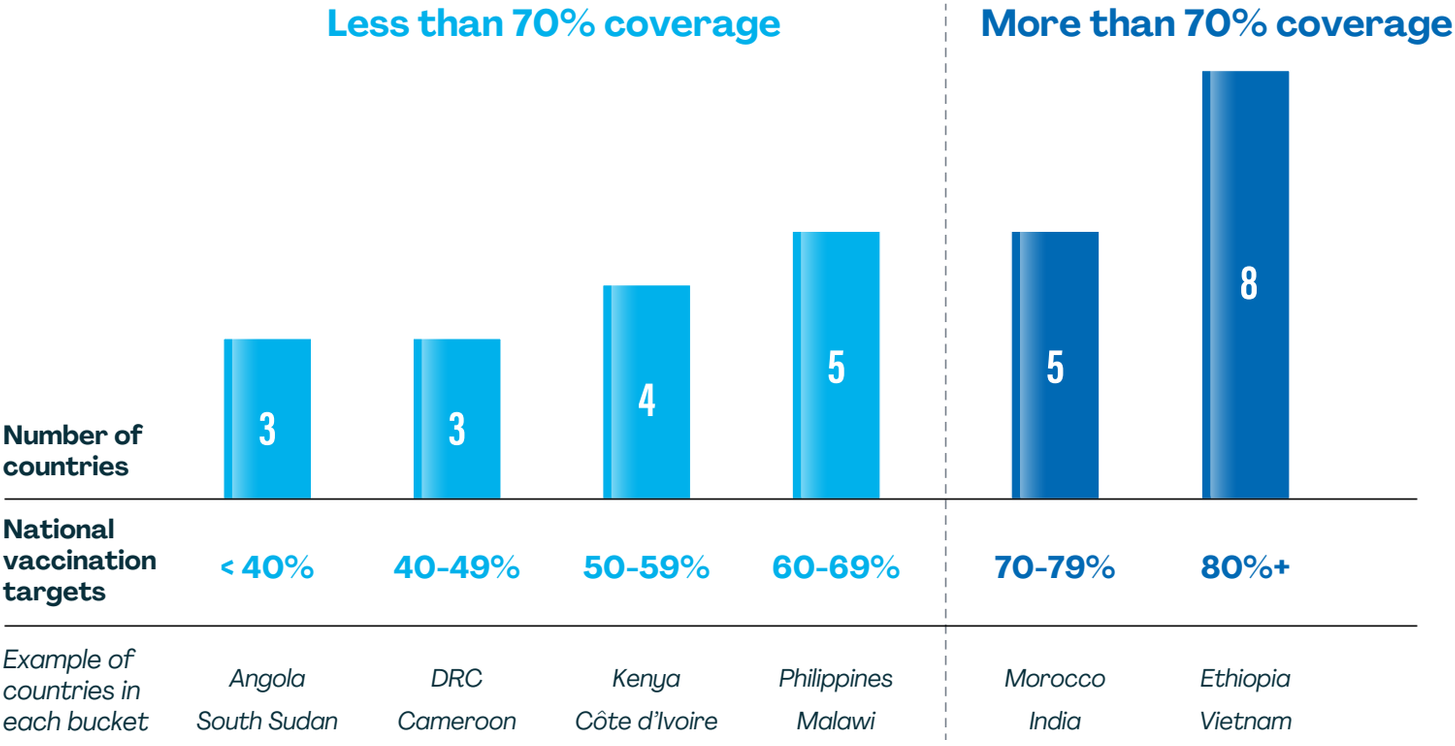
* Includes 10% wastage assumption
** Only donated doses for which the donor/ manufacturer has shared precise volume by vaccine type and by month (high-certainty scenario).
*** This reflects the estimated supply from AVATT and other non-COVAX sources by mid-2022.
Source: COVID-19 Vaccine Global Market Assessment. Analysis by Linksbridge SPC with input from AVATT, BMGF, CEPI, Gavi, IMF, UNICEF, and WHO Working Group.

Underneath the global targets, the picture is more complex. Individual AMC economies, guided by their own priorities and circumstances, are setting their own national coverage targets. As Figure 8 shows, in some cases, these targets are above 70% – for example, Ethiopia and Vietnam are aiming for over 80% coverage. In other cases, some countries with younger populations are seeking to focus on immunising all adults, so targets are lower than 70%. These targets are dynamic; adapting as the pandemic evolves. COVAX and its partners, including AVATT, will work in lockstep with implementing countries to support them in meeting their coverage targets.

Figure 8

Country vaccination targets as of December 2021

Countries per vaccination targets, sample of 28 countries – Non-exhaustive and preliminary analysis as captured in publicly available information and/or updated National Deployment and Vaccination Plans (NDVPs)



However, just as the virus evolves, so does the world's knowledge of the immunology of the COVID-19 virus and how vaccines work. It seems inevitable that more doses will be required for lower-income countries to maintain the same level of effective coverage – particularly for those at highest risk. And so procurement strategies will need to be updated.

Growing demand for boosters

Across high-income countries, what began as a targeted campaign focused mainly on the elderly and high-risk populations has now evolved into a race, turbocharged by the Omicron variant, to ensure that all adults are provided doses.

With the WHO SAGE committee having recommended that booster doses are required for some at-risk populations,[5] and with further recommendations likely in 2022, lower-income countries will want to ensure their populations are provided with the same levels of protection seen in higher-income countries. Gavi estimates that a further 419 million doses would be required to provide booster vaccines to at-risk population groups across the AMC 91. Should lower-income countries decide, as have many higher-income countries, to seek booster shots for their entire adult populations, that number increases by a further 1,536 million doses – almost 2 billion doses in total.

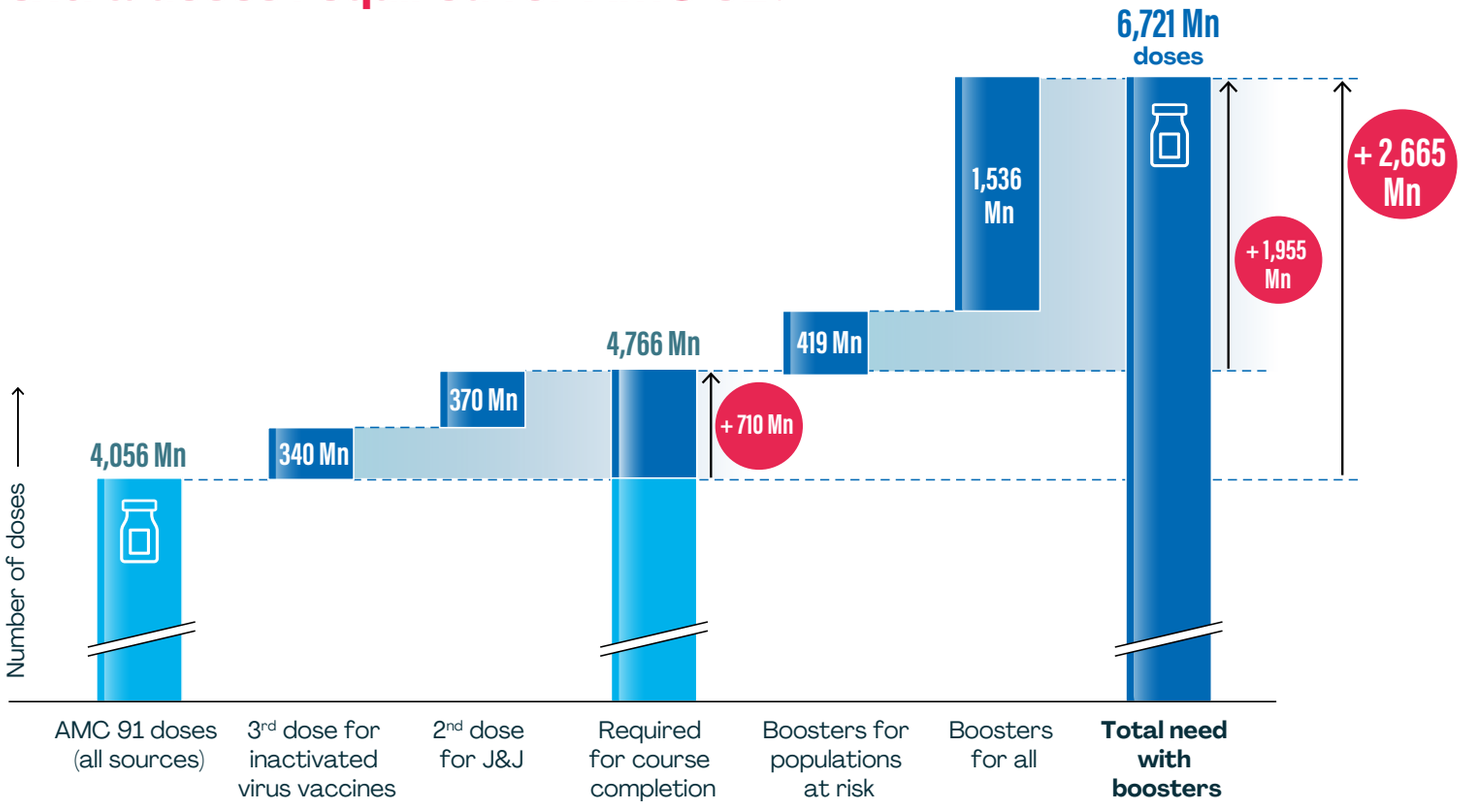
Achieving effective immunity

It's not just demand for boosters that is driving up global demand for COVID-19 vaccines. There is now increasing evidence that some vaccines may require additional doses as part of their primary series. SAGE has already recommended a third dose of some inactivated virus vaccines as part of the primary series for those aged over 60 years, as well as booster doses for the immunocompromised. It has also set out circumstances in which a second dose of the J&J viral vector vaccine is appropriate. Gavi estimates that these two decisions alone could require lower-income countries to source another 710 million doses.

Figure 9 illustrates the magnitude of the various potential demand risks to complete primary series and provide boosters. Should even just these known risks materialise, AMC economies could potentially require up to an additional 2.7 billion doses, almost the entire quantity of doses that the COVAX AMC has secured to date from advance purchase agreements (APAs), dose donations and cost-sharing.

Figure 9

More than 100 countries administering boosters: extra doses required for AMC 91?



As higher-income countries also roll out vaccines for adolescents and paediatric populations, pressure on existing supply is increasing while simultaneously increasing demand from lower-income countries. In addition to boosters and paediatric vaccination, there may also be demand for new variant-adapted vaccines in a situation where existing vaccines become less effective against new variants such as Omicron.

Supply improving but risks remain

There are also a range of risks to consider on the supply side, many of which are universal and may impact both non-COVAX and COVAX supply. Experience so far has shown significant risk of supply disruption related to export controls, manufacturing scale-up, and delays or failure of vaccine candidates to achieve regulatory approval. While there are encouraging signs some supply constraints are easing – such as the gradual lifting of export restrictions from India – it seems reasonable to plan on the basis that some supply-side shocks will continue until at least the middle of 2022.

> **Ensuring global access to COVID vaccines is crucial to fight the pandemic and the European Investment Bank is pleased to back COVAX around the world. Scaling up engagement through the innovative COVAX Investment Opportunity will both enable new affordable supplies and allow countries to acquire more vaccines. This is crucial to increase vaccination worldwide.**
>
> **Werner Hoyer,** President of the European Investment Bank

HOW CAN THE GAVI COVAX AMC MEET THE GLOBAL CHALLENGE?

> **Against all odds, COVAX has delivered more than a billion doses. COVAX is not perfect but it represents the only means for many countries to get vaccines. We support this Investment Opportunity which would allow COVAX to do even more in 2022 and provide AMC countries with greater certainty and resilience as they deliver their vaccines.**
>
> **Retno Marsudi,** Minister for Foreign Affairs, Indonesia

The emergence of Omicron has served as a sharp reminder that no matter where you are in the world, the COVID-19 crisis is far from over.

The virus is constantly changing and adapting to circumstances. So must the world's defences. The Gavi COVAX AMC now needs to move into a different, but no less urgent, phase of operating. As crisis and uncertainty abound, it needs to provide greater stability and resilience to countries to help them deliver their individual country strategies. As the pandemic evolves, there are tasks that can only be performed by COVAX building upon these foundations and operating as a global mechanism:

- ensuring that vaccine markets are managed in the interests of these countries and the right products secured; and

- coordinating supply and demand, given the many sources of supply at country and regional levels.

Now is the time to reinforce this global mechanism. The unique challenge of responding to Omicron, preparing for other variants, and managing a profile of risks and uncertainty that AMC economies face as they move into 2022, means that at least US$ 5.2 billion of additional financing is required over

the next three months to maximise the capacity of COVAX to support AMC economies and provide greater security and resilience in their national plans and coverage targets.

That funding would provide the Gavi COVAX AMC with the means to pursue an immediate three-pronged strategy to create a **Pandemic Vaccine Pool of 600 million doses** to increase coverage and mitigate against both demand and supply risks; **procure critical ancillary supplies** to ensure dose donations get to those who need them; and build on Gavi's comparative advantages to **strengthen in-country delivery systems** to get shots into arms. In executing this strategy across 2022, Gavi would maintain a core focus on the particular needs of the world's lowest-income countries within the AMC 91, which will require the most support.

Component I: the Pandemic Vaccine Pool (US$ 3.7 billion)

Over the past 18 months, with the support of our partners, the Gavi COVAX AMC has been able to build up a portfolio of donor-funded and cost-shared vaccine doses which have helped countries plan ahead to 2022 to increase their coverage targets towards the global goals.

In 2022, the role of the Gavi COVAX AMC needs for the most part to pivot away from a supply-focused approach to a more nimble and flexible strategy that is responsive to the demands of AMC economies and helps provide confidence they can respond to Omicron and other variants and plan for, and mitigate, further risks and pressures. Our goal is to be able to support each AMC country to deliver their own plans, priorities and preferences in support of the global 70% coverage target.

In order to achieve this, the Gavi COVAX AMC can act as a global aggregator and risk management instrument by offering

Gavi has learned from experience: access to cash and contingent financing well in advance is key to reserving doses

a **financially frontloaded Pandemic Vaccine Pool** of diversified vaccines to manage risks and uncertainties.

Funding is required up front and as soon as possible in the first quarter of 2022 so that Gavi can lock in dose orders with manufacturers. As Gavi has learned from experience, access to cash and contingent financing well in advance is key to reserving doses. With finance in place, orders can be placed at the right moment to ensure delivery can be phased in appropriately across 2022 and help countries plan their own vaccination strategies with greater predictability.

It is envisaged that doses for the Pool will be mainly secured using options under the set of existing APAs, with any additional deals executed depending on country demands and preferences. The Pool will be designed to provide flexibility and greater security to help countries manage the significant number of risks they may face in 2022, both to demand (to increase primary coverage, for booster doses or for variant-adapted vaccines) and to supply shocks (from further manufacturing delays or disruptions). Early visibility is critical to break the cycle of late supply and ensure lower-income countries do not continue to fall behind.

As countries scaled up their immunisation programmes through 2021, demand for different products is becoming clearer. The options chosen for the Pool will reflect the optimal combination of products requested by countries to meet their programmatic requirements and their absorptive capacity. Depending upon the evolution of the virus, it may also provide capacity to purchase modified vaccines designed to be effective against new variants.

Three examples to illustrate how the Pool could be used to flexibly respond to different – but realistic – scenarios that could emerge during 2022 are set out on the next page.

Scenarios for the Pandemic Vaccine Pool

Scenario 1: Significant increase in demand for boosters

A majority of AMC economies decide to expand booster programmes to a large subset of the population, for example, to all adults.

- **How the Pool would respond:** COVAX would focus on procuring vaccines that have shown use as boosters, particularly as heterologous boosters for the vaccines in the COVAX portfolio that have been used for primary series vaccinations. In this scenario, the portfolio may consolidate around a few booster vaccines. Given that many high-income countries are already planning or rolling out booster programmes, it would be critical for COVAX to secure its place in the queue for booster doses as soon as possible.

Scenario 2: A new variant with higher ability to evade immunity

A new variant emerges that reduces the efficacy of existing vaccines and requires new variant-adapted vaccines to ensure sufficient protection.

- **How the Pool would respond:** COVAX would focus on procuring variant-adapted vaccines against the new variant(s). These could be variant-adapted versions of existing vaccines within the COVAX portfolio or could be new vaccines – including those still under development that COVAX has preferential access to, for example, as a result of seed investments by CEPI. This may result in the expansion of the COVAX portfolio, with these new vaccines being supplied to countries upon WHO Emergency Use Listing. In this scenario, the supply of variant-adapted vaccines is likely to be limited initially given constrained production and anticipated high demand, and so it would be critical for COVAX to secure its share of these desirable vaccines early.

Scenario 3: A supply shock

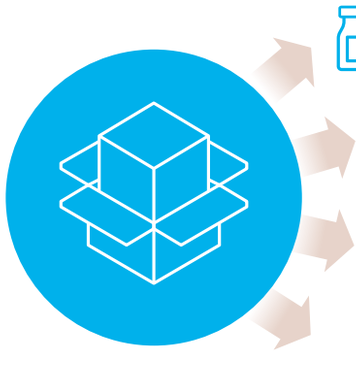
Demand from AMC economies materialises as expected, but the supply situation becomes worse than expected (e.g. supply shortages due to high-income country demand for boosters, introduction of export restrictions due to limited supply of booster and/or variant-adapted vaccines, further manufacturing shocks).

- **How the Pool would respond:** COVAX would focus on procuring more vaccines from the most reliable manufacturers that are able to provide timely supply of the vaccines that are most preferred by countries. These would be likely to be procured from COVAX's existing portfolio, including leveraging its existing options under contract, so that countries do not have to introduce new vaccines into their existing COVID-19 immunisation programmes. Given that lead times for these vaccines are at least several months, orders would need to be placed now to secure volumes for the first half of 2022.

Figure 10

How could the Pandemic Vaccine Pool be used to respond to the needs of AMC countries?

A 600 million-dose Pandemic Vaccine Pool could be used to provide...



250 million booster doses to protect 50% of all health workers and the high-risk population of AMC 91 countries

160 million doses of new variant-adapted vaccines in case of emergence of immunity-escaping variants

90 million doses of J&J as an extra dose to complete primary coverage

100 million doses to low-income countries to increase primary coverage levels by 13%

Note: examples above are for illustrative purposes

Based on a horizon-scan of potential supply and demand risks, Gavi estimates that a pool of 600 million doses would provide a minimum level of protection and insurance across the AMC 91 economies (see Figure 10).

It is not possible to provide a definitive number for the size of a Pandemic Vaccine Pool that will guarantee all AMC 91 economies have sufficient access to doses to meet their national targets and to progress toward the global 70%. There are simply too many risks and uncertainties. The previous chapter identified potential demand-side scenarios where AMC 91 economies may require up to an additional 2.7 billion doses of vaccines in 2022 to ensure their adult populations are fully protected. Should some AMC economies follow the paths of higher-income economies and move towards the vaccination of adolescents, that number would increase further.

At least US$ 3.7 billion of funding will be needed to secure a Pandemic Vaccine Pool of a minimum of 600 million doses. Funding beyond US$ 5 billion will allow up to 900 million additional doses to be secured, extending guaranteed supply over time to cover more risks and to more countries. A lower level of funding of around US$ 2 billion would secure only 300 million additional doses and would limit the ability of the Pool to provide supply security to countries.

Component II: secure funding for critical ancillary costs (US$ 545 million)

Dose donations as a complement to other COVAX supply are expected to continue into 2022. By the beginning of December 2021, donors had provided COVAX with clear commitments to deliver around 900 million of COVID-19 vaccines through the Gavi COVAX AMC by the end of June 2022.

Most of the dose donations received by COVAX consist of the COVID-19 vaccines themselves. However, getting vials of vaccines from donors into doses that can be supplied to AMC 91 economies and ready to be transported to clinics and safely put into arms requires extra equipment, logistics and regulatory indemnification. During the early phases of the dose donation process, Gavi was able to use unallocated Gavi COVAX AMC funds to cover these additional expenses: US$ 290 million of US$ 10 billion raised has been earmarked to facilitate donations of the first 650 million doses, which creates very good value for money for those fully loaded vaccines using donor financing.

More funding is now urgently needed so that donations can continue, we can tackle syringe shortages, and the Gavi COVAX AMC is able to deliver all the doses that donors are now expected to provide through 2022: these costs are estimated at US$ 545 million.

As the constraints on the global vaccination supply market finally begin to ease and significant numbers of dose donations arrive in country alongside greater numbers of Gavi COVAX AMC purchased doses, a strong collective partnership will be required between Gavi, our Alliance partners, AVATT, donors, and manufacturers to provide predictable and reliable supply for recipient countries.

To reach WHO's 70% global vaccination goal, countries around the world require further support to scale up delivery

Component III: strengthen in-country delivery systems (US$ 1 billion)

Gavi's Alliance partners are fully committed to supporting countries to achieve their individual COVID-19 vaccination strategies, within the broader view of WHO's 70% global vaccination goal.

To reach these goals, countries around the world require further support to scale up delivery and increase the number of vaccines they can provide to their populations, ensuring no one is left behind, including the most vulnerable. Despite recent progress, absorptive capacity in many countries, and lower-income countries in particular, remains well below levels seen in higher-income countries.

Reducing those gaps in delivery will be critical to achieving equitable access across AMC economies. And as Gavi has learned, doing that well means being able to add catalytic delivery funding and bundle it together with procurement financing for vaccines so that technical assistance, operational funding and capacity building services can be provided to countries to build the right capacity, at the right time, for the right vaccine products.

Pakistan builds on routine immunisation services to build capacity for COVID-19 vaccine delivery

Pakistan has been very successful in scaling up COVID-19 vaccine delivery, with nearly 40% of the population having received a first dose and over a quarter fully immunised by mid-December. Very impressively, it has managed to do this while mitigating the risk to routine immunisation services, using Gavi's funding and technical assistance as a package to support delivery.

Pakistan used Gavi cold chain support to expand storage capacity at national and regional level, as well as building significant ultra-cold chain capacity, to ensure it could store the required COVID-19 vaccines without displacing routine vaccines. The country further strengthened its supply chain to enable it to manage the high volumes of COVID-19 vaccines by making this a priority area for Gavi-funded technical support while using CDS funding to rapidly procure more refrigerated trucks to deliver vaccines. CDS support was also used to recruit surge vaccinators for COVID-19 so that existing vaccinators could remain focused on routine immunisation as well as the recent, successful measles-rubella vaccine campaign, which reached more than 92 million children in 12 days in November.

At its peak, the programme has been delivering 1.7 million doses per day through a combination of vaccination centers and, increasingly, outreach and school campaigns.

That expertise will enable Gavi to focus on ensuring greater levels of access for the most marginalised and vulnerable populations within countries. Gavi has used the COVID-19 delivery funding received so far to support countries to reduce gender-related barriers to access by equipping women vaccinators in Afghanistan; reached rural communities in Ghana by partnering with the private sector to deliver vaccines via drones; provided fast-track access to refugees and people with disabilities in Nepal; and employed the systems in Pakistan developed with Gavi for routine immunisation, which were already targeted at zero-dose children.

To do more of that, at least US$ 1 billion is needed for COVAX in 2022 – US$ 600 million for Gavi and US$ 400 million of support that will be raised concurrently by UNICEF. Gavi will use these resources to extend and expand technical assistance through to the end of 2022, fill remaining gaps in countries' cold chain and ultra-cold chain capacity, and replenish its CDS envelope (with total CDS reaching ~US$ 1.1 billion) given high country demand. UNICEF's fundraising will focus on supporting delivery of COVAX Humanitarian Buffer doses as well as providing support in emergency and humanitarian settings.

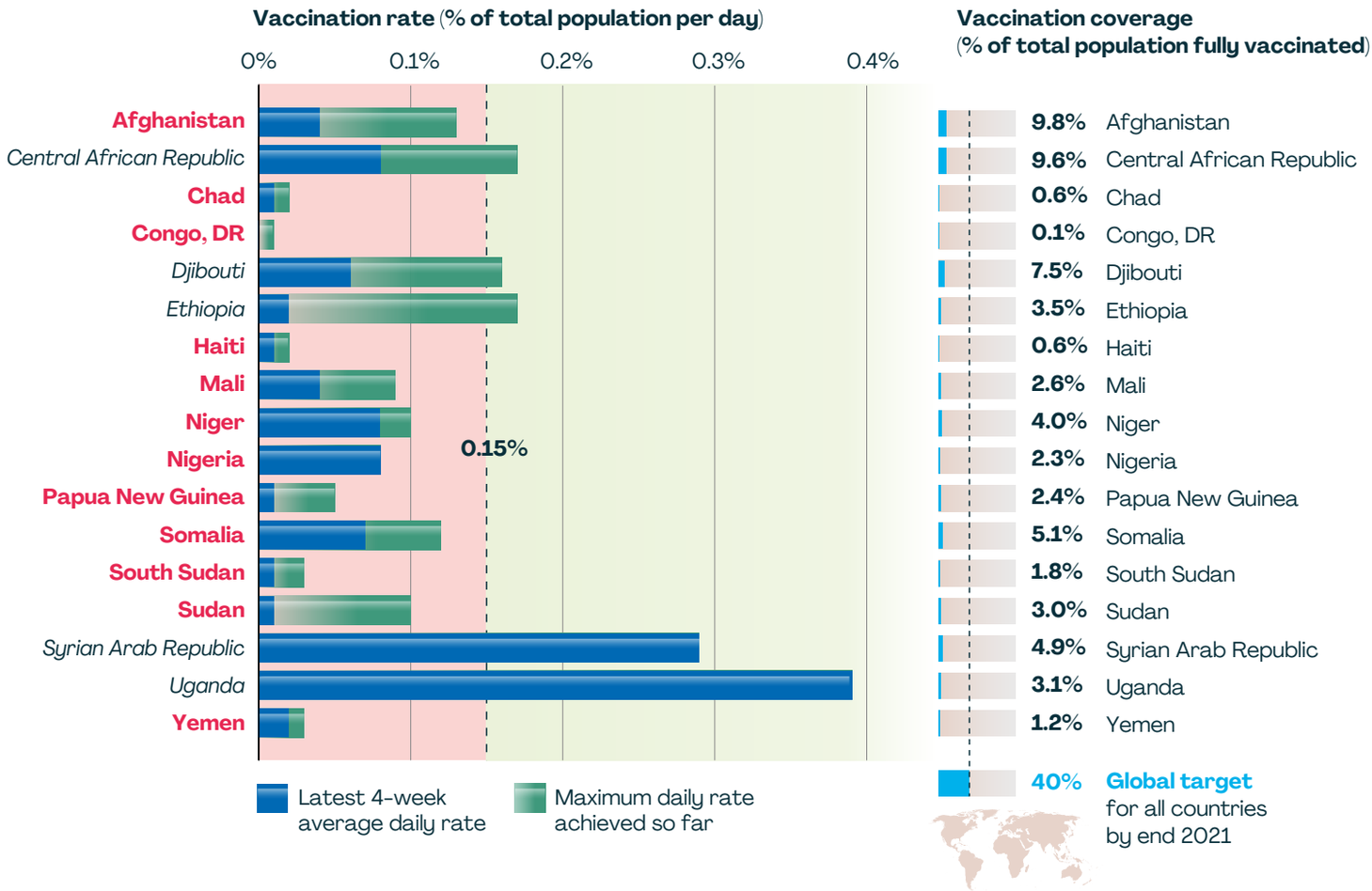
Building on lessons from delivery funding provided to date, Gavi's focus will be on sustaining and expanding technical support to the 57 countries that are eligible to apply for support through Gavi's core immunisation programming. Special attention within that grouping will be placed on the 20-25 countries facing the greatest challenges at any one time, which will be largely low-income economies. Real-time assessments will monitor vaccine absorption capacity and rate of usage. Extra support will be provided for countries with the lowest coverage and funding in which administration rates are below 0.15% of the population vaccinated per day. Figure 11 illustrates 17 countries that we have been monitoring particularly intensively given they have persistently had uptake below this rate.

0.15%

Extra support will be provided for countries where the vaccination rate is below 0.15% of the total population per day

Figure 11

Real-time assessment of AMC countries requiring additional support from Gavi to strengthen delivery capacity



> Country, regional and global teams will work together to identify critical bottlenecks to absorption in country plans and ensure countries get the support required to improve absorption, which could include CDS funding, management surge support, technical assistance as well as other bespoke elements. As countries take forward new and innovative approaches to mass vaccination, South-South learning will be critical and can be reinforced with technical assistance from additional partners that bring these skills.

This support will enable countries to increase service delivery capacity, reduce wastage, boost vaccine confidence and address misinformation, while maintaining routine immunisation and other essential services. As always, coordination will be critical to success. Just as for vaccine procurement, funding from Gavi isn't the only source available for countries to fill these gaps. In line with Gavi's core principles of burden-sharing, many middle-income members of the AMC 91 will be able to set aside domestic financing to strengthen delivery systems, and/or take advantage of funding envelopes agreed by the MDBs. But access to funding varies significantly across the AMC. Latest estimates suggest there are now 25 AMC economies with more than US$ 10 per capita in external funding for delivery but another 22 countries with less than US$ 2 per person.

Gavi is well positioned to move quickly to fill gaps, particularly to Gavi-supported countries with low health system capacity where we have strong comparative advantage. The US$ 1 billion request for COVAX delivery funding has been designed to take account of the latest pipeline of support expected from MDBs. For example, the World Bank has approved over US$ 7.5 billion in support for countries, of which 30% is for delivery. There are 25 further projects under development worth US$ 2.5 billion, likely to include significant additional delivery financing. This should help provide many countries with the resourcing they require for delivery, with COVAX targeting support at countries with the greatest gaps. This will be closely monitored as if MDB support does not materialise as expected, or as rapidly as required, demand for COVAX support may be higher than anticipated.

In December 2021, the Gavi Board recognised the urgency of accelerating progress on delivery and approved the creation of an enhanced coordination structure, including a temporary Steering Committee for delivery designed to bring together Alliance partners, as well as key external stakeholders

such as the Africa CDC/AVATT, to help speed up funding disbursements to countries, and provide an end-to-end view of delivery. The Steering Committee will support the work of the new Global Lead Coordinator, Ted Chaiban. Together this will ensure a unified and coordinated approach to channel increased and focused support to help countries build capacity and reach their vaccination targets.

> **While we appreciate the contributions from donors to help us make up our short-term vaccine shortfalls, we are eager to work closely with COVAX and partners to ensure that we have visibility into supply schedules and our health systems can absorb the influx of doses in the coming months, rapidly, safely and efficiently.**
>
> **Macky Sall,** President of Senegal

Real-time data and gender-sensitive programming surges access in Afghanistan

The collapse of the Afghan government in August 2021 led to widespread disruption to health services, significantly undermining efforts to scale up the delivery of COVID-19 vaccines. By mid-October, fewer than 15,000 doses were being provided per day. An emergency effort was launched, drawing on Gavi's existing US$ 8 million support, to fast-track the training and recruitment of vaccinators and intensifying efforts to generate demand.

With cultural restrictions tightening under the Taliban, efforts were made to ensure that at least 50% of vaccinators hired were women. As a result of this deliberate focus, 52% of doses given under the 'accelerator campaign' were administered to women, with just a small number of provinces experiencing lower-than-expected uptake among women. The campaign also made use of real-time data, with dashboards clearly visualising progress against agreed performance targets, with WhatsApp updates shared with provincial teams at the end of every day. This has enabled real-time troubleshooting and active learning to help guide improvements in ongoing vaccine distribution efforts.

These approaches swiftly enabled a threefold increase in delivery with 45,000 doses now being administered on average daily; a significant achievement given the scale of disruption caused by the fall of the government in mid-August. Nearly 10% of the population is now vaccinated with two doses, well over half of which were supplied by COVAX.

Nepal focuses on equity and inclusivity

When Nepal received its first consignment of COVAX doses in early March 2021, it became one of the first countries in Asia to begin the mass distribution of COVID-19 vaccines.

Gavi's support for cold chain equipment allowed the country to improve and expand the storage capacity for COVID-19 vaccine roll-out. Additional technical assistance support advanced the planning and preparedness activities including training, supervision, strengthening adverse event surveillance and development of a robust demand generation plan. The tailored support in the amount of US$ 1.1 million enabled Ministry teams to rapidly roll out the vaccines, especially between July and September 2021, increasing coverage from 4% to 20%, with a focus on priority populations.

The COVID-19 vaccine roll-out has been remarkable for increasing equity and inclusivity. Like many countries, Nepal prioritised its frontline workers and the elderly with its first volley of shots. As further doses became available, the country invited marginalised populations to the front of its vaccine queues: refugees and people with disabilities were afforded priority access to Johnson & Johnson's single-dose vaccine to minimise barriers related to travel. A high-level multi-stakeholder Gender in Humanitarian Action Task Team (GiHA-TT) has also played an important role in promoting equitable access.

Across the country, vaccine acceptance has been strikingly high: "there is [practically] no hesitancy," Dr Jhalak Sharma Gautam, chief of the Ministry of Health's Vaccination Division remarked in October. That popular commitment to the immunisation campaign enabled vaccination rates as high as 300,000 doses a day.

By mid-December, the country had secured some 27.3 million vaccine doses, of which nearly 13.5 million came from COVAX. As of mid-December, 35% of Nepal's population have received at least one dose; 30% qualify as fully immunised.

FUNDING THE GAVI COVAX AMC

At the G20 Summit in Rome, I expressed my support for the goal of vaccinating 70% of the population in all countries by mid-2022, building onto Japan's pledge of 1 billion US dollars in total announced at the COVAX AMC Summit co-hosted by Japan in June 2021. I call on other global leaders to continue to work together to improve equitable access to safe and effective vaccines.

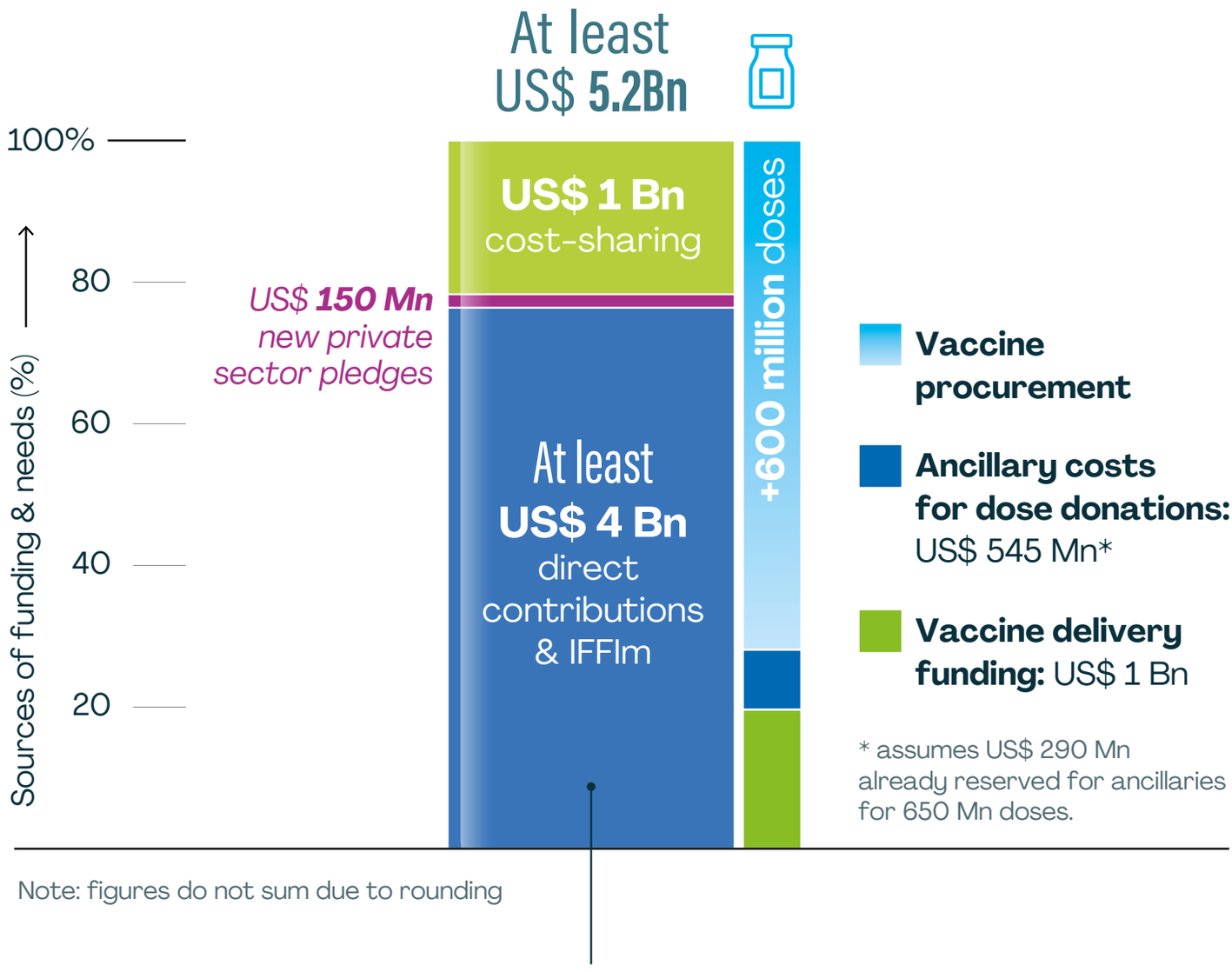
Fumio Kishida, Prime Minister of Japan

Time is of the essence. To respond to the crisis provoked by the Omicron variant, prepare for other new variants and achieve the objective to vaccinate 70% of the world by the summer of 2022, we will need all hands on deck. If the world unites to ensure adults in lower-income countries are immunised at levels achieved in high-income countries, recent modelling suggests 940,000 to 1.27 million deaths could be prevented in the next year[6], and the economic cost of the pandemic could be reduced by as much as half in some countries.[7] We call on donors and partners to work together to win the race against variants. As part of this joint effort:

We call on our sovereign donors, as well as corporations, philanthropies, and foundations to provide direct and upfront financial commitments of at least US$ 4 billion by March 2022
Securing bold commitments before the end of Q1 2022 will be critical to enable us to lock in the Pandemic Vaccine Pool, ensure ancillary costs are covered as dose donations continue to ramp up, and help prepare countries to move to the next phase of the biggest vaccine roll-out in history.

Figure 12

Funding the Gavi COVAX AMC



US$ 1.5 bn can be drawn from IFFIm by pledging:

- US$ 210 Mn per year over 10 years
- US$ 150 Mn per year over 15 years

Leveraging Gavi's innovative funding instruments to fast-forward impact

While every minute counts against the spread of COVID-19, for sovereign donors to secure significant amounts of funding in a short period of time may go against domestic budget constraints. This is why, to ensure the fastest availability of resources, Gavi has developed several flexible investment options.

IFFIm, the International Finance Facility for Immunisation, is an innovative financial instrument that enables donor payments to be spread over many years, while funds can be immediately frontloaded by issuing bonds against these longer dated commitments. This mechanism has been used for over a decade to successfully accelerate impact with Gavi, CEPI and COVAX. In November 2021 IFFIm increased the offering on its April 2026 vaccine bond by US$ 250 million to reach US$ 1 billion. At a pivotal moment, this milestone highlights IFFIm's ability to frontload essential funding to fight public health emergencies.

The EUR 440 million **frontloading facility** we started with the **European Investment Bank** offers donors a zero-interest mechanism by which to advance signed agreements into early cash commitments where budgets might release monies to Gavi further into the future (up to five years).

These two mechanisms provide donors with a set of options for contributing to the Gavi COVAX AMC funding ask with immediate impact while building on donor budget cycles.

We will continue to work closely with development finance institutions as well as commercial capital providers to further develop the suite of tools that address liquidity, balance sheet and pre-financing risks for the benefit of faster access to capital for Gavi- and AMC-eligible countries.

We call on the private sector to contribute at least US$ 150 million towards our joint objective

> **Keeping the world safe means reaching the last mile. UPS and Zipline are delighted to be working hard to help COVAX AMC ensure the largest, most rapid global vaccine deployment in history, benefits everyone.**
>
> **Nicole Clifton**, President of Social Impact & The UPS Foundation and **Keller Rinaudo,** Co-Founder & CEO of Zipline

> **Mastercard is committed to supporting the accelerated procurement and equitable distribution of vaccines, leveraging our technology and our financial resources. Global recovery from the pandemic depends on it.**
>
> **Michael Froman,** Vice Chairman and President, Strategic Growth, Mastercard

As a public-private partnership, Gavi has a long track record working with corporations for impact. Since the beginning of COVAX in 2020, we have mobilised more than US$ 234 million from the private sector in support of the Gavi COVAX AMC. With this track record and experience of working with the private sector, we once again call on the private sector to support COVAX and end the pandemic.

As part of this approach, we call for support from corporations, employees, and consumers, through direct donations to the Gavi COVAX AMC as well as leveraging public-facing initiatives such as the Vaccine Forward Initiative,

the Go Give One campaign and CODE (RED), in partnership with (RED) and the Global Fund.

Beyond funding, we also call on the private sector to share core expertise and assets that can be mobilised to support countries' efforts in getting shots in arms. For instance, our deep partnership with UPS has supported the delivery of over one billion doses through COVAX and beyond. Working with organisations such as Unilever, we have leveraged the deep expertise and know-how in behaviour change to promote handwashing and immunisation in India and now Indonesia. Recognising the need to drive innovation, Gavi catalysed a drone delivery partner. In 2016, Zipline began delivering vaccines and essential medicines in Rwanda and Ghana, and they are now delivering COVID-19 vaccines to those in need. Ensuring that data systems are harnessed to their full potential, Zenysis Technologies uses its advanced machine learning platform to build COVID-19 control rooms to pinpoint where resources should be deployed. And Mastercard offers a contactless card containing electronic medical record that are portable in all clinics in Mauritania and beyond.

Ghana and Gavi join forces on innovation: COVAX vaccines take to the air by drone

As part of its commitment to innovation and harnessing private sector expertise, in 2019 Gavi partnered with the Government of Ghana, Zipline a medical drone company and logistics giant UPS to build the world's largest drone delivery network, to deliver vaccines and essential medicines to remote and rural populations.

On 24 February 2021, the first ever shipment of COVAX vaccines landed in Ghana. No sooner had 600,000 doses touched down in Accra, preparations were underway for some of them to be launched back into the air. Refrigerated trucks from the UPS fleet first deliver vaccines safely to the National Cold Room, a central storage facility run by Ghana's Expanded Programme on Immunisation (EPI), and then onto four Zipline "nests" – launch-bases for the company's squadrons of autonomous medical delivery drones.

This partnership has already delivered 4.7 million vaccines and aims to deliver at least 2.5 million doses of COVID-19 vaccines (including those requiring ultra-cold chain storage) across Accra, Ashanti and the central regions of the country, boosting vaccination rates in remote and hard to reach areas.

In Ghana, as elsewhere, Gavi's track record of helping to forge innovative public-private partnerships has proven fruitful during the global health crisis and a clear example of how innovation and expertise can overcome stubborn challenges, such as predictable and efficient delivery to remote communities.

We call on implementing countries who wish to secure greater levels of coverage to invest an additional US$ 1 billion through COVAX via the Cost-Sharing Mechanism

> **The Asian Development Bank worked closely with COVAX to design the Cost-Sharing Mechanism, which enables new supplies and allows countries greater access and affordability to acquire vaccines. This is crucial as governments implement their vaccination plans. We have so far committed over $600m through the mechanism and stand ready to do more.**
>
> **Masatsugu Asakawa,** President of the Asian Development Bank

As countries strive to ramp up vaccination rates, we encourage them to access COVAX AMC prices and delivery for their own domestic purchases. This is the guarantee that countries will benefit from the lowest prices and broadest access to COVAX's diversified vaccine portfolio. This also means countries will be able to access the unique No-Fault Compensation Programme that we have put in place with COVAX: the first and only global vaccine injury compensation mechanism has contributed to addressing one of the thorniest problems that needed to be overcome to successfully roll out COVID-19 vaccines worldwide, indemnity and liability. It is one of the key benefits for lower-income countries choosing to roll out COVID-19 vaccines through COVAX, limiting their financial risk.

In order to ensure that implementing governments have the resources they need to buy these doses, Gavi has built on its record of financial innovation to put in place a bold new Cost-Sharing mechanism that unlocks MDBs financing for countries, available on concessional or grant terms, while simplifying

countries' vaccine purchases and making sure they get the support they need from international and regional financial institutions. Our cost-sharing platform is brought to countries in partnership with the Asian Development Bank, the European Investment Bank, and the World Bank. Participation in cost-sharing is voluntary, additive, makes use of surplus supply and does not compete with donor funded doses for delivery.

We call on civil society, country health teams and UN and ACT-A agencies to fast-forward our joint efforts

As the battle between new variants and vaccination continues, national governments driving forward vaccination plans with partners and country teams will be at the forefront and will need continuous support from all of us.

WHO's role will be central in swiftly providing expert review and prequalification or emergency use licensure for new and evolving vaccines. UNICEF's teams will need to continue to work against the clock to ensure smooth procurement and shipping of vaccines, and to ensure efficient use of the US$ 400 million UNICEF funding out of the US$ 1 billion needed for delivery roll-out, working closely with Gavi and other partners in the new COVAX delivery coordination mechanism, ensuring vulnerable and marginalised populations are protected.

Civil society partners will have a critical, broad mandate, from helping raise awareness in donor capitals about the urgency to continue to mobilise in global solidarity, to tackling vaccine hesitancy and supporting last-mile vaccine delivery, particularly with fragile communities and populations and in emergency settings.

We call on the pharmaceutical industry to take bold steps

We will only win the fight if everyone contributes equally to the world's efforts. We must recognise the incredible work carried out by the pharmaceutical industry in this pandemic to date. It is truly remarkable that in less than two years since the WHO characterised COVID-19 as a pandemic, 33 vaccines have been approved for use by at least one national regulatory agency. We welcome the ongoing investment channeled into both variant-adapted vaccines and new vaccines that will help provide the world with further tools to help end the pandemic.

The industry now has a key role to play moving forward to remove obstacles that can be in the way of delivery. In particular, we call on all pharmaceutical companies to waive indemnity and liability for the COVAX Humanitarian Buffer, so that humanitarian agencies can fulfil their mission and relief be provided to millions of refugees, displaced communities, and populations in fragile settings. We also call on the industry to continue to ensure continued supply to COVAX at the lowest prices, so that implementing countries and partners can plan sustainable roll-outs and ensure adequate preparation and management on the ground. We ask that manufacturers deliver and strengthen their commitments to supply variant specific vaccines or boosters through COVAX's Advance Purchase Agreements or options.

The pharmaceutical industry has a key role to play moving forward, to remove obstacles that can be in the way of delivery

The Cost-Sharing Mechanism

> **The innovative cost-sharing mechanism developed by COVAX and the World Bank has helped enable new supplies and allowed countries to speed up the purchase of vaccines. Greater transparency around contracts – including vaccine availability, prices, and delivery schedules – has proven to be critical as governments prepare and implement their vaccination plans.**
>
> **David Malpass,** President of the World Bank Group

In 2021, Gavi successfully launched the **COVAX Cost-Sharing Mechanism** to unlock additional financing from **MDBs** and **domestic resources** to access **lower pricing**. Building on Gavi's global reputation for innovative financing, this operates according to five principles:

- **Voluntary:** individual countries do not have to participate if they do not wish to and are not penalised for not doing so – cost-sharing has no effect on the allocation of fully-subsidised doses that AMC countries receive;
- **Additive:** cost-sharing taps additional financing from MDB and domestic sources to enable countries to reach national coverage targets faster, but does not subtract from or substitute for grant funded doses provided by AMC donors;
- **Surplus supply:** vaccines purchased through cost-sharing are surplus doses that have not been taken up by AMC donor funding – in most cases these are options with manufacturers that would otherwise expire unused;

- **Non-competitive:** delivery of doses does not compete for resources with AMC fully subsidised doses as countries first take into account their capacity to absorb deliveries; and
- **Transitional:** cost-sharing is a temporary model that we aim to transition to a model closer to the core Gavi co-financing model in future years.

In 2021, COVAX mobilised close to **US$ 800 million** in domestic and pre-approved MDB financing on behalf of **12 countries**, representing **134 million extra doses**. This funding is incremental to AMC donor funding, and helps to address failures in the vaccine market by enabling AMC countries to benefit from improved purchasing power to access lower pricing than they can negotiate bilaterally. The vast majority of AMC countries have projects already approved through MBDs wherein financing can be used for cost-sharing.

For 2022, the aim is to help countries to purchase **US$ 1 billion** of vaccines through cost-sharing in addition to donor funding mobilised for the Pandemic Vaccine Pool. Alongside existing partners, the **Asian Development Bank** and the **World Bank**, the **European Investment Bank** recently finalised arrangements to support African countries seeking to boost vaccine coverage, and discussions with other banks are ongoing. Whilst cost-sharing is an important way in which countries can access additional doses, MDB finance cannot be placed at risk to secure deals. In this regard, cost-sharing is a complement but does not replace donor funding, which is required up front to secure additional APA options in the COVAX portfolio.

Longer term, cost-sharing offers a stepping stone towards a more sustainable pandemic financing model – and the eventual shift from donor-funded emergency response to one in which both MDB and domestic financing contribute, as is the case today for routine immunisation.

Closing the Act-A Financing Gap

COVAX's efforts would be incomplete if they were not complemented with other critical interventions – diagnostics, treatments, and broader health system strengthening. The Access to COVID-19 Tools Accelerator (ACT-A) is a groundbreaking global collaboration to accelerate the development, production and equitable access to COVID-19 tests, treatments and vaccines. It was set up in response to a call from G20 leaders in April 2020. We will continue to work closely with ACT-A's agencies to ensure synergies in our respective interventions, so that we can together put an end to the worst pandemic in decades. Annex 5 sets out how this Investment Opportunity links into the overall ACT-A Strategic Plan and Budget.

This is why we call on donors to support ACT-A as a whole, and urgently address the overall ACT-A financing gap.

Finally, and importantly, the colossal and imperative challenge of meeting the global need for COVID-19 vaccines has created huge moral and legal predicaments that will be essential for us to solve, not just to end this current pandemic, but also to ensure we are more prepared for the next. COVAX has been a strong supporter of encouraging manufacturers to share all-important technical know-how. Technology transfer is one of the reasons we have managed to get the kinds of volumes of doses we have seen so quickly. But we need more. And if we are to be prepared for the next pandemic preparedness, we need to increase global manufacturing capacity too, particularly in regions with low manufacturing capacity. And while COVAX supports any measures that increase the sharing of intellectual property, encouraging the further use of technology transfers is the best way to ensure there is adequate supply, without removing the incentives for manufacturers to develop the vaccines we desperately need.

The opportunity for further acceleration of impact

If more funding above US$ 5.2 billion were to be pledged, Gavi would be able to further increase its Pandemic Vaccine Pool beyond 600 million doses and further address the risks and uncertainties the world is facing as the virus continues to mutate. The Pool is specifically intended to manage risk, including increasing coverage if it is indicated. A particular emphasis will be placed on using this supply to increase primary coverage in the highest need countries such as low-income countries, which generally lack alternative sources of supply and to date have relied on COVAX for more than 80% of their supply on average.

The base case calls for 600 million doses of incremental supply. However, this value is a point estimate, and the actual requirements will continue to evolve due to the uncertainties set out in this document. If risk increases over the coming

year, and countries look to COVAX to fill larger gaps in their coverage, a high case scenario could run to more than 900 million doses. The higher end of this range reflects a larger degree of risk materialising, including for example recommendations around population-wide use of boosters on the demand side or renewed export controls on the supply side.

The cost of underinvestment

The COVID-19 pandemic has further highlighted the interconnectedness between economic stability and vaccine equity. The impact of the new Omicron variant on capital markets and commodity prices was a stark reminder that until everyone is protected, no one is protected. And the longer-term impacts of the newest variant on inflation levels, industry stabilisation and global supply chains remain uncertain. Stabilising the world and ending this pandemic is now an urgent economic imperative as much as a public health measure.

Should the world collectively fail to secure US$ 5.2 billion to finance the Gavi COVAX AMC, we would need to decide which element of country demand would not be met, in terms of the size of the Pool, funding for ancillary expenses for donated doses, and support for implementation of vaccine plans in countries.

For instance, fulfilling the ask would enable 600 million doses for the Pandemic Vaccine Pool which could be used to ensure availability of 100% of boosters for populations at risk across the AMC 91 as well as increasing coverage levels in low-income countries by more than 13%. However, a Pandemic Vaccine Pool of 300 million doses would only be sufficient to cover supply and demand challenges to boost around 50% of the population at risk and raise low-income coverage levels by less than 10% - and only if we assume that manufacturers are able to overcome production issues and that vaccines with recent

80%

Low-income countries have relied on COVAX for more than 80% of their supply on average.

or still pending WHO Emergency Use Listing can scale up in the first quarter of 2022.

With less visibility and security of supply for countries, the lowest-income and most fragile countries will have more difficulties planning for steady increases in coverage. The cycle of late supply will continue and low-income countries will be at risk of falling behind. Without additional delviery support, some of the world's lowest-income and most fragile countries will struggle to deliver the vaccines they receive through COVAX and other sources. The world would risk forgetting the key fact that you cannot stop a virus in geographical phases, vaccinating in some parts of the world while leaving the prediction of others until late. Doing so would leave the virus free to continue to spread and mutate and new dangerous variants will continue to emerge, as we have seen with Omicron.

LOOKING AHEAD: PREPARING FOR FUTURE PANDEMICS

"Saudi Arabia remains a key advocate of COVAX since its establishment during the G20 Saudi Presidency, whose efforts are vital in supporting members in need, particularly low income countries and fragile states. COVID-19 and its variants show that, in a connected world, vaccine policy is also an economic policy. Hence, global efforts must be sustained and investment in pandemic prevention is a low premium insurance to safeguard economic and health recovery for the benefit of all.

Mohammed Al-Jadaan,
Minister of Finance of the Kingdom of Saudi Arabia

Gavi's 22-year engagement in epidemic prevention and more recently pandemic response has made the Alliance an important thought-partner to both the G20 and G7 Presidencies, and to other stakeholders across the UN and multilateral system. We have engaged deeply with the Italian and UK Governments to support the 'Build Back Better' agenda, and we are committed to engaging deeply under the Indonesian and German Presidencies in 2022.

Our work has laid much of the foundation for the current pandemic response, whilst also establishing systems for future readiness. Prior to the COVID-19 crisis, Gavi was well recognised for our track record in surveillance and diagnostics (as for Yellow Fever) and in epidemic response (including the 2014 Ebola crisis and establishment of the Ebola vaccine stockpile).

In addition to direct support to epidemic prevention, many national COVID-19 responses have been able to leverage routine immunisation capacity built in partnership with the Alliance over many years. This includes systems for cold chain and community engagement, plus planning, distribution and monitoring capacity; all often the result of health systems

investments spanning decades. Critically important have been global mechanisms; governance and legal structures established by Gavi and rapidly scaled through the COVAX Facility and AMC. These include innovative financing and market-shaping systems such as IFFIm, Advance Market Commitments and Advance Purchase Agreements.

More recently, cost-sharing in partnership with Multilateral Development Banks, the No-Fault Compensation Programme, model indemnity & liability arrangements and the Humanitarian Buffer, have all underlined the need for ever-ready systems and mechanisms that can be 'kept warm', and rapidly scaled in a crisis.

As the G20 Joint Finance and Health Task Force prepares to report to Ministers in early 2022, as we discuss the longer-term model for COVAX, we look forward to engaging on the future of pandemic financing. This includes the proposed Financing Facility, and other potential pandemic-contingent IFFIm-type mechanisms to ensure finances can be rapidly mobilised when the next pandemic arrives.

The capacity mobilised through the Alliance will form core components of any future pandemic response. Our work to support early mobilisation of vaccine financing, manufacturing capacity, procurement and delivery systems are all critical to mitigating the current and future crises. With the unprecedented political focus on the global health architecture, we are committed to helping build consensus, maintain momentum, and actively contribute towards a more equitable and drastically improved global Pandemic Prevention and Response architecture going forward.

We're not going to solve this crisis with half-measures or middle-of-the-road ambitions. We need to go big. And we need to do our part: governments, the private sector, civil society leaders, philanthropists. This is an all-hands-on-deck crisis. And the good news is, we know how to beat this pandemic: vaccines, public health measures, and collective action.

Joseph Biden
President of the United States of America

ANNEX 1:
LIST OF 92 AMC-ELIGIBLE ECONOMIES AND ROLE OF INDIA

Low-income: Afghanistan, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Congo Dem. Rep., Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Korea, Dem. People's Rep., Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Somalia, South Sudan, Syrian Arab Republic, Tajikistan, Tanzania, Togo, Uganda, Yemen, Rep.

Lower-middle income: Angola, Algeria, Bangladesh, Bhutan, Bolivia, Cabo Verde, Cambodia, Cameroon, Comoros, Congo Rep., Côte d'Ivoire, Djibouti, Egypt, Arab Rep., El Salvador, Eswatini, Ghana, Honduras, India, Indonesia, Kenya, Kiribati, Kyrgyz Republic, Lao PDR, Lesotho, Mauritania, Micronesia, Fed. Sts., Moldova, Mongolia, Morocco, Myanmar, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, São Tomé and Príncipe, Senegal, Solomon Islands, Sri Lanka, Sudan, Timor- Leste, Tunisia, Ukraine, Uzbekistan, Vanuatu, Vietnam, West Bank and Gaza, Zambia, Zimbabwe.

Additional IDA-eligible: Dominica, Fiji, Grenada, Guyana, Kosovo, Maldives, Marshall Islands, Samoa, St. Lucia, St. Vincent and the Grenadines, Tonga, Tuvalu.

India's role in the COVAX AMC

The Gavi COVAX AMC was originally launched to provide equal access and support to 92 countries including India. COVAX has committed to provide India with up to 240 million doses from its current contracted portfolio of over 1.7 billion doses and supplied 10 million doses before export bans were put in place. India is also a major vaccine supplier, and through an agreement with the Serum Institute of India (SII), around 30 million doses of SII-AstraZeneca ("Covishield") were supplied through COVAX to AMC countries before the outbreak of the Delta variant in India led to exports being halted. India has now resumed supply to COVAX, with around 130 million doses of Covishield now allocated. Through COVAX's deal with SII, we have secured access to up to 550 million doses of Covishield and up to 1,000 million doses of SII-Novavax ("Covovax"). India has now achieved immunisation coverage of 45% with two doses, and this Investment Opportunity is focused on supporting 91 lower-income countries.

ANNEX 2: OVER 1BN DOSES DELIVERED TO 144 COUNTRIES

COVAX has now delivered more than one billion doses to 144 countries around the world, including to 86 AMC countries (lower-income countries eligible for the Gavi COVAX AMC Advance Market Commitment) and to 68 Self-Financing Participants (SFP).

The following figures and tables provide more detail on when, where and with which vaccines COVAX has delivered doses. All data used in this Annex has been taken from the UNICEF COVID-19 Vaccine Market Dashboard, on Sunday 16th, January.

Figure 13

Month-by-month delivery of COVAX doses

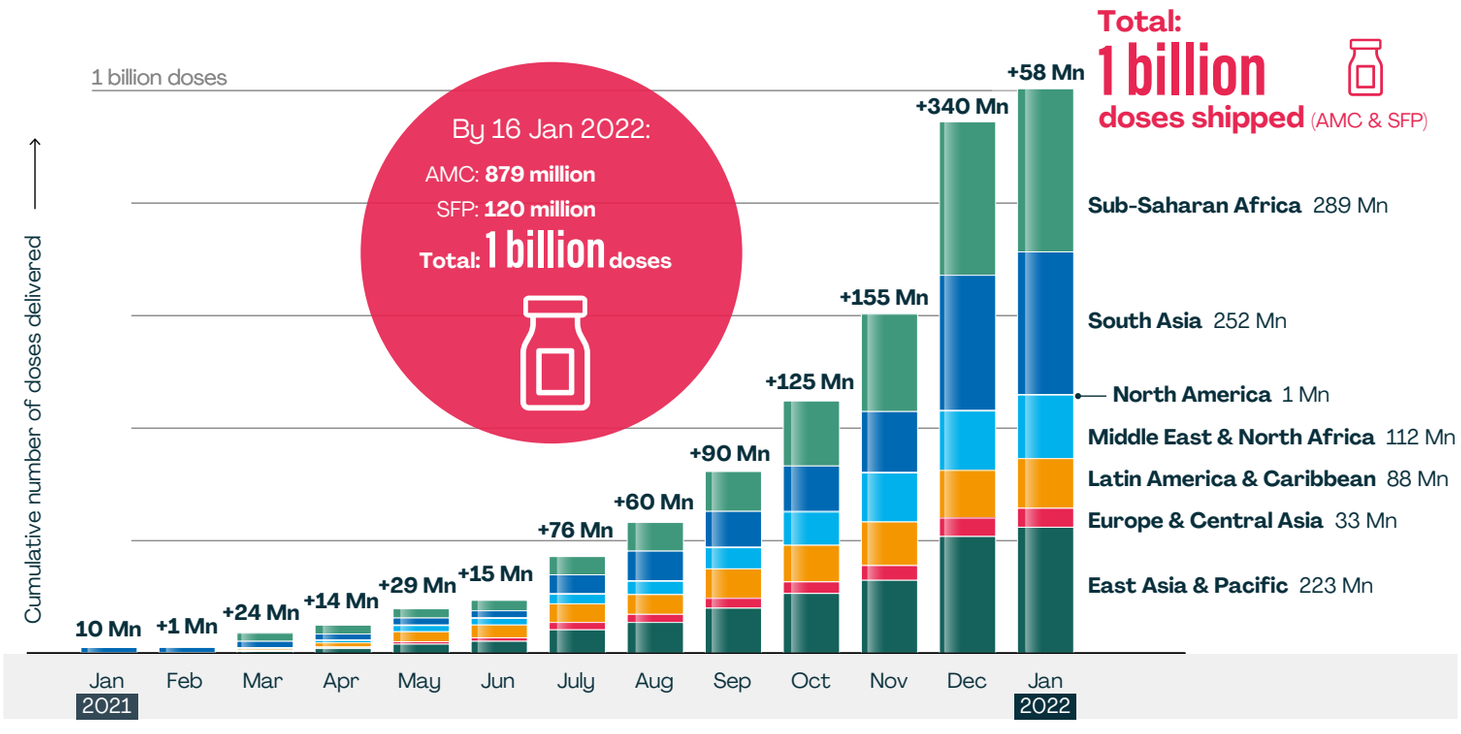


Table 1

COVAX doses delivered by AMC country

East Asia & Pacific	216,241,500
Cambodia	3,926,960
Fiji	501,280
Indonesia	87,723,170
Kiribati	104,000
Lao PDR	5,088,150
Maldives	371,170
Mongolia	1,327,260
Papua New Guinea	883,200
Philippines	65,724,100
Samoa	215,200
Solomon Islands	209,420
Timor-Leste	393,420
Tonga	91,800
Tuvalu	9,600
Vanuatu	95,950
Vietnam	49,576,820

Europe & Central Asia	28,045,050
Kosovo	739,620
Kyrgyz Republic	1,278,240
Moldova	830,790
Tajikistan	7,569,320
Ukraine	8,081,540
Uzbekistan	9,545,540

Latin America & Carribean	20,566,400
Bolivia	6,735,140
Dominica	91,980
El Salvador	3,606,050
Grenada	114,630
Guyana	291,540
Haiti	805,480
Honduras	4,444,620
Nicaragua	4,163,730
Saint Lucia	197,430
Saint Vincent and the Grenadines	115,800

Middle East & North Africa	83,872,400
Algeria	15,926,400
Djibouti	254,850
Egypt, Arab Rep.	50,548,880
Morocco	4,190,190
Syrian Arab Republic	4,892,840
Tunisia	4,519,020
West Bank and Gaza	1,362,620
Yemen, Rep.	2,177,600

South Asia	252,343,080
Afghanistan	6,204,050
Bangladesh	130,420,330
Bhutan	505,850
India	10,000,000
Nepal	22,926,920
Pakistan	77,157,720
Sri Lanka	5,128,210

Sub-Saharan Africa	277,775,860
Angola	21,069,180
Benin	2,867,940
Burkina Faso	3,752,390
Cabo Verde	361,220
Cameroon	1,380,750
Central African Republic	1,189,260
Chad	1,294,310
Comoros	12,000
Congo, Dem. Rep.	5,149,740
Congo, Rep	1,633,500
Eswatini	429,420
Ethiopia	22,461,170
Gambia	376,800
Ghana	16,266,490
Guinea-Bissau	360,000
Kenya	19,329,270
Lesotho	653,670
Liberia	1,246,980
Madagascar	2,894,260
Malawi	2,813,850
Mali	2,605,600
Mauritania	1,985,730
Mozambique	19,172,820
Niger	3,446,970
Nigeria	49,879,440
Rwanda	14,001,260
São Tomé and Príncipe	129,120
Senegal	3,770,990
Sierra Leone	1,510,110
Somalia	5,096,900
South Sudan	1,002,070
Sudan	6,354,290
Tanzania	5,910,120
The Guinea	4,493,790
Togo	3,545,670
Uganda	30,922,740
Zambia	4,508,320
Zimbabwe	1,378,800
Côte d'Ivoire	12,518,920

Table 2

COVAX doses delivered by Vaccine type

Vaccine	Number of Doses
AstraZeneca	240,210,150
AstraZeneca – SII	46,010,500
Johnson & Johnson	125,442,850
Moderna	149,016,120
Pfizer	259,018,110
Sinopharm	96,061,200
Sinovac	84,472,600
Grand Total	**1,000,231,530**

ANNEX 3: MONITORING, EVALUATION AND LEARNING

Robust monitoring of progress made, results achieved, as well as learning about challenges along the way, will continue to be central to COVAX's efforts in 2022. A set of top line metrics will continue to be routinely reported through the COVAX Reporting Framework, with revisions made to the framework to ensure alignment with the 2022 vision for Gavi's role in COVID-19 vaccination. These top line metrics will be complemented by a broad array of complementary and more in-depth strategic and programmatic analyses as well as a COVAX learning agenda. 2022 will also mark the start of the Gavi-commissioned multi-stage independent evaluation of the COVAX Facility and COVAX AMC, following the completion of the evaluability and evaluation design phase.

Themes and results to be included in the Monitoring, Evaluation and Learning approaches include, but are not limited to:

- Reporting on the utilisation of the Pandemic Vaccine Pool and how these essential additional doses are dispatched to respond to any emerging uncertainties and the evolution of the pandemic.

- As Gavi's support for COVID-19 delivery expands, reporting will focus not just on timely disbursements and investments made through COVID-19 Delivery Support, but also on mitigation efforts related to key risks, such as the expiration of COVAX-supported doses.

- Deep-dive analyses related to COVAX's support particularly to those countries most reliant on COVAX for their supply and results achieved in lower and lower-middle income countries.

- Routinely tracking COVAX's success in satisfying countries' demands, including product preference, and level of support requested in terms of population coverage.

- Further exploration of the overall impact of COVAX's efforts, including deaths averted.

ANNEX 4: OVER US$ 10BN PLEDGED TO THE GAVI COVAX AMC

Table 3

Key Outcomes: COVAX AMC 2021

Commitments to Gavi 2021-2025 (contributions basis)

All figures in millions and in USD or USD equivalent for commitments made in local currencies

Donor Governments	Direct contributions (USD)	IFFIm contributions (USD)	Delivery contributions (USD)	Total contributions
Australia	72	28		**100**
Bahrain	2.5			**2.5**
Bhutan	0.01			**0.01**
Canada	414		56	**470**
China	100			**100**
Colombia	0.5			**0.5**
Iceland	6			**6**
Japan	1,000			**1,000**
Korea	210			**210**
Kuwait	50			**50**
Liechtenstein	0.2			**0.2**
Malaysia	0.1			**0.1**
Mauritius	0.003			**0.003**
Mexico	0.3			**0.3**

TABLE 3 CONTINUED
All figures in millions

Donor Governments	Direct contributions (USD)	IFFIm contributions (USD)	Delivery contributions (USD)	Total contributions
Moldova	0.003			**0.003**
New Zealand	20			**20**
Norway	25	111		**136**
Oman	1			**1**
Qatar	10			**10**
Saudi Arabia	150			**150**
Singapore	5			**5**
The Sovereign Military Order of Malta	0.01			**0.01**
Switzerland	162			**162**
Team Europe including:				*3,220*
Austria	6			**6**
Belgium	5			**5**
Croatia	0.6			**0.6**
Denmark	16			**16**
Estonia	0.2			**0.2**
European Commission	489			**489**
Finland	12			**12**
France	218		23	**240**
Germany	1,009		213	**1,222**
Greece	1.8			**1.8**
Ireland	5			**5**
Italy	470			**470**
Luxembourg	2.4			**2.4**
Malta	0.05			**0.05**
Monaco	0.1			**0.1**
Netherlands	83			**83**

Donor Governments	Direct contributions (USD)	IFFIm contributions (USD)	Delivery contributions (USD)	Total contributions
Poland	0.9			**0.9**
Portugal	0.8			**0.8**
Slovenia	0.6			**0.6**
Spain	0.9	122		**123**
Sweden**	267	272		**539**
The Philippines	1			**1**
United Kingdom	63	669		**731**
United States	3,500		500	**4,000**
Vietnam	0.5			**0.5**
TOTAL Donor Governments	8,379	1,203	791	**10,373**
Foundations, Corporations and Organisations				
Aercarp Ireland Limited	0.10			**0.10**
Allen & Overy Foundation	0.07			**0.07**
Alight Solutions*	0.25			**0.25**
Analog Devices Foundation*	2.5			**2.5**
Anonymous Donor	2			**2**
Asia Philanthropy Circle*	1.5			**1.5**
Bill & Melinda Gates Foundation (BMGF)	206		30	**236**
Blackberry*	0.15			**0.15**
Charities Trust	0.62			**0.62**
Cisco*	5			**5**
Centene Charitable Foundation*	0.25			**0.25**

TABLE 3 CONTINUED
All figures in millions

Donor Governments	Direct contributions (USD)	IFFIm contributions (USD)	Delivery contributions (USD)	Total contributions
Coca-Cola Foundation*	0.5			**0.5**
CODE(RED) Campaign	0.05			**0.05**
Epiroc AB*	0.23			**0.23**
Etsy	0.13			**0.13**
Exxon Mobile Foundation	0.05			**0.05**
Gates Philanthropy Partners	18			**18**
Goodrich Corporation (Collins Aerospace)	0.1			**0.1**
Google.org*	7.1			**7.1**
IF Metall	0.03			**0.03**
Kerke in Actie	0.37			**0.37**
King Baudouin Foundation	0.13			**0.13**
KS Relief/Gamers Without Borders	27			**27**
Mastercard*	27			**27**
Mc Hugh O'Donovan Foundation	0.1			**0.1**
Medline International	0.02			**0.02**
Nikkei Inc.	0.05			**0.05**
NITO	0.01			**0.01**
Okta for Good Fund	0.01			**0.01**
PagerDuty*	0.2			**0.2**
Pratt & Whitney*	0.1			**0.1**

Donor Governments	Direct contributions (USD)	IFFIm contributions (USD)	Delivery contributions (USD)	Total contributions
Portuguese Private Sector	1.83			**1.83**
PPL	0.01			**0.01**
Procter & Gamble*	5			**5**
Reed Hastings and Patty Quillin	30			**30**
Russell Reynolds Associates*	0.11			**0.11**
Salesforce*	0.66			**0.66**
Seadream Family Foundation	1			**1**
Shell	10			**10**
SMBC Aviation Capital Limited*	0.1			**0.1**
Soccer Aid	4			**4**
Stanley Black & Decker*	1			**1**
Stepstone Group	0.03			**0.03**
Spotify*	0.5			**0.5**
Symasia Happybones Foundation	0.25			**0.25**
Thistledown Foundation*	3.9			**3.9**
TikTok*	5			**5**
Toyota Tsusho	0.91			**0.91**
TransferWise	5			**5**
Twilio*	10			**10**
UBS Optimum Foundation*	2.1			**2.1**

TABLE 3 CONTINUED
All figures in millions

Donor Governments	Direct contributions (USD)	IFFIm contributions (USD)	Delivery contributions (USD)	Total contributions
UNFCU Foundation	0.06			**0.06**
Vaccine Forward Initiative	2.1			**2.1**
Visa Foundation*	4.5			**4.5**
Walter de Gruyter GMBH	0.08			**0.08**
WHO Foundation-Go Give One Campaign	6			**6**
Workday Foundation*	0.1			**0.1**
Other philanthropic and private sector contributions	48			**48**
TOTAL Foundations, Corporations and Organisations	443			**473**
Total Pledged to date	**8,822**	**1,203**	**821**	**10,846**

Notes:

* To be matched

** SEK 2.1 billion pledge from September 2021 includes a mix of direct financial support and the cost of vaccine dose donations

Guarantees

Team Europe (European Commission/EIB)	537

ANNEX 5: ACCESS TO COVID-19 TOOLS ACCELERATOR & COVAX

The Access to COVID-19 Tools Accelerator (ACT-A) is a time-limited collaboration designed to rapidly leverage existing global public health infrastructure and expertise to accelerate development, production, and equitable access to COVID-19 tests, treatments, and vaccines.

Each contributing organisation to ACT-A brings key components to the global COVID-19 response. The work of these organisations is organised into three product Pillars – vaccines, therapeutics and diagnostics – and is supported by the cross-cutting Health Systems Connector (HSC) and guided by the Access & Allocation workstream, all of which are fully empowered to develop and implement workplans through their own structures and processes. The Civil Society engagement workstream ensures civil society and community input across ACT-A. Through ACT-A, leading organisations work in close partnership with governments, civil society, and industry to provide an integrated approach to develop the tools needed to end the pandemic. Each pillar is necessary: by protecting people against the disease; rapidly identifying new cases and stopping further transmission; treating those who become ill; and supporting the rapid deployment of tools, these combined interventions can limit COVID-19 transmission and severe disease and minimise the pandemic's economic impact.

The ACT-Accelerator's vaccines pillar

COVAX is the vaccines pillar of ACT-A, jointly convened by CEPI, Gavi and WHO, and working with UNICEF as a key delivery partner. The Gavi-administered COVAX Facility is responsible for the procurement of safe and efficacious COVID-19 vaccines for use by its 190 participating countries in the Facility.

Each partner has a distinct role to play:

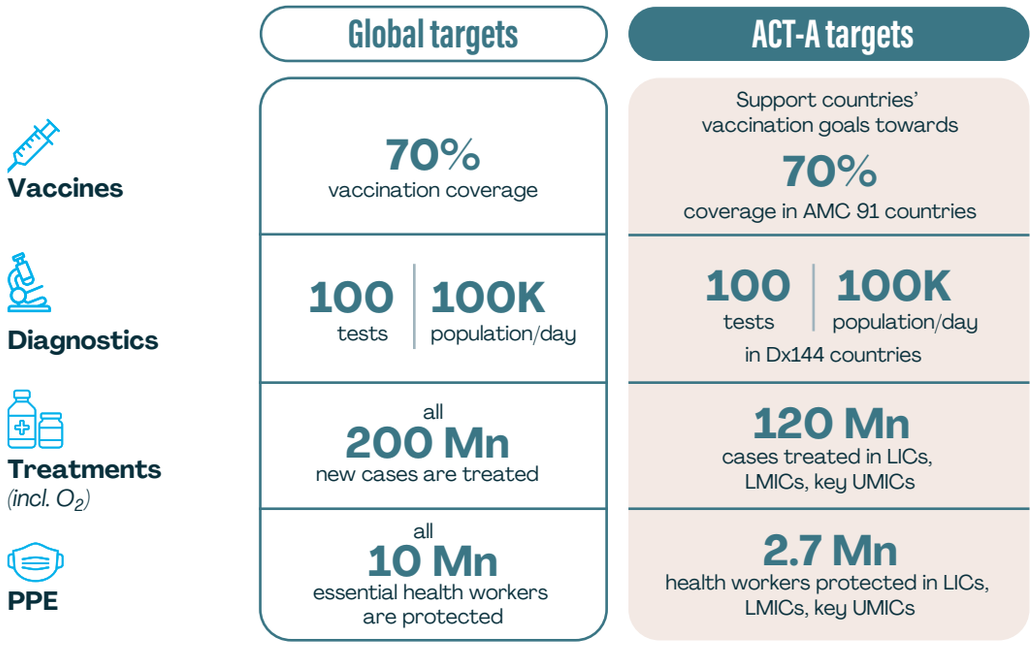
- **CEPI** manages a broad portfolio of COVID-19 vaccine candidates and evaluates promising candidates as they come online for addition to the COVAX portfolio.
- **Gavi** negotiates with manufacturers to secure initial doses of vaccine under supply constraints, works with UNICEF Supply Division and PAHO on procurement of vaccines and holds contracts and financing arrangements with participating governments, and mobilises resources on behalf of the 92 COVAX AMC-eligible countries.
- **WHO** convenes the allocation and regulatory processes for vaccine roll-out, assesses country readiness to receive vaccines and provides technical assistance.
- **UNICEF** procures COVID-19 vaccine doses in collaboration with the Pan American Health Organization (PAHO) and manages the logistics of vaccine distribution, including freight and storage.

The ACT-Accelerator Strategic Plan and Budget and the Gavi COVAX AMC Investment Opportunity

On 28th October 2021 the ACT-A set out its strategic plan and budget for October 2021 and September 2022.

Figure 14

ACT-A contributions to achieving global targets in access to COVID-19 tools by end September 2022



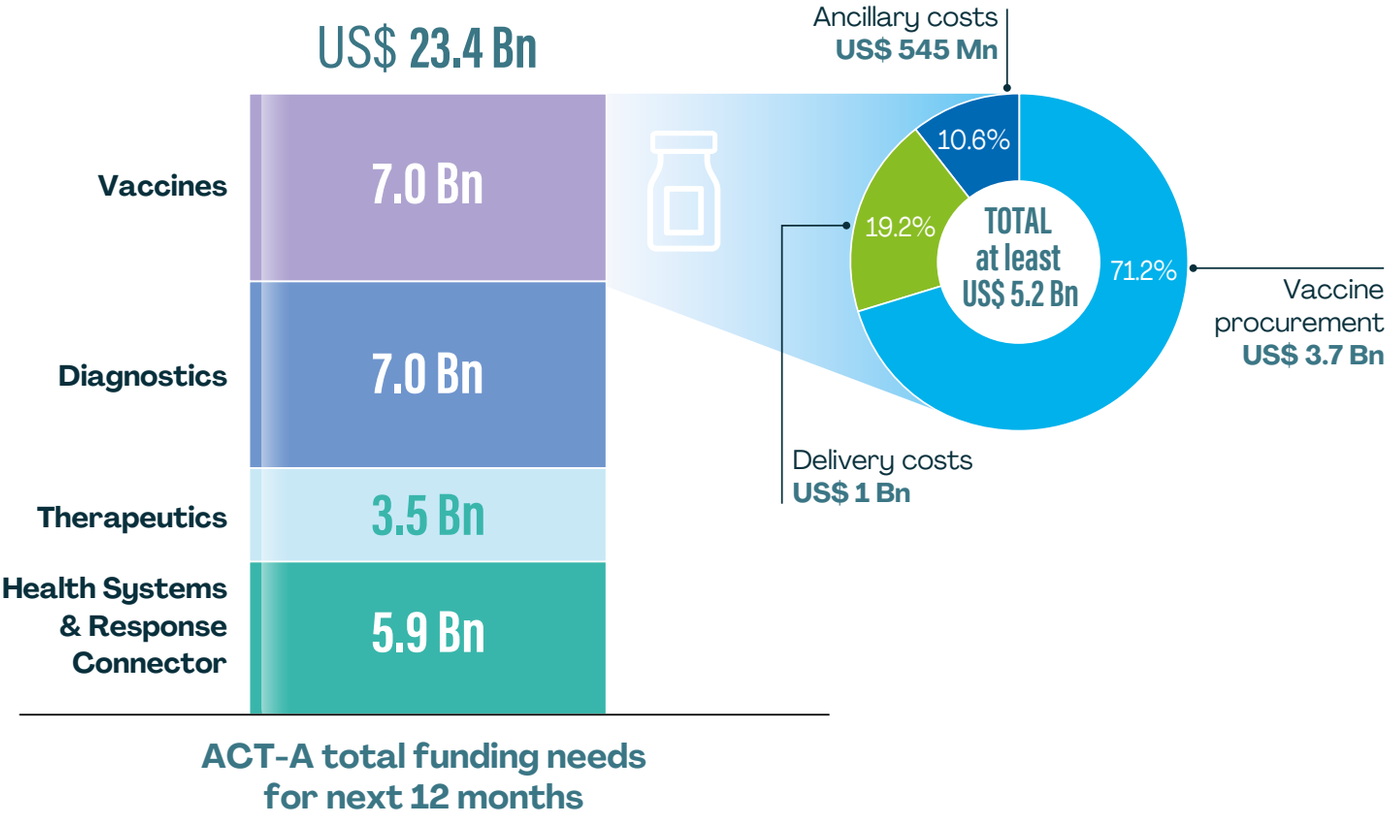
Source: based on "ACT-Accelerator Strategic Plan & Budget, October 2021 to September 2022", World Health Organization

The fundraising request and strategy contained within the Gavi COVAX AMC Investment has been developed fully in line with the ACT-A plan.

The ACT-Accelerator Strategic Plan & Budget laid out the new focus, strategic priorities, major scopes of work and funding needs for the ACT-Accelerator. As set out in Figure 14, these included tracking overall gaps and barriers in access to COVID-19 tools; helping to close global gaps in access to vaccines, tests, treatments and PPE; and fully integrating Pillar delivery support with national COVID-19 response mechanisms. Reflecting key recommendations of the ACT-Accelerator Strategic Review, ACT-A's work will be more closely driven by country and community needs, follow a results-based approach that is anchored in the global targets for access to COVID-19 tools, and align with the efforts of other actors and initiatives that focus on resolving inequities in access to COVID-19 tools.

Figure 15

How the ACT-A Strategic Plan and Budget maps to the COVAX AMC 2022 Investment Opportunity



Notes: ACT-A funding needs from October 2021 to September 2022 by Pillar

The total ACT-A funding needs across all four pillars for 2021-2022 were set at US$ 23.4 billion. The total funding needs across the vaccines pillar (covering Gavi, CEPI, WHO and UNICEF) to hit the ACT-A targets were set at US$ 7 billion. Figure 15 demonstrates how the funding needs of US$ 5.2 billion set out in this Gavi COVAX AMC map onto the total asks in the pillar. CEPI, UNICEF and WHO have further asks covering R&D, product assessment and policy guidance, and agency technical assistance and delivery support which complete the picture. Gavi will continue to play an active role within ACT-A and the vaccines pillar to ensure our plans and fundraising strategies remain consistent and mutually supportive over the course of the coming months.

ANNEX 6: DOSE DONATIONS

Table 4

Dose Donations

As of 17th January 2022

Donor	Formal offers[1] to COVAX AMC+SFP	of which shipped by COVAX AMC / (AMC+SFP)	Confirmed additional supply[13]		Donations announced AMC+SFP+bilateral
			Q1 2022	Q2 2022	
Australia	0.0	0 / (0.0)	0	0	60
Canada	24.4[12]	10.2 / (11.9)	3.5	0	51[7]
Team Europe	320[11]	217 / (227)	55[9]	10[9]	473[2,6]
Belgium	8.8	7.6 / (7.8)	0	0	8.8
Czech Republic	1.5	1.4 / (1.4)	0	0	1.9
Denmark	7.2	4.7 / (4.8)	0	0	7.2
Finland	3.3	0.7 / (0.7)	0	0	3.7
France	64.7	44.1 / (44.3)	0	0	120[2]
Germany	93.6[12]	76.4/ (77.2)	0	0	175[2]
Greece	4.3	2.1 / (2.1)	0	0	4.3[2]
Ireland	2.6	1.0 / (1.0)	0	0	2.6
Italy	47.0	28.0 / (31.5)	0	0	47.0[2]
Netherlands	16.9	13.8 / (13.8)	0	0	27.0
Norway	6.2	3.3 / (3.3)	0	0	6.2
Portugal	2.4	2.4 / (2.4)	0	0	3.2[2]
Slovakia	1.1	1.1 / (1.1)	0	0	1.3

Donor	Formal offers[1] to COVAX AMC+SFP	of which shipped by COVAX AMC / (AMC+SFP)	Confirmed additional supply		Donations announced AMC+SFP+bilateral
			Q1 2022	Q2 2022	
Slovenia	1.1	0.7 / (0.7)	0	0	1.2
Spain	46.5	20.9 / (25.7)	0	0	50[2]
Sweden	8.5	5.7 / (5.7)	0	0	8.5
Others[3]	3.6[5]	3.3 / (3.3)	0	0	4.5
Hong Kong SAR China	7.5[8]	0.6 / (0.6)	0	0	7.5
Japan	24.7	11.8 / (15.4)	16	0	60[2]
Macao SAR China	0.0	0 / (0)	0	0	0.4
New Zealand	5.1	0.9 / (0.9)	3	0	8.0
South Korea	0.0	0 / (0)	0	0	4.8
Switzerland	1.9	1.8 / (1.8)	0.4	0	4.0
UAE	0.0	0.0 / (0.0)	0	0	1.0
UK	25.8	17.8 / (17.8)	23	3	100.0
USA	513[14]	182 / (193.5)	0	0	857.5[4]
Total	**922**	**442** / (**469**)	**101**	**13**	**1627**

Forecast supply to AMC by end Q2 2022 estimated to be **~968m** (formal offers + confirmed additional supply). [10]

Note: volumes offered to COVAX are subject to change based on supply information from manufacturers. If supply does not meet COVAX requirements (e.g. shelf life <10 weeks in country), these numbers could be lower.

Note: Total donated and shipped might not sum exactly due to rounding; 1. Offer notices accepted by COVAX (total includes only volumes that met COVAX requirements); 2. Primarily through COVAX, final amount estimated based on latest information shared by Donors; 3. Iceland, Estonia, Luxembourg, Croatia, Latvia, Lithuania, Austria, Cyprus; 4. US support has allowed COVAX to secure 1bn Pfizer doses. These include a donation of 700m doses which are reflected in the total here. The US have also facilitated the procurement of 300m additional doses. 5. Includes donations from Iceland (0.3m), Estonia (0.4m), Luxembourg (0.4m), Croatia (1.0m), Latvia (0.05m), Lithuania (0.3m), and Austria (1.0m), Cyprus (0.1m); 6. Sum of Team EU Donor pledges; 7. Canada has announced it will donate the equivalent of at least 200m doses to COVAX by end of 2022 (of which 51m are included here); 8. 3m donated for 2021 and 4.5m already donated for 2022 allocation; 9. Significant potential additional doses; 10. 968m = 442m doses delivered + 93% of remaining formal offers (133m) & of confirmed additional supply (211m+223m); 11. Additional 21M J&J doses donated for Q4 21 and Q1 22 allocation; 12. Offer notice updated (decreased); 13. Q1 supply includes formal offers pending COVAX acceptance; 14. Include confirmed Q1 and Q2 2022 supply, already accepted and allocated.

Table 5

Total dose donations delivered per quarter & per month 2021

Quarter	Month	Deliveries per month 2021		Deliveries per quarter 2021	
		Total	Cumulative	Total	Cumulative
Q2	April	31,200	31,200	5,015,200	5,015,200
	May	343,200	374,400		
	June	4,640,800	5,015,200		
Q3	July	67,667,040	72,682,240	136,742,754	141,757,954
	August	31,762,560	104,444,800		
	September	37,313,154	141,757,954		
Q4	October	47,732,022	189,489,976	293,741,044	435,498,998
	November	70,122,842	259,612,818		
	December	175,886,180	435,498,998		
TOTAL Donations					**435,498,998**

Table 6

Total deliveries per vaccine product in 2021

Vaccine product	Total
AZ	126,991,750
J&J	119,457,250
Moderna	104,817,720
Pfizer	84,232,278
Total	**435,498,998**

Table 7

Total deliveries per region by end 2021

Region	Total	Percentage
East Asia & Pacific	113,432,742	26%
Europe & Central Asia	10,538,352	2%
Latin America & Caribbean	20,651,494	5%
Middle East & North Africa	48,380,034	11%
South Asia	80,255,528	18%
Sub-Saharan Africa	162,240,848	37%
Total	**435,498,998**	**100%**

ENDNOTES

1. The 92 members of the Gavi COVAX AMC include 31 low-income countries; see Annex 1 for details.
2. https://www.Gavi.org/news/media-room/joint-statement-dose-donations-covid-19-vaccines-african-countries
3. IMF World Economic Outlook, October 2021, p25.
4. https://www.mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-countering-the-regressive-effects
5. https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccines-SAGE_recommendation-immunocompromised-persons
6. MRC Centre for Global Infectious Disease Analysis, Imperial College London, Dec 2021 analysis of COVAX AMC countries
7. Preliminary projections from Harvard University based upon six largest AMC countries.

Photo credits

Cover I_am_zews; P.4 Gavi/2021/White Rhino Films-Lameck Orina; P.7 UNICEF/UN0426749/Dware; P.10 Gavi/2021/White Rhino Films-Lameck Orina; P.14 UNICEF/UN0439495/Vatava Media; P.17 Gavi/2020/Isaac Griberg; P.21 Gavi/2021/Benedikt v.Loebell; P.23 UNICEF/UN0471084/Sujan; P.25: UNICEF/UN0421695/Singh; P.29 WHO/PAHO/2021; P.30 Gavi/2021/Jeffrey Atsuson; P.33 – GAVI/2012/Diane Summers; P.36 GAVI/2006/Indras Getachew; P.39 Gavi/2021/Jeffrey Atsuson; P.41: Gavi/2021/White Rhino Films-Lameck Orina; P.47 Gavi/2021/Asad Zaidi; P.52 Gavi/2021/Benedikt von Loebell; P.56 Gavi/2021/Asad Zaidi; P.60 Gavi/2021/Asad Zaidi; P.61 Gavi/2020; P.63 UNICEF/UN0421688/Singh; P.68 UNICEF/UN0426109/Kanobana; P.69 2021/Samuel-Moore; P.75 – WHO/2020; P.78 UNICEF/UN0426592/Verzosa; P.79 Gavi/2018/Simon Davis

BREAK COVID NOW.

CEPI Gavi The Vaccine Alliance unicef World Health Organization THE WORLD BANK IBRD • IDA | WORLD BANK GROUP