FIGHT FOR WHAT COUNTS.

Investment Case
Seventh Replenishment 2022
At least US$18 billion for the Global Fund’s Seventh Replenishment would save 20 million lives, cut the death rate from HIV, TB and malaria by 64% and build a healthier, more equitable world.
In 2002, in an act of extraordinary global solidarity and leadership, the world came together to create the Global Fund to fight what were then the deadliest pandemics confronting humanity: HIV and AIDS, tuberculosis (TB) and malaria.

Over the 20 years that followed, this unique partnership has invested more than US$53 billion, saving 44 million lives and reducing the combined death rate from the three diseases by more than half in the countries in which the Global Fund invests.

Behind these huge numbers lie a multitude of individual human stories. The 44 million people whose lives have been saved include parents who care for their children, employers and workers that build thriving economies, neighbors and friends that contribute to their communities. They are children who have survived malaria or have been protected from HIV and are now young adults. They are community leaders who strive every day to make the lives of people in their communities better, healthier, and longer. Every life saved and every infection averted has a multiplier effect.

In 2022, we need another such moment of global solidarity and leadership. COVID-19 continues to cause huge loss of life, human suffering and economic and social disruption across the world. Hard-won gains against HIV, TB and malaria are being reversed, with devastating consequences for the poorest and most vulnerable communities. The entire United Nations Sustainable Development Goals agenda is now at risk, as inequities deepen, poverty spirals and social and political tensions grow.

This is the moment for the world to recommit to protect everyone from the deadliest infectious diseases. That means protecting people across the world, whoever they are and wherever they live, from the earlier pandemics we have yet to defeat – HIV, TB and malaria; the pandemic running rampant right now – COVID-19; and future pandemics we have yet to see but know will come.

Protecting the world from such pandemics is not an impossible dream. With science, money and leadership, we have proven we can fight and beat even the most formidable infectious disease threats. Yet neither will it be easy. Since no one is safe from infectious diseases until everyone is safe, protecting us all from pandemics will take a truly global effort. Because preventing, detecting and responding to pandemics requires much more comprehensive and effective systems and capacities, we need to step up investment in the critical components of health systems and tackle barriers to access. The communities most affected by pandemics, particularly those most marginalized, must be at the center, voicing their needs and designing responses that truly leave no one behind.

Climate change and environmental damage make this all the more urgent. Climate change will affect the epidemiology of existing diseases and facilitate the emergence of new diseases. Changes in rainfall, temperature and humidity are already shifting malaria transmission into new areas. Climate change will also alter TB and HIV through, for example, the forced displacement or migration of vulnerable populations and increased economic insecurity. Moreover, climate change and other environmental pressures will also change the dynamics of zoonotic spillover, the process by which diseases affecting animals transition to humans. Since three-quarters of new disease threats originate in animals, any increase in zoonotic spillover will increase the probability of new pandemic threats.

The Global Fund’s Seventh Replenishment is the world’s opportunity to rise to the challenge and take bold action. We can turbocharge progress in the fight against HIV, TB and malaria, regaining ground lost during the pandemic and getting back on track toward finally ending these three pandemics by 2030. We can also deliver a step change in pandemic preparedness, strengthening the overall resilience of systems for health by investing in their capacities to prevent, detect and respond to new health threats. By taking an integrated approach to the pursuit of these two complementary objectives, we can maximize the impact of every dollar.
The impact of COVID-19 on HIV, TB and malaria

Even before COVID-19, progress against HIV, TB and malaria was off track. That’s why, during the Global Fund’s Sixth Replenishment three years ago, we called on the world to “step up the fight.” The response from donors was a resounding “yes”: We raised a record-breaking US$14 billion, enough to enable a significant increase in funding for HIV, TB and malaria programs and further investment in health systems and community health networks during the 2021-2023 implementation period.

But in early 2020, just as we began to implement this increased funding, COVID-19 struck. Each successive wave of COVID-19 diverts resources, disrupts services, and threatens to overwhelm health and community systems, increasing the damage to HIV, TB and malaria programs. Despite massive efforts across the Global Fund partnership, supported by the Global Fund’s COVID-19 Response Mechanism (C19RM), the stark reality is that we have gone backwards.

In 2020, for the first time in the Global Fund’s history, we saw declines in key programmatic results across all three diseases in the countries where we invest. HIV testing fell by 22% and prevention services by 11%. While HIV treatment services have proven more resilient and adaptive, new enrollment for treatment and fluidic drug-resistant TB fell by 37%. Overall, the number of people being treated for TB fell by over 1 million. Malaria deaths and cases increased significantly in 2020, mainly due to COVID-19 disruptions. New estimates suggest a child is dying nearly every minute as a result of this mosquito-borne parasite. Malaria testing fell 4%. Instead of stepping up the fight against the three diseases, we found ourselves struggling to protect hard-won gains.

The last two years have been a vivid demonstration of how old and new pandemics interact. COVID-19 has been a catastrophe for those most affected by HIV, TB and malaria. Once again, we have seen how pandemics thrive on and exacerbate inequities. Across many parts of the world, the COVID-19 crisis has worsened human rights-related barriers to accessing health services, deepened gender inequities and led to increased rates of gender-based violence. However, we have also seen extraordinary resilience and innovations, as countries adapt and innovate, leveraging the synergies between existing investments to fight HIV, TB and malaria, and new interventions to combat COVID-19. For many countries, the laboratories, community health worker networks, supply chains and disease surveillance systems put in place to fight the earlier pandemics have been the foundation of their COVID-19 responses.

Twenty years of experience in fighting the deadliest infectious diseases have taught us that investing in the critical components of health systems, such as laboratory networks, trained health workers and supply chains, is an essential complement to disease-specific interventions such as insecticide-treated mosquito nets for malaria or antiretroviral therapies for HIV. Investments to strengthen formal health systems and community health networks already comprise nearly one-third of the Global Fund’s grants. We invest over US$1 billion per year to build resilient and sustainable systems for health, making the Global Fund the largest multilateral provider of grants for this purpose. Through these investments, we have supported countries to build capacities not only to fight HIV, TB, and malaria but also to combat COVID-19 and detect and respond to future pandemics. By sustaining and strengthening access to lifesaving services, including through direct support to community-led responses, we have helped increase collaboration and trust among communities, civil society, the private sector and governments.

When describing systems for health, it is all too easy to focus on the technology and infrastructure, such as disease surveillance systems, health facilities, molecular diagnostic devices or gene sequencing tools. These are all vitally important, yet people are the heart of any health system.

The imperative of investing in systems for health

Trained, equipped, appropriately paid and protected health workers, whether doctors, nurses, laboratory technicians or community health workers, are the irreplaceable components of an effective and resilient health system. Investing in health and community systems, and specifically in pandemic preparedness, is above all about making smart and sustainable investments in people.

COVID-19 brought into sharp focus the vital role that community networks and systems, including community health workers, play as guardians of community health. As we have learned in the fight against HIV, TB and malaria, it is only through empowering the communities most at risk that we ensure that lifesaving services reach the most vulnerable, including those marginalized by poverty, stigma, discrimination or criminalization. Moreover, putting people and communities at the center helps build the trust that is vital (and all-too-often missing) foundation for any pandemic response.

To defeat HIV, TB and malaria, conquer COVID-19 and build stronger defenses against future health threats, we need accelerated and equitable deployment of the most effective disease-specific tools and interventions for existing diseases, and we need more resilient, sustainable and inclusive health and community systems to prevent and detect infectious disease threats and respond effectively whenever and wherever they occur. We need both: One without the other cannot deliver the impact we need.
The Global Fund’s new strategy

These themes and priorities are captured in the Global Fund’s ambitious new Strategy, “Fighting Pandemics and Building a Healthier and More Equitable World.” Through an intense, inclusive and rigorous process, the entire Global Fund partnership, including governments, communities, civil society, development partners, private sector and technical partners, have worked together to develop the new Strategy, which captures our shared resolve to end HIV, TB and malaria. Achieving the United Nations Sustainable Development Goal 3: Health and Well-being for All (SDG 3)’s target of ending AIDS, TB and malaria as public health threats by 2030 will require accelerated progress toward universal health coverage (UHC), which in turn will require more investment in resilient and sustainable health systems, greater engagement and leadership of affected communities, and intensified focus on tackling health inequities, human rights barriers and gender inequalities. The “U” of UHC will not be attained automatically, but by deliberate, sustained action to build people-centered and inclusive systems, and to remove barriers to access health services.

Translating this new Strategy into reality will require a significant increase in financial resources. Given the magnitude of the setbacks across HIV, TB and malaria because of COVID-19, continuing at the current level of funding will not enable us to get back on track – even with ambitious projections of domestic resource mobilization.

The choice is stark: We either increase funding for the three diseases, or we abandon the SDG 3 target of finally defeating these pandemics by 2030. From a human perspective, the argument for increased investment is compelling since so many lives are at stake. From an economic perspective, the logic is equally compelling. Stretching out the fight against HIV, TB and malaria will end up being massively more expensive than stepping up investment now. Against pathogens as formidable as HIV, TB and malaria, there is no middle ground: We are either winning or we are losing. Right now, given the impact of COVID-19, we are at risk of losing.

The case for greater investment in pandemic preparedness is also compelling. Modelling by The Economist estimates that COVID-19 has already killed more than 19 million people (far more than the officially reported figure of 5.6 million people) as of 21 January 2022 and could cost more than US$10 trillion in cumulative economic losses. Climate change and other global trends imply that infectious disease threats are likely to increase in frequency. The emergence of the next pathogen of pandemic potential or new variant is a question of “when” and not “if.”

While the Global Fund has already been making a substantial contribution to pandemic preparedness as a consequence of our ongoing investments in resilient and sustainable systems for health, achieving a step change in low- and middle-income country (LMIC) capacities to prevent and prepare for infectious disease outbreaks of pandemic potential will require substantial additional funding to expand and strengthen critical components of their systems for health.

By combining increased investment in HIV, TB and malaria interventions and strengthening systems for health with additional investments in pandemic preparedness through the Global Fund, we would be able to exploit the significant synergies between fighting existing diseases and preparing for new ones, and thus maximize the impact of every dollar. A Georgetown University study estimated that over one-third of our investments to fight HIV, TB and malaria already contribute to pandemic preparedness, even without this being an explicit intent. Given our scale, inclusive operating model and focus on the biggest infectious diseases, plus our relentless focus on outcomes, the Global Fund partnership is uniquely positioned to support countries in designing and implementing programs that simultaneously deliver immediate benefits in the fight against HIV, TB and malaria and provide greater protection against future pathogens.

coronavirus-excess-deaths-estimates.
5 https://www.economist.com/finance-and-economics/2021/02/18/the-economist-in-focus-the-economist-in-focus

Figure 1
Combined Incidence Rate

Figure 2
Combined Mortality Rate
When Maia Chikovani was diagnosed with drug-resistant tuberculosis (DR-TB), she knew she would have to fight the disease and keep working to support her family. This mother of two takes care of her children and the animals on their small farm and works as a caregiver to earn a living.

But treating DR-TB is grueling. Patients like Maia take daily medications that can have severe side effects for up to two years. Many are hospitalized for months at a time and are required to make daily trips to a health clinic to ensure their treatment is supported and monitored closely.

The Global Fund is working to improve treatment for patients like Maia by decentralizing DR-TB treatment from major health facilities into communities and homes and introducing all-oral treatment regimens that result in fewer side effects.

In Georgia, this work includes the roll-out of the AdhereTB mobile application, which Maia now uses.

“This application helps because I can do the work I have at home – I can feed the animals and care for the kids. Without it, I would not even have the job I have now because I would not have the time for it.”

Developed with the National Center for Disease Control and Public Health of Georgia, the AdhereTB application reduces the number visits patients like Maia have to make to health clinics from daily trips to one trip every two weeks. Patients take their medication at home, record the process and upload videos that a nurse later reviews. Patients can also ask the nurse questions and report side effects in real-time. The application saves patients time and transportation costs, and throughout the COVID-19 pandemic it has helped to decrease the number of people at health clinics while ensuring patients remain on treatment.

Global Fund investments now support video-observed treatment applications, such as AdhereTB, in several countries across the region, including in Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova and Ukraine.
Building on 20 years of impact

We begin 2022 confronted by unprecedented health challenges. But we know from experience that when the world works together and mobilizes the necessary resources, we can force even the deadliest diseases into retreat.

Twenty years ago, AIDS, TB and malaria seemed unbeatable. At that time, these were the deadliest infectious diseases, claiming millions of lives with devastating consequences for families and communities, especially in poor countries and marginalized communities.

The Global Fund was created because the world refused to accept the loss of millions of lives every year to diseases that were both preventable and treatable. Over the course of the last two decades, the Global Fund partnership has cut the combined death rate from HIV and AIDS, TB and malaria by more than half.

The unique partnership model of the Global Fund has been crucial to this success. To an extent unmatched by any other global health or development agency, our governance model brings together all the stakeholders involved in fighting these pandemics, so that those who are disempowered and marginalized can engage in making decisions on how we invest. The Global Fund brings governments, civil society, the private sector, affected communities, and technical and development partners to the table at both local and global levels. This unique governance approach builds ownership and trust, ensures diverse perspectives are heard and valued and – crucially – translates into effective implementation and impact.

To beat HIV, TB and malaria, countries must tackle the inequalities, human rights-related barriers and gender inequalities that drive the epidemiological dynamics of the three diseases. When HIV infection rates for key populations – gay men and other men who have sex with men, sex workers, people who use drugs, transgender people and people in prison – are up to 25 to 35 times higher than in the general population, and six in seven new HIV infections among adolescents aged 15 to 19 years in some countries in sub-Saharan Africa occur among girls, then the answer is not just more money, but the political will to make significant changes in policies, laws, behaviors and attitudes. As a trusted and committed partner, the Global Fund can catalyze such essential shifts.

The Global Fund also acts as a powerful catalyst for domestic resource mobilization through co-financing requirements as well as broader advocacy and technical assistance for increased investment in health. Nearly 90% of co-financing commitments in previous grant cycles have been fulfilled. For the current cycle, the Global Fund is working intensively with countries and partners to ensure co-financing commitments are delivered, despite the fiscal stresses and competing demands triggered by the COVID-19 pandemic.

The Global Fund’s versatility has been demonstrated in the partnership’s rapid and effective response to the new pandemic. Starting in March 2020, the Global Fund moved swiftly to enable countries to reprogram savings from existing grants to procure tests, treatments and medical supplies, protect frontline health workers with personal protective equipment (PPE), adapt lifesaving HIV, TB and malaria programs, and make urgent reinforcements to critical components of health systems, such as supply chains and laboratory networks. In April 2020 we launched C19RM. Through these two initiatives and thanks to generous support from a number of donors, we have deployed more than US$4.1 billion in additional financing to more than 108 countries and 20 regional programs as of January 2022. C19RM has been one of the most transparent, inclusive and swiftest components of the entire global response to COVID-19 and has demonstrated in the partnership’s processes for the COVID-19 response.

The distinctive attributes of the Global Fund partnership have been critical to achieving extraordinary progress over the last two decades in the fight against HIV, TB and malaria. They are also why we can be confident that we can use this proven model, not just to turbocharge the fight against HIV, TB and malaria, but also to defeat COVID-19 and make the world better prepared to respond to future pathogens.
The Global Fund needs at least US$18 billion

The Global Fund's target for the Seventh Replenishment is to raise at least US$18 billion to fight HIV, TB and malaria and build stronger systems for health. It is estimated that one-third of the US$18 billion – US$6 billion – will be investments in health systems that both support the ongoing fight against HIV, TB and malaria and reinforce pandemic preparedness. We have seen this during COVID-19: The same laboratories, supply chains, data systems, diagnostics tools, etc. built to fight HIV, TB and malaria were used to fight the new pandemic. The same community health workers who are vital to delivering HIV, TB and malaria services can simultaneously serve as the first line of defense to prevent, detect and respond to new disease outbreaks.

Investing our share of the projected resource needs for HIV, TB and malaria

The starting point for determining the Seventh Replenishment target is the projected resource needs across the three diseases, which have been developed in conjunction with our technical partners, including the World Health Organization (WHO), the Joint United Nations Programme on HIV/AIDS (UNAIDS), the Stop TB Partnership and the RBM Partnership to End Malaria (RBM). The projected resource needs for HIV, TB and malaria for 2024-2026 amount to US$130.2 billion in countries where the Global Fund invests (Figure 3). This is a 29% increase on the US$101 billion in resource needs estimated for the current three-year period (2021-2023). This sharp increase reflects the fact that across all three diseases, we have gone backwards or stalled during the COVID-19 pandemic. In order to hit the SDG 3 target of ending AIDS, TB and malaria as public health threats by 2030, we need to speed up progress to reduce deaths and new infections. This will inevitably require more money.

Three years ago, the Sixth Replenishment Investment Case asked for a Global Fund investment of US$14 billion to cover approximately 14% of the US$101 billion projected resource needs to fight HIV, TB and malaria over the 2021-2023 period. To maintain a similar share of the US$130.2 billion projected resource needs for the next implementation cycle (2024-2026), we would require at least US$18 billion of investments in HIV, TB and malaria. This is the bare minimum needed to recapture the losses due to COVID-19 and get back on to a trajectory consistent with achieving the SDG 3 target of ending the three pandemics by 2030 (Figures 1 and 2).

Contributing to pandemic preparedness

The 20 High Level Independent Panel (HLIP) argued for a Global Fund investment of US$14 billion to cover approximately 14% of the US$101 billion projected resource needs to fight HIV, TB and malaria over the 2021-2023 period. To maintain a similar share of the US$130.2 billion projected resource needs for the next implementation cycle (2024-2026), we would require at least US$18 billion of investments in HIV, TB and malaria. This is the bare minimum needed to recapture the losses due to COVID-19 and get back on to a trajectory consistent with achieving the SDG 3 target of ending the three pandemics by 2030 (Figures 1 and 2).

A Seventh Replenishment of at least US$18 billion would enable the Global Fund to make a significant contribution to building resilient and sustainable systems for health and strengthening pandemic preparedness. With approximately US$6 billion for investments to strengthen health systems and community networks, or US$2 billion a year, the Global Fund could significantly enhance its role in supporting countries’ efforts to build more people-centered and integrated systems for health, better able to prevent, detect and respond to infectious disease threats. However, this level of investment would not fully meet LMICs’ resource needs for pandemic preparedness. Given the extensive synergies between investments in health systems to fight the existing pandemics and those to prepare for new threats, the Global Fund is uniquely positioned to help countries further strengthen their pandemic preparedness capacities. In line with our new Strategy, we will look to secure additional resources from new sources or financing mechanisms that may result from ongoing global discussions about how to protect the world from future disease threats.

Funding for the COVID-19 Response Mechanism (C19RM)

The Seventh Replenishment target does not include any further funding for the Global Fund’s COVID-19 response through C19RM. This is because C19RM is designed to meet immediate COVID-19 needs in 2022 and 2023, while the objective of the Seventh Replenishment is to raise financial resources to fund programs that will be implemented in the three-year period beginning in January 2024. While funding for COVID-19 interventions might still be required from 2024 onwards, it is impossible at this stage to assess the potential amount and nature of such needs. In the meantime, the Global Fund will continue to accept contributions to C19RM in line with the Access to COVID-19 Tools (ACT) Accelerator strategy and budget. Given that C19RM is already being used to fund system enhancements, such as laboratory strengthening, oxygen infrastructure and gene sequencing, this mechanism could also be used to kick-start urgent preparedness investments prior to the start of the next grant implementation cycle in January 2024.
We cannot afford to fail

The target of at least US$18 billion for the Seventh Replenishment is US$4 billion more than the US$14 billion we succeeded in achieving for the Sixth Replenishment – an increase of 28%. This is the minimum required to get the world back on track toward ending HIV, TB and malaria and to make the world more equitable and safer from future threats and is in line with the projected resource needs identified by the Global Plans.

If we fail to step up investments in fighting HIV, TB and malaria, we must accept that we are effectively abandoning the 2030 goals to end these diseases as public health threats. Even worse, we risk surrendering the gains we have collectively fought so hard and invested so much to achieve, leaving people to die and entire communities behind. The economic costs of prolonging the fight against the three diseases far outweighs the additional investments needed. The cost in lives will be measured in millions.

Likewise, if we fail to step up investments in health systems to build resilience and pandemic preparedness, we risk reverting to the cycle of “panic and neglect” that has for far too long characterized the world’s approach to pandemics. If there’s one lesson to draw from COVID-19, it must be that underinvesting in preparedness for pandemics is a false economy. Investing several billion dollars to protect against threats that can kill millions and cost multiple trillions must make sense. Unless we tackle this on a truly global basis, leaving no one behind, we will fail.

To build back better we must act to make everyone safer from the deadliest infectious diseases. That means staying true to our commitment to ending the as-yet undefeated pandemics of HIV, TB and malaria, and reinforcing our defenses against the next deadly pathogens that will inevitably emerge. This will require vision, sustained political leadership, substantial resources and intense collaboration between diverse partners across the globe, including the communities most affected by such diseases. It can be done. The 20-year success story of the Global Fund is proof. And the Global Funds Seventh Replenishment is the moment to make it happen.

Now is the time to fight for what counts. For lives. For healthy communities. For a more equitable world free from fear of deadly infections.

The Global Fund would:

- Secure at least US$18 billion for the Seventh Replenishment
- Help get the world back on track to end AIDS, tuberculosis and malaria
- Accelerate progress toward SDG 3 and universal health coverage and strengthen pandemic preparedness
- Reduce inequities in health services
- Yield a return on investment of 1:31

Help get the world back on track to end AIDS, tuberculosis and malaria:

- Save 20 million lives between 2024 and 2026, reducing the mortality rate by 64% across the three diseases by 2026, relative to 2020 levels.
- Reduce the death toll across the three diseases: 850,000 in 2026, down from 2.4 million in 2020, and from 4 million in 2005.
- Avert more than 450 million infections or cases between 2024 and 2026, reducing the incidence rate by 58% across the three diseases by 2026, relative to 2020 levels.

Accelerate progress toward SDG 3 and universal health coverage and strengthen pandemic preparedness:

- Catalyze scale-up of domestic investments of up to US$9 billion toward addressing the three diseases and strengthening systems for health through co-financing requirements and technical assistance on health financing.
- Reinforce systems for health and pandemic preparedness by investing approximately US$6 billion to support health care workers; strengthen laboratories, diagnostic tools, supply chain management, information and financial systems; tackle antimicrobial resistance, including drug-resistant TB; reinforce community systems; and accelerate the shift toward patient-centered, differentiated models of care.
- Reduce inequities in health services by addressing gender-related and human rights barriers to access and working with partners, including civil society and affected communities, to build more inclusive health systems that leave no one behind. For example, this investment will reduce global inequality in life expectancy (where people in low-income countries live much shorter lives than in high-income countries) by 9% in 2026.

With a Seventh Replenishment of US$18 billion, the Global Fund would contribute to achieving these results alongside scaled-up domestic investments, scaled-up domestic financing, and more innovation, collaboration and vigorous execution.
1: State of the Fight Against HIV, Tuberculosis and Malaria

The COVID-19 pandemic has reversed progress against HIV, TB and malaria.

Across many countries, COVID-19 has overwhelmed already overstretched health systems. Lockdowns disrupted lifesaving services and critical resources were diverted from the fight against HIV, TB and malaria to fight the new pandemic. People avoided going to health centers for treatment out of fear of catching COVID-19 – or of being stigmatized for having COVID-19 symptoms such as cough or fever, but which could also be signs of treatable malaria or TB. People whose health had already been compromised by HIV, TB or malaria were also more vulnerable to COVID-19.

The fight against TB was severely affected. In 2020, we saw – for the first time in a decade – an increase in TB deaths, with 1.3 million TB deaths among HIV-negative people (up from 1.2 million in 2019) and an additional 214,000 deaths among HIV-positive people (up from 209,000 in 2019). The combined total of over 1.5 million deaths takes us back to where we were in 2017.

Between 2019 and 2020, the number of people treated for TB in the countries where the Global Fund invests dropped by about 1 million, with those treated for drug-resistant TB falling by 19%, and for extensively drug-resistant TB by 37%. The number of HIV-positive TB patients on antiretroviral therapy as well as TB treatment dropped by 16%. In 2021, many countries made enormous efforts to restore testing and treatments, often with the support of the Global Fund through our COVID-19 Response Mechanism (C19RM), but many of the highest burden countries also got hit by new waves of COVID-19. With so many people going undiagnosed and untreated, deaths from TB could well be even worse in 2021 than in 2020.

The impact of COVID-19 on the fight against HIV has also been significant. Although AIDS-related deaths continued to decline in 2020, people living with HIV experienced more severe outcomes and have higher comorbidities from COVID-19 than people not living with HIV. The world missed every single global HIV target for 2020, including that of reducing deaths to fewer than 500,000 per year. Yet it could have been much worse. As a result of swift and determined action across the Global Fund partnership, supported via C19RM, disruption to antiretroviral therapy programs was less than initially feared.

Figure 5
Where the Global Fund Invests
Impact on HIV, TB and Malaria Deaths in Countries

+12.4%
+6.5%
-6.2%

increase in malaria deaths – the first time malaria deaths have increased since 2017.
increase in TB deaths in 2020 (excluding HIV+) – the first time TB deaths have increased since 2002.
decrease in AIDS-related deaths in 2020, comparable progress to 2019 despite COVID-19 disruptions.

In fact, in countries where the Global Fund invests, and thanks to tireless efforts by communities and adaptations and innovations by partners, including the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and UNAIDS, the number of people living with HIV receiving antiretroviral therapy increased by 9%. Yet there were alarming declines in prevention services and testing. Compared with 2019, the number of people reached with HIV prevention programs and services in 2020 fell by 11%. Medical male circumcision for programs and services in 2020 fell by 22%. The pandemic severely disrupted prevention and testing programs for key populations – people who are most likely to be exposed to HIV and whose participation in fighting the disease is vital. Unless we act with urgency, these shortfalls in prevention and testing will translate into increased infections and a reduction in the proportion of those newly infected enrolled on antiretroviral therapy.

With malaria, a rapid and robust response led by communities and supported by partners – including RBM and the U.S. President’s Malaria Initiative (PMI) – via C19RM averted the worst-case scenario of a potential doubling of malaria deaths that had been initially projected by WHO in early 2020. Yet there were still significant setbacks in the fight against the disease. Globally, there were an estimated 241 million malaria cases and 627,000 malaria deaths in 2020. This represents about 14 million more cases in 2020 compared to 2019, and 69,000 more deaths. Approximately two-thirds of these additional deaths were linked to COVID-19 disruptions.

Setting out the declines in key metrics in 2020 versus 2019 (as in Figure 5) demonstrates the scale of the impact of COVID-19 on the fight against the three diseases. Given the increased resources from the Sixth Replenishment, we had anticipated accelerated progress in 2020, not stalling or going backwards. Moreover, in many of the most vulnerable communities where we invest, the full impact of COVID-19 was not felt until 2021.

From the start of the crisis, we recognized that supporting countries to respond effectively to COVID-19 was vital to protecting our hard-won gains against HIV, TB and malaria. The devastating impact of COVID-19 would have been even worse without the rapid and determined actions that took place across the Global Fund partnership to mitigate the disruption to HIV, TB and malaria programs and fight the new pandemic.

In March 2020, the Global Fund immediately made available up to US$500 million through grant flexibilities to support countries to protect lifesaving HIV, TB and malaria programs and respond to COVID-19. A month later, we launched C19RM to provide further support to countries to respond to the pandemic, mitigate the impact on programs to fight HIV, TB, and malaria and urgently reinforce systems for health. By the end of 2020, and thanks to the generous support of our donors, US$980 million was provided to 105 countries and 14 multicountry programs through these two mechanisms. In April 2021, with the unprecedented support of donors led by the United States, we launched a second, much bigger phase of C19RM, incorporating lessons from 2020. As of November 2021, C19RM delivered 62% of funds recorded as being channeled through ACT-Accelerator partners for tests, treatments (including oxygen), PPE and to strengthen health and community systems. The Global Fund’s support to countries via C19RM has been delivered in close coordination with key partners through the ACT-Accelerator. Every funding request for C19RM has been reviewed by ACT-Accelerator partners, and technical assistance and implementation support is coordinated through the relevant ACT-Accelerator pillars.

Mitigating the impact of COVID-19 on HIV, TB and malaria programs

Figure 5
Impact on Key Services for HIV, TB and Malaria in Countries Where the Global Fund Invests (Change, 2019–2020)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number of cases taken</th>
<th>People treated</th>
<th>Suspected malaria cases that received a parasitological test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2020: 273</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2020: 280</td>
</tr>
<tr>
<td>Malaria</td>
<td>2019: 5.5</td>
<td>2020: 5.9</td>
<td>2019: 4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2020: 4.5</td>
</tr>
</tbody>
</table>

The counterfactual “expected results” are based on grant targets adjusted by grant performance prior to COVID-19. The lost progress between “expected results” and “actuals” is largely due to the impact of the COVID-19 pandemic on service delivery (particularly for TB and malaria, and for HIV testing in certain countries), with additional factors such as underperformance or program change.

Source: Global Fund 2021 Results Report
Bryanna Nicole Camey from Guatemala City, Guatemala

“It was like the end of the world for many of us.”

Bryanna Nicole Camey studied business, but never managed to get a job in her field. She says this is “because of the way people look at me.” Faced with stigma and harassment, Bryanna, like many transgender women in Guatemala, makes a living as a sex worker.

“When people stigmatize you, the best thing is to ignore it and go on with your life, because after all, life is but the blink of an eye,” she says.

In addition to facing violence and discrimination, transgender women are 34 times more likely to acquire HIV than other adults globally. They face barriers accessing health services, and the COVID-19 pandemic has made this worse.

Due to lockdown measures, the health center where Bryanna got tested for HIV closed its doors.

“It was like the end of the world for many of us. We were afraid because we had to continue working and we had lost our support groups,” she says.

To maintain testing services, the Global Fund works with community-based organizations Colectivo Amigos Contra el Sida (CAS) and Organización Trans, Reinas de la Noche (OTRANS) to provide HIV self-testing kits. The kits are promoted on social media and delivered by post.

Bryanna has used the self-tests herself and spreads the word to other members of her community. Self-tests give people who otherwise may not get tested an option that is safe, confidential and convenient. They are easy to perform, accurate and fast and have been an important tool to mitigate the impact of COVID-19 on the fight against HIV.

Between 2021 and 2023, the Global Fund will invest US$60 million in HIV self-testing – a fourfold increase compared to the previous three-year period.
Getting back on track against HIV, TB and malaria is essential to building back better

Even before COVID-19, we were off track compared to the trajectories for reductions in infections and deaths prescribed by the Global Plans for HIV, TB and malaria. These Global Plans lay out ambitious, but not unrealistic, pathways to achieve the Sustainable Development Goal 3: Health and Well-being for All (SDG 3) target of ending the three epidemics as public health threats by 2030. But because of COVID-19, and with only eight years left before 2030, we have fallen significantly behind on most metrics versus the Global Plans for all three diseases.

In many of the poorest and most vulnerable communities in the world, HIV, TB and malaria kill even more people than COVID-19. So we must beat the new virus and simultaneously recover the ground lost against the earlier pandemics. To focus our energies and resources purely on COVID-19 or on preparing for potential future pandemic threats at the expense of getting back on track against HIV, TB and malaria would deepen global health inequalities. It would be difficult to defend allowing the resurgence of these earlier pandemics amongst the poorest and most vulnerable communities in the world while stepping up investment to protect richer regions of the world from future pandemic threats.

We can avoid any such tradeoff by taking an approach that recognizes that so much of what we need to do to fight any one pandemic can help in the fight against others. Investments made to fight HIV, TB and malaria were the foundation of many countries’ responses to COVID-19. Investments being made now to fight COVID-19 will be the platform for many countries’ preparedness against future pathogens.

So far, these synergistic benefits have been largely the unintended consequence of discrete initiatives with distinct objectives, rather than the result of intentional and coordinated efforts. Taking a smarter, less siloed approach to fighting HIV, TB and malaria, combating COVID-19 and building pandemic preparedness will enable us to address all these challenges on a highly efficient, marginal cost basis. By supplementing disease-specific investments with increased investments in surge capacity and multipathogen capabilities, we can simultaneously deliver immediate benefits to countries and communities in terms of lives saved and infections averted, and strengthen the ability of health systems to prevent, detect and respond to future threats.

Figure 6
Summary of Global Plan Milestones and Targets, 2025 and 2030

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<td><strong>Target 2025</strong></td>
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As part of this approach, at least 90% of key populations will be virally suppressed, 90% of people diagnosed with TB treated successfully (2019), 11% and 9.2% decline in TB incidence rate and in absolute number of TB deaths, compared with 2015, 59% of all people with TB diagnosed and all placed on appropriate treatment, 86% of all people diagnosed with TB treated successfully (2019), 47% of TB-affected families facing catastrophic costs due to TB, 3% increase and no change in malaria mortality rate and malaria case incidence, compared with 2015, Elimination in 23 countries (12 certified by WHO since 2000), 100% of malaria-free countries that prevented re-establishment.
When the COVID-19 pandemic first hit Bangladesh, tuberculosis (TB) case notifications dropped by 22% between 2019 and 2020, an alarming decrease in one of the world’s 30 high-TB burden countries. Despite this significant decline, the country achieved a quick return to pre-pandemic notification levels by the end of 2020, and notification rates exceeded targets for the first six months of 2021.

Key factors that supported Bangladesh’s successful recovery included strong leadership from the National TB Program (NTP), political advocacy to avoid any interruption to TB services (including through maintaining key TB staff), effective collaboration with partners, including BRAC, WHO and USAID, and working closely with communities and the private sector.

The NTP rapidly established guidance to manage TB services during the pandemic and educated staff on infection control and prevention measures.

Global Fund investments supported the distribution of personal protective equipment for health workers and community volunteers, the integration of COVID-19 messages into TB campaigns as well as increasing the number of community outreach events, including family and community counseling, sample collections and referrals.

Bangladesh also used investments to strengthen testing capacity for both TB and COVID-19. The NTP introduced simultaneous TB and COVID-19 testing using GeneXpert diagnostics machines at 71 sites along with rapid antigen testing across the country. Testing was further bolstered by introducing sample transportation boxes for field staff and by establishing sample collection booths in areas with a high concentration of people with TB symptoms.

If Bangladesh’s current performance continues and improves, national TB notification coverage will reach an all-time high, leading to an accelerated reduction in TB incidence and mortality. Lessons learned in Bangladesh can also be replicated in other countries where disruption in TB services have been high due to the pandemic.
Health care should be equitable and accessible for everyone, everywhere.

The imperative of investing to build inclusive, resilient and sustainable systems for health

The key to translating this approach into reality will be investing in building inclusive, resilient and sustainable systems for health. Fighting any disease requires a combination of investment in disease-specific tools, such as COVID-19 tests, HIV antiretrovirals or malaria mosquito nets, alongside investment in health and community system capacities and infrastructure, including the health workforce. While investments in disease-specific tools are particular to individual diseases, investments in health systems can deliver benefits in protecting people from multiple pathogens, whether existing or potential, and in contributing to SDG 3’s overall objectives of universal health coverage (UHC) and health and well-being for all.

For example, molecular diagnostic instruments can be used for multiple pathogens, supply chains for multiple medical commodities and disease surveillance systems to track the spread of different outbreaks. Community health workers can be trained to prevent, diagnose and treat different diseases, and to detect unusual symptoms that might indicate the presence of new threats. Many critical components of health systems, like primary care facilities, infection prevention and control protocols, cost management systems, or public health communication capabilities, can be used to tackle multiple pathogens, as well as broader health challenges. For example, Global Fund investments have benefited programs to advance reproductive, maternal, newborn, child, and adolescent health. Women and girls living with or affected by HIV are offered opportunities to access quality sexual and reproductive health and rights (SRHR) services, including family planning, screening for sexually transmitted infections, and post-violence care. And it works both ways: Women’s visits to SRHR clinics present a key opportunity for the provision of HIV prevention and testing services as well as active referral to HIV treatment and care services.

Community systems are particularly important for reaching the most marginalized populations, expanding the reach and uptake of services beyond formal health facilities and empowering those deprived of access to advocate for their rights. Recognizing the critical importance of strengthening health and community systems, the Global Fund is already the largest multilateral provider of grants for this purpose. We must renew our commitment to people that have been left behind because of who they are or where they live. We must address the disparities that drive HIV, TB and malaria as well as human rights violations and gender-related barriers to accessing health services. We must accelerate innovation as well as encourage and support increased local production of health products and services. We must strengthen our collaboration across the partnership. And we must also mobilize more investments from international and domestic sources as well as the private sector.

No one should die from preventable and treatable diseases. As we build back better after COVID-19, we must seize this opportunity to protect everyone from the deadliest infectious diseases, making health care more equitable and more accessible everywhere.
Kamate Muhindo is head nurse at the Majengo Marie Health Center in Goma, Democratic Republic of the Congo (DRC). Throughout his 20-year career, Kamate has worked in locations across the country and now manages a team of 15. He says he was inspired to get into nursing after he got sick and almost died when he was a young man.

"I fell very ill, and when I saw how the doctors saved me... I made the decision that if I was cured, I would do medicine to help others," he says.

Kamate’s work is demanding. The Majengo Marie Health Center serves a population of approximately 40,000 people. Every day the team treats patients with HIV, tuberculosis (TB) and malaria. They have also been on the front line fighting other disease outbreaks as well as the COVID-19 pandemic.

Investing in health workers like Kamate is a critical component of the Global Fund’s work to build resilient and sustainable systems for health. In DRC, this work includes training and supporting health workers, strengthening health information systems, building strong supply chains and procurement processes, and strengthening community-based health networks.

In 2021, the country strengthened its disease surveillance system with 2,800 health centers equipped with tablets for online disease outbreak reporting, including for COVID-19 cases. Over 800 health workers were trained in strengthening the quality of front-line health care services.

Throughout his career, Kamate has felt the impact that fragile health systems have had on his community, colleagues and family – his older sister died of AIDS in 2005 because she did not have access to lifesaving antiretroviral drugs. He says that continued investments in the local health system are important to protect him and his colleagues and ensure they can provide their community with lifesaving health care.
In 2002, the Global Fund was founded to fight HIV, TB and malaria – three global pandemics that were killing millions of people every year. For the first time, the world created a unique partnership that brought together governments, civil society, people affected by the diseases, global health organizations, and the private sector to fight the three diseases. We established a movement that refused to accept people in the poorest and most marginalized communities dying from preventable, treatable diseases. Since then, the Global Fund partnership has delivered outstanding results, saving 44 million lives and reducing the combined death rate from HIV, TB and malaria by more than half.

It is important to remember where we started. In 2002, HIV was like a death sentence in many low- and middle-income countries (LMICs). Lifesaving antiretroviral medication cost more than US$10,000 a year – available to the rich, but far out of reach for the millions with HIV in poor countries, particularly in sub-Saharan Africa. HIV and AIDS killed a generation of mothers and fathers, leaving millions of orphans and their elderly grandparents to care for them. Children born to HIV-positive mothers died within a few years, with no treatment to save them.

Figure 7
Coverage of Treatment and Prevention Interventions in Countries Where the Global Fund Invests

Malaria coverage calculations based on 38 African countries for which data is available from WHO/Malaria Atlas Project estimates in countries where the Global Fund invests. HIV and TB estimates are based on all countries where the Global Fund invests.

When the Global Fund was created, we worked swiftly with partners like PEPFAR and UNAIDS and numerous communities around the world to correct this injustice. Today, in countries where the Global Fund invests, more than 21.9 million people are on antiretroviral therapy – medication that allows people living with HIV to live healthy lives and prevents them from passing the virus on to others. Through leveraging economies of scale, working with partners and negotiating directly with manufacturers, we have brought the cost of antiretroviral drugs down to less than US$666 per person per year. More than 85% of pregnant women living with HIV now have access to medicine to prevent transmitting HIV to their babies, meaning children are born HIV-free. This massive expansion in treatment provision, combined with an increasing array of prevention interventions, often designed and delivered by affected communities themselves, has had a huge impact. In countries where the Global Fund invests, the AIDS-related death rate has been reduced by 74% and new infections by 54% since 2002. The Global Fund provides 25% of all international financing for HIV programs.

In 2002, TB, one of the world’s earliest and deadliest epidemics, killed 2 million people a year – mainly adults in the most productive years of their lives, breadwinners of families in the poorest and most vulnerable communities. Without treatment, a person infected with TB can infect 10-15 others in one year. So the first step to ending TB is to diagnose and treat all the people falling ill with the disease. The Global Fund joined forces with partners such as WHO and the Stop TB Partnership to find the missing people with the disease – the millions that go undiagnosed, untreated and unreported every year, who can therefore die of the disease and unknowingly infect others.

As the source of 77% of all international financing for TB (12% of total available resources), the Global Fund plays a critical role in supporting programs to find and successfully treat people with TB. In many countries, Global Fund support meant TB treatment was available for free for the first time. Global Fund investments put a particular focus on drug-resistant forms of TB, which are much more difficult and expensive to treat. Drug-resistant TB accounts for about one-third of all antimicrobial resistance deaths worldwide and presents a potentially catastrophic risk to global health.

Due to a persistent shortfall in both international and domestic funding, progress against TB has been much slower than required to meet the Global Plan targets. In countries where the Global Fund invests, the TB death rate (excluding HIV-positive) has dropped by 42% since 2002; new TB cases have fallen by just 5%.

No one should die from preventable, treatable diseases.
From 2000-2015, the fight against malaria was a public health success story: Cases were reducing dramatically worldwide (countries shaded in green).

Starting in 2015, global funding plateaued and progress slowed and then reversed. Global malaria cases are now on the rise (countries shaded in red).

Over the last two decades, the Global Fund partnership has continuously evolved to become ever more efficient and effective in delivering results at scale. The accumulated experience of fighting three very different infectious diseases worldwide - one a virus, another a vector-borne parasite and the third a bacterium - has given the partnership unparalleled insights into what works and what doesn’t in fighting pandemics.

The Global Fund’s unique governance model, which brings an extraordinarily diverse range of partners to the decision-making table at both country and global levels, has created an environment of continuous debate and challenge amongst trusted partners.

We coordinate our work together with bilateral partners, such as PEPFAR, the U.S. Agency for International Development (USAID), PMI, the Agence Française de Développement (AFD), the UK Foreign, Commonwealth & Development Office (FCDO), Japan International Cooperation Agency (JICA), Australia’s Department of Foreign Affairs and Trade (DFAT), Global Affairs Canada (GAC) and BACKUP Health/GIZ among others. Through joint planning and following shared global plans and targets, we invest in programs that reinforce and support each other’s interventions and build on our respective areas of expertise, making our collective efforts more effective.

We collaborate with a wide range of multilateral partners. For example, the Global Fund and Unitaid work closely with countries to ensure that the best global health innovations reach everyone, especially the most vulnerable. Unitaid invests in finding innovations and bringing them to market, while the Global Fund supports countries in deploying them at scale. Our collaborative efforts span all three diseases and have included next generation mosquito nets to stop malaria-carrying mosquitoes, self-testing for HIV, and pediatric treatments for HIV and TB.

The Global Fund’s nature as a public-private partnership has enabled us to combine the private sector’s focus on innovation, efficiency and speed with a deeply values-based commitment to leaving no one behind, and to empowering those most affected by the diseases. Our focus on outcomes – on saving lives and reducing infections – rather than on input metrics or on interventions has given us the impetus and flexibility to innovate and change.

Fundamental to the Global Fund model is the notion of country ownership – meaning that decisions about program priorities are best made at the local level through an inclusive process involving all stakeholders. This makes the Global Fund unique; through our Country Coordinating Mechanisms (the local committee of health, government and community experts that design and guide Global Fund-supported programs in countries), marginalized groups such as sex workers or men who have sex with men have a seat at the table alongside government ministers, country health officials, and civil society leaders. The Global Fund is committed to engaging and empowering affected communities, putting them at the center of the effort, so that they can shape and deliver interventions tailored to the needs of specific populations and ensure no one is left behind.

From the start, the Global Fund has taken a rights-based, gender-responsive approach to fighting pandemics, seeing equitable access to services and tools as a matter of justice. Since pandemics thrive on and exacerbate inequities, the Global Fund has increased investments to remove human rights and gender-related barriers to health more than four-fold in recent years. Through our pioneering “Breaking Down Barriers” initiative, we support countries to identify human rights-related barriers and develop country-owned and costed plans to address them. This is an example of where the Global Fund’s catalytic role is particularly important: We deliver results partly through the direct impact of the grants we fund, and partly through stimulating changes in policies, laws, behaviors and attitudes.
The reduction in mortality from HIV, TB and malaria in the past two decades has significantly contributed to an overall increase in life expectancy in LMICs and helped reduce global inequity in life expectancy – the injustice of living longer, or shorter, based on where a person is born (see Figure 12) – between high-income and low-income countries. This impact is particularly striking in countries in sub-Saharan Africa. Between 2002 and 2019, life expectancy in 15 countries in this region increased on average from 52.3 years to 65.7 years. These countries accounted for 40% of the global decline in inequality, with nearly 60% of this decline contributed by reduced mortality from HIV, TB, and malaria.

The Global Fund also plays a critical role in catalyzing domestic investments in health, supporting countries as they move toward fully domestically funded systems for health, including fully domestically funded responses to HIV, TB and malaria. Co-financing of Global Fund-supported programs increased by 37% in the 2018-2020 grant implementation period, with a further 33% increase already committed for the 2021-2023 cycle. By supporting countries to develop sustainable financing approaches, the Global Fund can help them respond more effectively to the substantial unmet needs of their populations, reducing overreliance on inequitable out-of-pocket expenses by patients and overdependence on external funding.

The Global Fund is one of the world’s largest procurers of medical supplies for LMICs. More than half of the Global Fund’s yearly investments – amounting to over US$3 billion in 2021 – are used to procure medicines and health products, both directly through our Pooled Procurement Mechanism and through national and partner procurement channels. Through leveraging economies of scale, working with partners and negotiating directly with manufacturers, we have driven down prices for lifesaving medicines like antiretroviral therapies (a 50% price reduction since 2014) and malaria treatment (a 36% price reduction since 2014). Our partnerships with private sector suppliers have resulted in more reliable delivery of medical supplies and reduced stock-outs of medicines. We work with partners to execute market-shaping strategies to stimulate competition and new product development where needed. For example, multiyear framework agreements with suppliers of HIV medication saved US$324 million between 2018 and 2021 and secured supply for over 4 million people.

The Global Fund is also highly cost effective. Through disciplined cost control and economies of scale, we continue to keep our operating expenses low while improving and expanding the scope of our work. Despite significantly increasing investment in catalytic interventions including health finance; communities, rights and gender; and addressing human rights and gender-related barriers to access to health services, as well as reinforcing risk management and assurance, the Global Fund’s operating expenditure as a percentage of donor contributions has steadily decreased, and is now 5.1%, significantly below most comparable organizations.9 For C19RM, this percentage is below 3%, reflecting the way we have leveraged the Global Fund’s core infrastructure and processes for the COVID-19 response.

Over the last 20 years, we have built a strong and vibrant alliance that has brought together thousands of diverse organizations in a unique partnership to confront the world’s deadliest infectious diseases across more than 120 countries. In the last two years, that partnership has also played a crucial role in the global fight against COVID-19. Those efforts have achieved tremendous impact, saving more than 44 million lives. Our partnership will continue to play a critical role as the world seeks to accelerate progress toward ending AIDS, TB and malaria as public health threats by 2030, defeat COVID-19 and build better defenses against future pandemics.

Figure 12
Reducing Inequities in Life Expectancy 2002-2019
Reductions in mortality from HIV, TB and malaria increase life expectancy, particularly in LMICs

See Annex 5 for data sources and methodology.
Children rest in bed under a long-lasting insecticide-treated mosquito net at home in the Maradi region of Niger. The country is aiming to achieve a national net distribution campaign that is expected to cause a significant reduction in malaria cases.

The Global Fund/Sarah Hoibak

More than 80% of malaria deaths in sub-Saharan Africa are in children under 5. The most effective tools to protect children from malaria are long-lasting insecticide-treated mosquito nets and seasonal malaria chemoprevention. However, growing resistance to the insecticides used to treat the nets, seasonal transmission that differs across regions, and ongoing insecurity make fighting malaria in Niger particularly complex.

To address these challenges, the Global Fund works in partnership with the government of Niger, Catholic Relief Services, the U.S. President’s Malaria Initiative (PMI), WHO and others, investing in a mix of interventions that are proving successful.

Armed with new data on insecticide resistance across the country and innovative new nets treated with a combination of insecticides, the Global Fund and partners are changing the way we distribute nets to stay ahead of the malaria parasite as it adapts. The distribution of these new insecticide-treated nets — designed to fight insecticide resistance — through multiple channels is a key to making sure that families are protected with the latest innovations to keep their children safe.

Niger is also among a handful of countries in West and Central Africa to have nationwide seasonal transmission of malaria, which puts children under 5 at higher risk of contracting malaria during the peak transmission season. The Global Fund and partners’ investments help cover over 4 million children under 5 annually with seasonal malaria prophylaxis drugs, protecting them against the dangers of a malaria infection.

The Global Fund/Hejara Lasenai/Catholic Relief Services
3: Fighting Pandemics and Building a Healthier and More Equitable World

In November 2021, the Global Fund Board approved an ambitious new Strategy – a multiyear road map for our partnership’s future. The Strategy – developed collaboratively by implementer governments, communities, civil society, the private sector, development partners and technical partners – clearly lays out how our partnership can accelerate progress toward our vision of a world free of the burden of HIV, TB and malaria with better, equitable health for all. We will do this by putting people and communities at the center and providing greater focus on more integrated and people-centered models of prevention, treatment and care.

The new Strategy covers the next six years across two three-year grant cycles. To complement the primary goal of ending AIDS, TB and malaria, the Strategy adds four mutually reinforcing contributory objectives around people-centered integrated systems for health; the engagement and leadership of affected communities to leave no one behind; maximizing health equity, gender equality and human rights; and mobilizing increased resources for our mission. Reflecting the fundamental change in context as a result of COVID-19, the Strategy adds a further “evolving” objective around pandemic preparedness and response.

Translating this Strategy into reality will require significant changes, including a greater focus on equity, sustainability, program quality and innovation; more action to tackle human rights and gender-related barriers to health; and increased investment in building more inclusive, resilient and sustainable systems for health better able to prevent, detect and respond to infectious disease threats; and to deliver on the promise of universal health coverage (UHC).

To achieve the Global Fund’s primary goal of ending AIDS, TB and malaria as public health threats by 2030, we must quickly recapture the ground lost due to COVID-19 and swiftly attain a steeper trajectory of reductions in deaths and infections across all three diseases. Otherwise, we have no hope of getting anywhere near the 2030 SDG 3 targets.

Our vision is a world free of the burden of HIV, TB and malaria with better, equitable health for all.
In the fight against HIV, we will focus on closing HIV prevention and treatment coverage gaps through more equitable service delivery models, better tailored to peoples’ needs, with particular emphasis on key and other vulnerable groups. We will intensify our focus on primary prevention, and on addressing the structural drivers of HIV infection and AIDS-related deaths, such as human rights and gender-related barriers to services including stigma, discrimination and criminalization.

We will put even greater emphasis on ensuring equitable access and rapid deployment to those who can most benefit from the latest innovations, deploying to those who can most benefit from the latest innovations, such as improved and more affordable diagnostics or shorter treatment regimens, digital technologies, and new approaches, better tailored to the specific at-risk communities and made available through delivery platforms that best meet their needs.

Against TB, we will intensify efforts to tackle barriers and gaps that limit access to quality TB prevention and treatment programs. We must scale up efforts to find and treat all people with TB, deepen the integration with other services (e.g., combining testing for TB with testing for HIV and/or COVID-19), intensify prevention interventions, address the socioeconomic barriers to care and sharpen the differentiation of services to meet the needs of the most vulnerable communities.

Expanding the identification and treatment of people with drug-resistant TB must be a particular priority, given that currently only one-third of those failing illness with the drug-resistant forms of the disease are diagnosed and treated. As with HIV, in TB we need to accelerate equitable access and scale deployment of innovations, whether these are medical tools such as improved and more affordable diagnostics or shorter treatment regimens, or new service approaches such as workplace and community-based testing and treatment, and bidirectional testing alongside COVID-19 or HIV. Increased efforts to prevent TB, including a renewed focus on finding and successfully treating all people with the disease, promoting service integration and quality care tailored to the needs of communities, are essential to get the world back on track toward the 2030 targets.

Against malaria, we will focus on delivering interventions better aligned to the needs of individual communities, while addressing barriers to equitable access, improving the quality of services, tackling resistance and demonstrating the path to malaria elimination. When effective prevention and treatment services are not maintained, malaria resurges rapidly. Children under 5 and pregnant women, those with lower economic resources and rural and mobile populations remain disproportionately affected by malaria and face barriers in accessing services, diagnostics and treatment. To get back on track in the fight against the disease, we must provide better and more equitable access to malaria services across the spectrum of prevention, diagnosis and treatment interventions.

We must accelerate equitable access to and effective deployment of, the latest innovations, including the next generation of mosquito nets and insecticides, vaccines and improved diagnostics and treatments. With malaria it is critically important to expand the use of geolocation technologies to understand how epidemiological dynamics vary by location and thus determine the optimal mix of interventions to combat the disease.

To support and complement the intensified focus on reducing incidence and death across the three diseases, the Global Fund Strategy envisages significant changes in other key aspects of the partnership’s activities, including:

- **Supporting countries and communities to build more people-centered and integrated systems for health.** To maximize impact, efficiency and sustainability, and to create a foundation for truly universal health coverage, we must support countries to build systems that can also address the comorbidities and coinfections of those affected by HIV, TB and malaria. We must build platforms that can deliver integrated packages of care across multiple health needs, such as sexual and reproductive health, fever management for children, or the diagnosis and treatment of respiratory conditions.

Tackling a more systematic approach to the development and integration of community systems for health. Community interventions play a critical role in the fight against the three diseases, but are insufficiently linked to national health systems or lack financial sustainability in many countries. It is imperative to reinforce the systems that underpin and sustain community interventions, such as by paying and training community health and peer workers, establishing social contracting mechanisms to sustain community-led programs for key populations, strengthening program linkages with national systems and promoting community-led monitoring.

Reinforcing the role and voice of communities affected by and living with the diseases. Community leadership has been essential to the success of the Global Fund from the start, ensuring interventions are designed and prioritized to meet the needs of those most affected, and reaching the most marginalized and vulnerable. Yet in many countries, affected communities are still denied the voice and role they need to make a difference. So the Global Fund must continue to be an agent of change in ensuring that people and communities are at the center of our efforts – at the decision-making table and empowered to lead.

**Intensifying efforts to tackle inequalities, human rights-related barriers and gender-based inequalities.** We recognize that we will not defeat the diseases by purely biomedical interventions, but by addressing the underlying socioeconomic determinants, including stigma, criminalization and other forms of discrimination and violence. We have already stepped up efforts through initiatives such as “Breaking Down Barriers.” Yet such obstacles persist, and in some countries have worsened, with COVID-19 exacerbating existing inequalities. To defeat HIV, TB and malaria and deliver truly universal health coverage, we must redouble our efforts to address the pervasive and entrenched inequities, human rights-related barriers and gender inequalities that result in so many being left behind. This will also require better data to enable more precisely targeted interventions and a willingness to use the Global Fund’s voice to challenge harmful laws, policies and practices.
Putting greater emphasis on programmatic and financial sustainability. This includes ensuring disease-specific interventions are better integrated into the underlying systems for health while catalyzing the development of more robust domestic financing approaches and ensuring value for money. Unless we support countries to establish systematic approaches to mobilizing and effectively deploying substantially increased domestic resources for health, we will not defeat the three diseases, let alone increase protection against future threats or deliver UHC. We will build on proven tools, such as our well-established co-financing requirements, and successful examples of blended finance, debt swaps, and public-private partnerships. We will deepen country dialogues on health finance, working with partners to strengthen advocacy and reinforce technical support. Through intensifying our partnerships with the World Bank, other multilateral development banks, the International Monetary Fund (IMF), the African Union (AU) and others, we will work to galvanize incremental investments to reinforce health systems’ preparedness against future infectious disease threats. Our approach to strengthening health systems for resilience and preparedness is explained in the next chapter.

Increasing our actions to respond to the multifaceted threats to human health arising from climate and environmental changes. Climate change will intensify extreme weather events, resulting in more refugees and internally displaced people (already at record levels worldwide), decreased air quality and increased food, water and economic insecurity, all of which have a negative impact on health. This will shift the dynamics of HIV, TB and malaria, and increase the risk of future pandemics – particularly in zoonotic diseases that jump from animals to humans. We must adapt our investments and interventions to anticipate and respond to the epidemiological effects of climate change. Doing this will entail embracing more of a One Health approach, positioning human health interventions within the context of a broader planetary health agenda, encompassing animal, human, plant health and the shared environment. It will also necessitate more focus on building more environmentally friendly and climate-resilient systems for health, with greater focus on waste disposal and energy efficiency.

The Global Fund’s new Strategy is an ambitious roadmap for fighting pandemics, both new and old, and building a healthier and more equitable world. It represents a commitment by the partnership to redouble our efforts to end AIDS, TB and malaria and deliver the SDG 3 goal of health and well-being for all. By putting people and communities at the center, this Strategy is about fighting for what counts – lives, health and well-being, equality, and thriving communities.

Increasing the focus of ensuring rapid access to lifesaving innovations. The response to COVID-19 has demonstrated how it is possible to achieve dramatic reductions in the timescales needed to develop and deploy new innovations, while simultaneously shining a bright light on the many obstacles to achieving equitable access. Radically accelerating equitable access and deployment of lifesaving innovations will require changes across (and beyond) the Global Fund partnership, including intensified collaboration with key upstream partners such as Unitaid, FIND, the Bill & Melinda Gates Foundation and the Wellcome Trust, close coordination with WHO and relevant regional entities, such as the new African Medicines Agency, on regulatory approvals and the development of guidance, and expanded partnerships to support rapid rollout at scale.

Reinforcing the use of granular, timely data to drive decision-making. COVID-19 has demonstrated the value of near real-time disaggregated data to understand the evolution of the threat, enable decision-making and design interventions targeted to the needs of specific communities. Yet in many countries, HIV, TB and malaria programs rely on out-of-date, high-level data of uneven quality, and lack the tools and capacities for rigorous disease surveillance. Building the capabilities to collect, analyze and make decisions on timely, quality, disaggregated epidemiological data is fundamental to how we defeat the three diseases and strengthen preparedness against future threats.

Strengthening the Global Fund partnership by increasing clarity on roles and resource commitments and by reinforcing accountability. The Global Fund delivers impact through collaboration across a diverse partnership. Government donors contribute funding and provide technical support through their bilateral agencies. Implementer governments are responsible for delivering strong, equitable health systems and effective disease programs that respond to the needs of their people. Communities provide insights and guidance on how best to meet the needs of affected populations, deliver and monitor programs to ensure no one is left behind. Civil society and private sector partners contribute funding, innovation, expertise and advocacy, and act as implementers. Technical agencies and other multilateral development organizations provide technical expertise, support resource mobilization and advocacy efforts, deliver interventions, and monitor and evaluate programs. Working with and through partners is particularly important in challenging operating environments (COEs) – countries or regions characterized by poor governance, disasters or conflict and requiring flexible approaches to deliver needed services and medicines.

There remain significant opportunities to maximize our collective impact through deepening collaboration and enhancing transparency and mutual accountability. As a founding partner in both the Access to COVID-19 Tools Accelerator and the Global Action Plan for Healthy Lives and Well-being for All, the Global Fund is committed to building on these platforms to strengthen interagency coordination and effectiveness, both to maximize the effectiveness of the COVID-19 response and to accelerate progress toward the SDG 3 goals.

Recognizing and delivering on the role the Global Fund should play in pandemic preparedness and response. Through the COVID-19 Response Mechanism (C19RM) the Global Fund has demonstrated the power of the partnership as a mechanism for pandemic response. While the next pandemic may need a different kind of response, the processes and policies underpinning C19RM are highly flexible and could be adapted to meet the requirements of a different kind of infectious disease threat. For preparedness, the Global Fund is uniquely positioned to help countries leverage the synergies between ongoing investments in systems for health to fight HIV, TB and malaria and incremental investments to reinforce health systems’ preparedness against future infectious disease threats.
Carolyne Wasonga from Siaya, Kenya

"Being a peer educator made me smile again."

Carolyne was 17 when she found out she was HIV-positive, but admits she was in denial about her status. She refused to take any treatment until she found out she was pregnant two years later.

"I started taking my treatment to protect my son – I had to save him," she says.

Thanks to PMTCT, a treatment that prevents the transmission of HIV from mothers to their babies, Carolyne gave birth to a healthy baby boy named Philip, who is now 5 years old. She also started working as a peer educator to support other young women living with HIV in her community.

"Being a peer educator made me smile again. It helped me accept my situation."

Carolyne is one of 400 peer educators who are part of a Global Fund-supported Kenya Red Cross Society program aimed at reaching adolescent girls and young women with HIV prevention, treatment and care. Adolescent girls account for more than 25% of HIV infections in sub-Saharan Africa, despite making up only 10% of the population.

As a peer educator, Carolyne ensures other young women living with HIV in her community have access to health services, education and psychosocial support. She and her colleagues facilitate local support groups and are trained by pro bono lawyers to address cases of gender-based violence.

When public gatherings were banned due to COVID-19 lockdowns, Carolyne and her colleagues performed home visits to distribute antiretroviral treatment and offer support to the young women they work with.

It is expected that 20,000 adolescent girls and young women will be reached through the vital work of Carolyne and the hundreds of other peer educators supported through Global Fund investments in Kenya.
Of the many lessons to be drawn from COVID-19, one of the most evident is that the world has woefully underinvested in pandemic preparedness.

This is not new: After every previous infectious disease outbreak, such as SARS or Ebola, there have been calls to step up investment in global preparedness. This time, the G20 High Level Independent Panel (HLIP) and the Independent Panel for Pandemic Preparedness (IPPR) are among those that have produced reports arguing for a significant increase in global investment to strengthen our collective capabilities to prevent, detect and respond to such threats.

If we are ever going to escape the cycle of "panic and neglect" that has characterized the world’s approach to pandemics, then this is the moment. COVID-19 has dramatically demonstrated the extraordinary damage a single pathogen can wreak on health, social, economic and all other spheres of life. As the virus mutates, the world is still struggling to respond, paying a huge cost in lives and livelihoods.

This pandemic is more than a wake-up call. It is an emphatic message that continuing to fail to invest in pandemic preparedness puts the whole world at risk. No one is safe; everyone’s lives and livelihoods are at risk.

It is not a question of if, but when, we will face the next threat from a pathogen of pandemic potential. In fact, the frequency of infectious disease outbreaks across the world appears to be increasing. With population growth and climate change putting increasing stress on the global ecosystem, we will likely see more zoonotic spillover events, where pathogens from the animal world become threats to humans. Through antimicrobial resistance (AMR), we face an increasing risk of being confronted with pathogenic threats impervious to lifesaving medical tools, such as antibiotics.

Wide-ranging discussions about pandemic preparedness and response (PPR) are currently taking place in various forums, including the United Nations, the WHO World Health Assembly, the G7 and G20. One conclusion is that dollars invested in "preparedness" (and "prevention") can save many times more dollars and lives than "response." The speed with which outbreaks can turn into pandemics largely determine the effectiveness of the response.

The Global Fund’s new Strategy recognizes that we have an important role in making the world safer from future pandemic threats. The Global Fund was created in response to the last big pandemic to strike humanity, HIV and AIDS. Alongside Gavi, the Vaccine Alliance (Gavi), the Coalition for Epidemic Preparedness Innovations (CEPI), and Unitaid, we are one of very few global institutions expressly established to focus on fighting the deadliest infectious diseases.
To achieve our mission to end HIV, TB and malaria, we cannot afford another setback like COVID-19. When pandemics collide, it is the poorest and the most vulnerable who suffer the most.

The new Strategy describes the Global Fund’s role in PPR as an “evolving objective,” since the global discussion about how to make the world safer from such threats is still ongoing, so we need to be flexible in determining how the Global Fund can complement other agencies and initiatives. On pandemic response, our role is now well defined. Through the Access to COVID-19 Tools Accelerator (ACT-Accelerator) and the COVID-19 Response Mechanism (C19RM), the Global Fund works with partners, such as WHO, Unitaid, FIND, the World Bank and UNICEF, as the largest provider of funding to low- and middle-income countries (LMICs) for everything other than vaccines – including tests, treatments, oxygen and PPE.

On pandemic preparedness, our comparative advantage is in supporting countries to build more resilient and sustainable health systems, better able to prevent, detect and respond to new infectious disease threats. In reinforcing preparedness, the Global Fund will collaborate and coordinate with partners. WHO must continue to play the central role in terms of coordination and normative guidance. Other agencies are better placed to invest in developing new technologies (e.g., CEPI, FIND, Unitaid) or strengthen vaccine readiness (e.g., Gavi, CEPI, UNICEF). The World Bank and other multilateral development banks must also play important roles, not least in supporting LMICs to sustain domestic investment in resilient health systems and to develop regionalized manufacturing and robust supply chains. Regional institutions, such as the Africa Centers for Disease Control and Prevention, will play a critical role in leading and coordinating efforts across countries, for example in disease surveillance.

The Global Fund is uniquely positioned to support LMICs to reinforce their health systems’ preparedness because we are already investing heavily in the same key components, including laboratory networks, disease surveillance systems, supply chains, primary health care facilities and community health workers. To strengthen pandemic preparedness, we should help countries build multipathogen capabilities and surge capacity on top of ongoing disease-specific investments. This would enable countries to build pandemic preparedness on a marginal cost basis, rather than as a separate – and more expensive – silo. Taking an integrated approach would enable countries to create fungible capacities, which could be used for HIV, TB, malaria and other diseases when there is no immediate threat or outbreak, and can be repurposed to counter any new potential pandemic. Like muscles, health system capabilities and infrastructure to prevent, detect and respond to threats will be most effective if exercised, rather than left idle.

The Global Fund/David Blacker/Paros
In Kyiv, call center operators like Mikhail Dyagterev provide counseling and help to protect the rights of people who inject drugs.

During night duty, social workers like Natalia Sholokh (left) provide HIV prevention information, testing and condoms to sex workers in Kyiv, Ukraine.

Tremendous progress has been made in the fight against HIV, but inequalities continue to fuel the epidemic. Key populations – people who are most likely to be exposed to HIV and whose participation in fighting the disease is vital – are at a much higher risk, often because inequalities and human rights barriers prevent them from accessing services.

Globally, key populations and their partners make up 62% of new HIV infections – in Eastern Europe and Central Asia, they account for 99%.

In Ukraine, which is home to the second largest HIV epidemic in the region, the Global Fund works with partners to ensure equal access to HIV prevention and treatment and address the barriers to quality health care.

We support partners to provide services to people who use drugs, including access to clean syringes, opioid substitution therapy, testing for HIV, hepatitis, COVID-19 and other diseases, and referrals to tuberculosis screening and mental health care. To address inequalities, people who use the services monitor their accessibility and quality and advocate for better laws, policies, funding and access to legal aid.

Mobile clinics reach sex workers with health care, “know your rights” information and access to paralegal support, while HIV prevention services geared at men who have sex with men and transgender women are also delivered hand in hand with community-led advocacy, documentation of human rights violations and referrals to legal support. Global Fund investments are also used to train health workers and police officers to respect and protect key populations’ human rights.

Human rights interventions increase the quality, acceptability and impact of HIV services, ensuring they are more accessible to those who need them most and that they are trusted and valued by the communities they serve.
Resilient and sustainable systems for health: a foundation for pandemic preparedness

Strengthening pandemic preparedness is fundamentally about building stronger systems for health, particularly public health capacities and primary health care. This principle is reflected in the International Health Regulation (IHR) framework, and the Joint External Evaluation (JEE) and the State Parties Self-Assessment Annual Reporting processes.

Investing in preparedness is thus a logical extension of the investments the Global Fund already makes to support countries in building more resilient and sustainable systems for health (RSSH). While reinforcing countries’ preparedness has not before now been an explicit objective, our investments in RSSH have significantly contributed to strengthening relevant capabilities.

Two recent studies found that roughly one-third of Global Fund investments contribute to health security and pandemic preparedness (https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30420-4/fulltext). For example, the HLIP estimated that enabling LMICs to build robust surveillance and detection networks and build greater resilience in health systems will require an additional US$23.4 billion per year, of which US$8 billion per year should be provided by external international financing. Given the significant synergies with the Global Fund’s current RSSH investments, adding investments primarily directed to reinforcing the key components of health systems’ preparedness capacities would be an efficient and effective route to reinforcing pandemic preparedness, and a logical extension of the Global Fund’s approach to RSSH. From a PPR perspective, this approach would enable countries to build pandemic preparedness capacities on a marginal cost basis. From an HIV, TB and malaria perspective, these incremental investments would also contribute to the fight against the three diseases: directly, by strengthening health system capacities; and indirectly, by reducing the risk of another pandemic that could again have catastrophic knock-on effects on HIV, TB and malaria programs.

With C19RM, we demonstrated we could adapt the Global Fund’s operational model for pandemic response, drawing on our experience working with countries to fight HIV, TB and malaria and leveraging our established operational processes and systems. While the requirements for health systems preparedness investments will differ from what was required for the COVID-19 response, we can build on this experience, to develop an appropriate allocation approach for funding, adapt the Country Coordinating Mechanism approach to funding requests to ensure these are grounded in National Action Plans for Health Security, modify the process for funding request review to ensure appropriate scrutiny and input by relevant partners (e.g., by expanding expertise on the Technical Review Panel), devise an appropriate monitoring and oversight framework and design tailored co-financing requirements. Ideally, we would synchronize the processes for any additional health system preparedness grants with those for HIV, TB and malaria and RSSH to maximize the synergies and thus the impact of every dollar invested.

Making the world safer from pathogens of pandemic potential is an urgent imperative. COVID-19 continues to cost millions of lives and trillions of dollars across the world. The earlier pandemics of HIV, TB and malaria are still killing millions and stifling the socioeconomic progress of the poorest and most marginalized communities in the world. New pathogens could emerge at any time. The threat of AMR is inexorably growing. Working with partners, as part of a broader effort to make everyone in the world safer from such threats, the Global Fund can play an important role in pandemic preparedness, leveraging our unique advantages and distinctive experience in fighting the deadliest infectious diseases. By stepping up investment in key components of health systems to support pandemic preparedness as an integral part of our Strategy, the Global Fund would be able to accelerate the development of resilient and sustainable systems for health that can deliver and protect universal health coverage and SDG 3: Health and Well-being for All.
A laboratory worker prepares samples used for COVID-19 diagnosis at the Instituto Nacional de Saúde in Maputo, Mozambique.

Even before the COVID-19 pandemic, Mozambique’s public health laboratory network experienced frequent supply stock-outs and capacity was centralized in two locations. When COVID-19 hit, the country was able to conduct only 600 COVID-19 tests a day for a population of 30 million people. The turnaround time for results was 72 hours; however, in many instances it took up to two weeks due to logistical challenges and the incredibly heavy workload.

Through the Global Fund’s COVID-19 Response Mechanism funding, Mozambique’s Ministry of Health gained access to international stockpiles of COVID-19 PCR and rapid antigen tests that significantly increased testing capacity, expanded access to testing and strengthened the laboratory network’s ability to respond to increasing demand.

Laboratory staff received training to decentralize antigen testing. This reduced the need to transport samples, provided remote communities with greater access, increased capacity and improved response time.

In 2021, Mozambique expanded PCR testing capacity to all provinces and began rolling out rapid tests. During the country’s fourth wave of COVID-19 caused by the omicron variant, Mozambique’s laboratory network has been able to conduct 12,000 tests a day – 20 times as many compared to the first wave.

The government also used COVID-19 Response Mechanism support to equip, renovate or rebuild four provincial public health laboratories. An additional three more laboratories will undergo similar improvements in 2022.

These investments will further increase the country’s laboratory capacity for all infectious diseases and strengthen the health system to respond to current pandemics while preparing for future health emergencies.
5: The Global Fund Needs at Least US$18 Billion

At least US$18 billion would save 20 million lives.

To get back on track in the fight against HIV, TB and malaria, to save 20 million lives, avert 450 million infections and cases and build a strong foundation for future pandemic preparedness, the Global Fund needs at least US$18 billion for the next three-year cycle. This scale of investment is essential: If we do not reach this goal, we will fail.

The stakes could not be higher. The combined total deaths from HIV, TB and malaria rose in 2020. The official reported death toll from COVID-19 is already 5.6 million, and new estimates show the true toll is likely closer to 19 million as of 20 January 2022. If we do not meet our new investment target, many more people will die from these pandemics and be at risk from future health threats. These funds are needed to change the trajectories of mortality and incidence toward achieving the SDG 3 target of ending AIDS, TB and malaria as epidemics by 2030, build stronger and more resilient health systems and strengthen capacities to prevent and prepare for future pandemics.

The Global Fund’s target for the Seventh Replenishment is to raise at least US$18 billion to fight HIV, TB and malaria and build stronger systems for health. It is estimated that one-third of the US$18 billion - US$6 billion - will be investments in health systems that both support the ongoing fight against HIV, TB and malaria and reinforce pandemic preparedness (Figure 14). We have seen this during COVID-19: The same laboratories, supply chains, data systems, diagnostics tools, etc. built to fight HIV, TB and malaria were used to fight the new pandemic. The same community health workers who are vital to delivering HIV, TB and malaria services can simultaneously serve as the first line of defense to prevent, detect and respond to new disease outbreaks.

Investing our share of the projected resource needs for HIV, TB and malaria

The starting point for determining the Seventh Replenishment target is the projected resource needs across the three diseases, which has been developed in conjunction with our technical partners, including WHO, UNAIDS, the Stop TB Partnership and RBM. The projected resource needs for HIV, TB and malaria for 2024-2026 amount to US$130.2 billion (Figure 15) in the countries where the Global Fund invests. This is a 29% increase on the US$101 billion in resource needs estimated for the current three-year period (2021-2023). This sharp increase reflects the fact that across all three diseases, we have gone backwards or stalled during the COVID-19 pandemic. In order to hit the SDG 3 target of ending AIDS, TB and malaria as public health threats by 2030, we need to speed up progress to reduce deaths and new infections. This will inevitably require more money.

Three years ago, the Sixth Replenishment Investment Case asked for a Global Fund investment of US$14 billion to cover approximately 14% of the US$101 billion projected resource needs to fight HIV, TB and malaria over the 2021-2023 period in the countries where the Global Fund invests. To maintain a similar share of the US$130.2 billion projected resource needs for the next implementation cycle (2024-2026), we would require at least US$18 billion of investments in HIV, TB and malaria. This is the bare minimum to recapture the losses due to COVID-19 and get back on to a trajectory consistent with achieving the SDG 3 target of ending the three pandemics by 2030 (Figures 17 and 18). The Global Fund

Non-Global Fund external funding amounts to US$25.2 billion. We arrive at this amount by extrapolating from external funding amounts reported to the Global Fund as part of the current (2021-2023) funding cycle, and assuming that they stay flat. The assumption of flat external funding from other sources has proven correct over previous Investment Case cycles and seems even more likely given donor fiscal constraints due to COVID-19.

Projected domestic resource amounts to US$8.6 billion, an increase of 30% over the domestic resource amounts committed to the Global Fund in the current 2021-2023 cycle and representing an annual increase of roughly 9%. To put this increase in context, countries' co-financing commitments for the 2021-2023 period had increased by 33% over commitments for the 2018-2020 cycle. To project domestic resource mobilization for 2024-2026, the analysis extrapolates from the commitments on domestic resourceing made in response to Global Fund co-financing requirements in the current cycle.

However, continued waves of COVID-19, consequent economic disruption and global supply chain bottlenecks are significantly impacting the economic recovery and fiscal outlook. In the latest International Monetary Fund World Economic Outlook (October 2021), aggregate economic output for LMICs (excluding China) is projected to remain 5.5% below the pre-pandemic forecast. In a quarter of Global Fund-eligible countries, real per capita government expenditures in 2024-2026 are projected to be lower than pre-pandemic levels. Taking cognizance of the diminished fiscal space, domestic financing for the response to HIV, TB and malaria is conservatively projected in line with growth of government expenditure, except in a handful of countries where projections are based on the more ambitious assumptions made in previous Investment Case projections. A more detailed breakdown of domestic resource mobilization and further details on the methodology are provided in Annex 2: Methodology for Projection of Available Resources.

For further details, please see Annex 1: Methodology for Estimating Resource Needs and Annex 2: Methodology for Projection of Available Resources.  
16 Inclusion of the latest data made available by countries for the 2021-2022 allocation period, the analysis includes the following: the Institute for Health Metrics and Evaluation for Rand economic and evaluation Development Assistance for Health (D4H) and the Organization for Economic Co-operation and Development (OECD) on funding available through regional and global funds; the Canadian International Development Agency; and government spending data provided by countries but are also included in the aggregate resources available. For malaria, the external financing amount also includes an assumed contribution from Gat to cover the cost of the introduction of the RTS,S vaccine as well as the introduction of the ASCEND (Advanced Surveillance, Control and Elimination of Denial) programme for malaria investment, consistent with the assumptions of the Global Technical Strategy.
Figures 17 and 18 highlight the different paths we can take in the fight against the three diseases. The black lines show what we have achieved thus far in terms of reducing disease incidence and mortality. The yellow line is the trajectory set out in the Global Plans for the three diseases – the path we should be on. The gap between the black lines and the yellow lines clearly shows that, exacerbated by the catastrophic impact of COVID-19, we are already off track to meet SDG 3. Even more concerning, the dotted pink line shows the rebound in incidence and mortality if we are not successfully mitigating the disruptive impact of COVID-19 on the three diseases. Finally, the turquoise line shows what we could achieve following a successful Seventh Replenishment.

If we want to reverse the losses caused by COVID-19 and get back on a trajectory that enables us to end the epidemics by 2030 – the turquoise lines in Figures 17 and 18 – the analysis demonstrates that a contribution through the Global Fund of US$18 billion, leading to 78% of the total resource need being covered, is the minimum required to sustain the ambition to achieve the 2030 Global Plan targets. With at least US$18 billion for HIV, TB and malaria, the projected trajectories for mortality and incidence, within the uncertainty range of the projection, start overlapping with the respective trajectories of the Global Plans (yellow). However, as Figures 17 and 18 indicate, a US$18 billion contribution by the Global Fund is the bare minimum amount required to achieve the 2030 Global Plan targets.

There remains an impact gap over the 2024–2026 period, visible in Figures 17 and 18 by the distance between the solid turquoise and the yellow lines. An additional US$28.4 billion would be required to entirely close this gap. More investment, whether through raising more for the Global Fund, from increased domestic resource mobilization, or increases in other forms of external assistance, would narrow the gap between the turquoise lines and the yellow lines on the charts. That would save millions more lives and would accelerate progress toward the end of AIDS, TB and malaria as public health threats.

**Investment Case Results for HIV, TB and Malaria**

**Figure 17**

**Combined Incidence Rate**

![Combined Incidence Rate](image1)

**Figure 18**

**Combined Mortality Rate**

![Combined Mortality Rate](image2)

Lines are first normalized to 100 in 2020 for each disease, and then combined with equal weighting across the three diseases, separately for incidence and mortality rates.

**Contributing to pandemic preparedness**

The G20 High Level Independent Panel (HLIP) argued for US$23.4 billion per year of additional financing for pandemic preparedness to help build robust surveillance and detection networks and more resilient health and community systems in LMICs, including an estimated US$8 billion in additional international financing per year. A Seventh Replenishment of at least US$18 billion would enable the Global Fund to make a significant contribution to building resilient and sustainable systems for health and strengthening pandemic preparedness. With approximately US$6 billion for investments to strengthen health systems, or US$2 billion a year, the Global Fund could significantly enhance our role in supporting countries’ efforts to build more people-centered and integrated systems for health, better able to prevent, detect and respond to infectious disease threats.

However, this level of investment would not fully meet LMICs’ resource needs for pandemic preparedness as estimated by the HLIP. Given the extensive synergies between investments in health systems to fight the existing pandemics and those to prepare for new threats, the Global Fund is uniquely positioned to help countries further strengthen their pandemic preparedness capacities. In line with our new Strategy, we will look to secure additional resources from new sources or financing mechanisms that may result from ongoing global discussions about how to protect the world from future disease threats.
Potential impact of required Global Fund resources

A successful Seventh Replenishment for the Global Fund, alongside the increased domestic funding and sustained external funding from other sources, would enable us to get back on the trajectory toward ending all three epidemics by 2030. Specifically, it would:

Help get the world back on track to end AIDS, TB and malaria:

- Save 20 million lives between 2024 and 2026, reducing the mortality rate by 64% across the three diseases by 2026, relative to 2020 levels.
- Avert more than 450 million infections or cases between 2024 and 2026, reducing the incidence rate by 58% across the three diseases by 2026, relative to 2020 levels.
- Reduce the death toll across the three diseases to 950,000 in 2026, down from 2.4 million in 2020, and from 4 million in 2005. In contrast, if the COVID-19 service disruptions continue at 2020 levels, incidence and mortality rates are projected to increase by 18% and 23% respectively between 2020 and 2026.

Accelerate progress toward SDG 3 and universal health coverage and strengthen systems for health, thus supporting pandemic preparedness:

- Reinforce systems for health and pandemic preparedness by investing approximately US$6 billion to support health care workers; strengthen laboratories, diagnostic tools, supply chain management, information and financial systems; tackle antimicrobial resistance, including drug-resistant TB; reinforce community systems; and accelerate the shift toward patient-centered, differentiated models of care.

"Whenever I heal someone and see them well it makes me so happy." Community health workers like Nyirahabimana Verena from the backbone of Rwanda’s decentralized health system.

Nichole Sobecki/VII for the Global Fund
Dr. Jayanthi Shastri leads a team of 53 doctors, paramedics and support staff at the Nair Hospital microbiology unit in Mumbai, India. She has been on the front line fighting infectious disease for 37 years.

Like many health care workers, Dr. Shastri and her team have been under an incredible amount of pressure due to the COVID-19 pandemic.

“We work long hours. There were times when many people on the team didn’t have transport to get to work, they struggled with homeschooling their children, and some had financial problems because their spouses lost their jobs,” she says.

On top of the new challenges created by COVID-19, Dr. Shastri’s team is still fighting another pandemic: tuberculosis (TB). India has the world’s highest TB burden. But because of lockdowns and other restrictions during the COVID-19 pandemic, TB diagnosis and treatment enrollment fell dramatically.

Determined to protect the gains made against TB, India integrated TB and COVID-19 screening programs and laboratory services. In Mumbai, a new diagnostic tool developed and manufactured in India allows hospitals to do rapid, onsite co-testing for both diseases. Dr. Shastri says co-testing has been a game changer.

“The capability of doing co-testing for both COVID-19 and TB is a real boon. It allows us to better understand the two diseases and their complications,” she says.

The Global Fund is supporting India’s response to COVID-19 and mitigating the impact on HIV, TB and malaria programs. This includes procuring testing tools and personal protective equipment for health workers, strengthening laboratories and diagnostics, and capacity building for community health systems.

The official case notification numbers of TB patients in India in 2021 was over 2.1 million – a significant recovery that brings the country almost back to pre-COVID-19 levels.
Get back on track to end HIV, TB and malaria by 2030

The following results are projected within each of the three diseases:

Looking specifically at HIV, Figures 19 and 20 show that a successful Seventh Replenishment would enable us to contribute to meeting the UNAIDS global AIDS strategy targets by 2026. The analysis suggests that with a Replenishment of at least US$18 billion, the Global Fund, together with partners, could:

- Reduce (from 2020 to 2026):
  - New HIV infections by 68%, from 1.1 million to 348,000;
  - AIDS-related deaths by 59%, from 579,000 to 239,000;
  - Incidence and mortality rates by 71% and 63% respectively;
  - HIV incidence among adolescent girls and young women in most affected countries by 72%.
- Provide antiretroviral therapy to 28 million people in 2026 to reach 91% treatment coverage in 2026.

In contrast, if disruption of services seen in 2020 continues, it would result in 2.4 million new infections and 910,000 AIDS-related deaths that could have been averted between 2021 and 2026.

- Reduce (from 2020 to 2026):
  - New HIV infections by 68%, from 1.1 million to 348,000;
  - AIDS-related deaths by 59%, from 579,000 to 239,000;
  - Incidence and mortality rates by 71% and 63% respectively;
  - HIV incidence among adolescent girls and young women in most affected countries by 72%.

- Provide antiretroviral therapy to 28 million people in 2026 to reach 91% treatment coverage in 2026.
Figures 21 and 22 show clearly that while the TB burden has been declining steadily, the rate of reduction is not nearly fast enough to meet the SDG 3 target of ending the epidemic by 2030. Given that the Global Fund currently represents 77% of total external funding for TB, a successful Replenishment is crucial to changing the trajectory of the fight.

As Figures 21 and 22 show, a successful Global Fund Replenishment will enable a marked acceleration in reducing both new TB cases and TB deaths. However, there would remain a significant gap with respect to the levels of incidence and mortality reduction required by the Global Plans (the yellow lines in Figures 21 and 22).

The analysis suggests that with a Replenishment of at least US$18 billion, the Global Fund, together with partners, could:

- Reduce (from 2020 to 2026):
  - New TB cases by 27%, from 8.5 million to 6.2 million;
  - TB deaths (including HIV+) by 59%, from 1.4 million to 570,000;
  - Incidence and mortality rates by 34% and 63% respectively.
- Treat 38 million people with first-line drugs and 1.5 million with second-line drugs between 2021 and 2026.
- Increase treatment coverage of TB patients (all forms of TB) from 57% in 2020 to 83% by 2026.

In late 2021, the Global Fund Board approved a new global disease split for the 2023-2025 allocation methodology that would enable a greater share of funding to go to TB while protecting HIV and malaria gains18 – but only if available resources exceed the amount of US$12 billion. As TB is the disease that needs the largest boost in progress, it is therefore even more critical to reach at least US$18 billion for the Seventh Replenishment.

In contrast, if disruption of services seen in 2020 continues, it would result in 24 million new cases of TB (all forms) and 5.2 million deaths that could have been averted over 2021-2026.

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18 At amounts for country allocations up to and including US$12 billion, the split of 50% for HIV, 18% for TB and 32% for malaria will be applied. A new split of 45% for HIV, 25% for TB and 30% for malaria will be applied to additional amounts above US$12 billion. Board decision point GF/B46/DP04. https://www.theglobalfund.org/media/21483/brid_overcommitment_report_en.pdf.
With malaria, the black lines on Figures 23 and 24 show that while we made steady progress against malaria from 2000-2015, progress began to plateau. In 2020, deaths and cases rose significantly – largely as a result of the COVID-19 pandemic. Given that the Global Fund currently represents 56% of total external assistance for malaria (and 39% of total available resources), a successful Replenishment of the Global Fund is crucial to getting back on track to reducing malaria cases and deaths.

The analysis suggests that with a Replenishment of at least US$18 billion, the Global Fund, together with partners, could:

- Reduce (from 2020 to 2026):
  - Malaria cases by 66%, from 239 million to 81 million;
  - Malaria deaths by 62%, from 623,000 to 234,000;
  - Incidence and mortality rates by 69% and 66% respectively.
- Increase use of long-lasting insecticidal nets in sub-Saharan Africa from 43% in 2020 to 52% by 2026.
- Treat 550 million malaria cases through public sector systems between 2021 and 2026.
- Eliminate malaria from an additional six countries by 2026.

In contrast, if disruption of services seen in 2020 continues, there would be a rapid and severe resurgence. Malaria cases would increase from 239 million in 2020 to 322 million in 2026, a 35% increase. Deaths from malaria would increase from 623,000 in 2020 to 887,000 in 2026. This would result in an additional 654 million malaria cases and 2 million deaths from malaria that could have been averted over 2021-2026.

Key results – malaria

![Figure 23: Investment Case Results for Malaria Malaria cases](image)

- Actual estimates of malaria cases
- Continued COVID-19 disruption
- If COVID-19 disruptions get worse than 2020 levels
- Global Technical Strategy pathway to 2030 targets
- Projection based on successful Replenishment – with uncertainty bars

![Figure 24: Investment Case Results for Malaria Malaria deaths](image)

- Actual estimates of malaria deaths
- Continued COVID-19 disruption
- If COVID-19 disruptions get worse than 2020 levels
- Global Technical Strategy pathway to 2030 targets
- Projection based on successful Replenishment – with uncertainty bars
Solar panels on the roof of the national medical warehouse in Lusaka, Zambia, which stores and distributes pharmaceutical health products, like vaccines and essential medicines, across the country. With the solar panels in place, the warehouse runs effectively even when there is no power from the national electricity grid. Photos: UNDP/Karin Schermbrucker for Slingshot

Health facilities need power. Clinics, maternity wards, operating rooms, medical warehouses and laboratories all rely on electricity to function and provide lifesaving health care.

But in remote regions of the world, particularly in sub-Saharan Africa, health facilities face significant power shortages, which can cut off essential services during surgeries or childbirth and can damage medicines and vaccines that require constant refrigeration.

To address this power gap, the Global Fund supports the UN Development Programme (UNDP) Solar for Health initiative. In Zambia, this includes investments in the government agency that procures, stores and distributes pharmaceuticals. In the past, regular power interruptions affected warehouses and refrigeration units. To ensure a steady supply of electricity, a solar-powered energy system and an energy-efficient temperature control system were installed to power the 14,000 square meters of national medical warehouse space.

With the solar panels in place, the warehouse runs effectively even when there is no power from the national electricity grid. The new system also ensures medicines and vaccines are stored at the required temperatures.

Solar power is better for the environment than fossil energy sources and helps countries reduce carbon dioxide emissions. Solar power also helps countries save money, which can then be reinvested to support other health programs. When health facilities with unreliable energy sources install solar power systems, UNDP estimates a 100% return on investment within two to seven years.
Accelerate progress toward universal health coverage and pandemic preparedness

Global Fund investments from a successful Seventh Replenishment are therefore estimated to generate health gains with a monetized intrinsic value of US$580 billion and direct productivity gains of US$48 billion during the Replenishment period. Two-thirds of these economic gains are estimated to occur in the sub-Saharan African region and 75% occur in low- and lower-middle-income countries. Extending the time horizon until 2030 results in an even more favorable return on investment. ROI for monetized intrinsic value increases from 31 to 43 and the ROI for productivity gains increases from 2.5 to 3.5.

Key results – catalyzing domestic investments in health to ensure sustainability

The Global Fund already acts as a catalyst for domestic health financing through its co-financing requirements, and by supporting technical assistance and advocacy for sustainable health financing solutions. In the next cycle, a fully funded Global Fund will catalyze domestic investments of around US$58.6 billion for the fight against the three diseases and the pursuit of SDG 3. Ensuring the development and implementation of robust health financing strategies – including adequate fiscal mobilization, crowding in of resources through blended financing and debt relief mechanisms, budget prioritization, health insurance, social contracting and effective resource allocation and control mechanisms – is critical for sustainability and successful transition.

Investments in the three diseases deliver significant economic gains and a return on investment of 1:31

Economic costs from the three diseases are incurred when workers are absent due to illness or because they need to stay at home to care for sick family members. Children affected by the three diseases are more likely to miss school and may struggle academically as a result. Reduced worker productivity and increased health care spending also have a direct cost effect on households, which can be catastrophic. The Global Fund has worked with independent experts to quantify the potential economic returns on investments to end HIV, TB and malaria. The resulting estimates include both the direct effects on economic productivity, and the intrinsic value of health gains based on the monetary value that the affected populations themselves would attribute to projected gains in survival and health-related quality of life. These estimates are deliberately conservative, since they do not include the economic gains arising from other health benefits from the Global Fund’s health system investments, nor indirect benefits from lowering disease risk, such as increased foreign investment or greater household savings.

Using the scenario of continued COVID-19 disruptions modelled for the Investment Case as a comparator, a Replenishment of at least US$18 billion would generate a return on investment (ROI) of 1:31. This projected ROI is considerably higher than in the Sixth Replenishment. This is because in light of the ongoing negative impact of COVID-19 on the fight against HIV, TB and malaria, the returns on our investments have an even larger impact.

When restricting estimates to the direct effects of economic productivity gains the cost-benefit ratio for the Investment Case is 1:2.5, which is similar to the estimates of the Sixth Replenishment.

A successful Seventh Replenishment would enable the Global Fund to act as a powerful driver and catalyst in accelerating progress toward universal health coverage (UHC) and better pandemic preparedness. While progress on this objective is not as amenable to quantitative modelling as with the three diseases, given the multiple dimensions of progress, and the need to respond to individual country contexts and priorities, there is no doubt that a strongly funded Global Fund could accelerate progress toward UHC and pandemic preparedness by investing in resilient and sustainable systems for health (RSSH).

Key results – strengthening health systems for resilience, sustainability and pandemic preparedness

The Global Fund is already the largest multilateral provider of grants to build RSSH. With a Replenishment of at least US$18 billion, the Global Fund would have the resources to step up such investments, with the potential to deploy around US$6 billion over 2024-2026 to build capacities and infrastructure such as diagnostic laboratories, disease surveillance systems, procurement and supply chain management systems, and training and career development for health workers, including community health workers. With greater resources, the Global Fund could deliver on the new Strategy’s objective of maximizing people-centered and inclusive systems for health, including community systems, working with partners to accelerate the shift toward patient-centered, differentiated models of care, and to drive improvements in quality of care. Building more sustainable and resilient systems for health will be a key priority in the next cycle, not just because it is a prerequisite for defeating the three diseases, but also because it is the foundation for strengthening pandemic preparedness, delivering UHC and achieving the overarching SDG 3 ambition of health and well-being for all.

Experience with COVID-19 and earlier outbreaks such as Ebola and Zika show clearly that smart investments in pandemic preparedness are likely to generate huge returns for LMICs that far outweigh the costs. Modelling by Hauck et al.99 points to returns from pandemic preparedness investments (measured as the value of lives saved and GDP losses averted) in the order of 1000 to 1. This extraordinary return on investment derives from avoiding the economic disruption of lockdowns and travel restrictions; keeping schools and other vital institutions open; and averting infections and deaths if a pandemic like COVID-19 should strike again within the next decade.98

Key results – tackling inequities in health, including gender and human rights-related barriers to access

The Global Fund is a leading actor in tackling inequities in health, whether arising from poverty, gender or human rights. A fully funded Global Fund would work with partners, including civil society and communities, to step up the focus on building more inclusive health systems that engage with communities to reach out to and for care for the most vulnerable, whether isolated rural populations, displaced people, women and girls, or key populations suffering discrimination and stigma. We could accelerate the shift toward more integrated, people-centered models of prevention, treatment and care spelled out in our new Strategy. The Global Fund partnership will thus make a significant contribution to delivering the “U” of UHC, ensuring the development of truly universal systems of health that leave no one behind. A Replenishment of at least US$18 billion would reduce global inequality in life expectancy (where people in low-income countries live much shorter lives than in high-income countries) by 9% in 2026.93

20 A. Lauer, F. Dooley, D. Hare, O. Focht, T. Hallett, PC Smith, K. Hauck. Jameel Institute, School of Public Health Imperial College London. What is the return on investment of investments in pandemic preparedness? If a US$18 billion pandemic preparedness investment is made, how many more lives are saved? How much is the valuation of lives saved if a COVID-like pandemic were to strike again over the next decade, depending on country and assuming an unmitigated pandemic? Other studies identify a return on investment of 40 to 1 for investments in PPE for health workers and a return on investment of 80 to 1 for investments in community health workers serving on the front lines of pandemic surveillance, communications and outreach. See: https://bmj.com/content/347/bmj.g7716. 21 Other studies identify a return on investment of 15 to 1 for investments in PPE for health workers and a return on investment of 30 to 1 for investments in community health workers serving on the front lines of pandemic surveillance, communications and outreach. See: https://bmj.com/content/347/bmj.g7716. 22 Other studies identify a return on investment of 15 to 1 for investments in PPE for health workers and a return on investment of 30 to 1 for investments in community health workers serving on the front lines of pandemic surveillance, communications and outreach. See: https://bmj.com/content/347/bmj.g7716.
“My goal is to help many people in the community.”

Nhin Kpă has been a community health worker since 2019, working to provide essential health services to people living in a remote region of Viet Nam who are at high risk of malaria.

“My goal is to help many people in the community – for myself, for my family, for the community in which I live,” he says.

Nhin is part of a Community Malaria Action Team (CMAT). He travels by motorbike to share knowledge on malaria and teach people how to protect themselves and prevent the disease. He also refers patients to health facilities for testing and treatment when needed.

Many of the people in Nhin’s community live in poverty and travel deep into the surrounding forests to earn a living by planting, harvesting or picking cashew nuts, cassava, corn, and bamboo shoots. The forest trips can last for weeks at a time and the workers sleep outside, exposed to malaria-carrying mosquitoes.

When COVID-19 hit, health workers like Nhin took on an even larger role in the community, sharing information about preventing COVID-19, providing masks and hand sanitizer, and giving out much-needed food packages to families.

Nhin and his colleagues are well-respected leaders in their villages, forming a crucial bridge between the communities and health facilities. CMAT workers like Nhin are also the first to recognize and respond to disease outbreaks, providing protection against future health threats.

Global Fund investments support more than 9,800 community health workers like Nhin in Viet Nam.
Conclusion

Now is the time to fight for what counts. For lives. For healthy communities. For a more equitable world free from fear of deadly infections.

Twenty years ago, the world created the Global Fund to fight what were then the deadliest pandemics killing millions of people a year: HIV, TB and malaria. Led by communities affected by these diseases, we fought back, refused to accept that injustice, and united partners to halt these diseases. Over the last two decades, the Global Fund partnership has proved that when the world works together, we can force the world’s deadliest diseases into retreat. Together, we have saved more than 44 million lives. We have reduced the combined death rate from HIV, TB and malaria by more than half. Our united efforts have increased life expectancy across low- and middle-income countries. Together, we are working to make the world more equitable – a place where everyone is safe from deadly infectious diseases.

Today, the work of the Global Fund partnership is more important than ever. Increasing conflict and displacement, climate change and new pandemics like COVID-19 show that it takes a coordinated, global approach to tackle global health threats. With 20 years of experience in fighting the deadliest infectious diseases in the most vulnerable communities and challenging environments in the world, we know how to do this.

But we also know that the world has changed. Because of COVID-19, global resource needs for HIV, TB and malaria have significantly increased since our last Replenishment three years ago. People and leaders around the world are now keenly aware of the critical importance of pandemic preparedness to our collective health: With diseases as deadly as these, no one is safe until everyone is safe.

A Seventh Replenishment of at least US$18 billion for the Global Fund is the most effective way to help achieve two critical and connected global objectives: ending AIDS, TB and malaria as epidemics by 2030, and building a safer, more equitable world by strengthening systems for health. Because our work in these two areas is interconnected and overlapping, investments through the Global Fund have a multiplier effect: Contributing to the fight against HIV, TB and malaria also contributes to pandemic preparedness, and vice versa. And our unique partnership makes us the best placed to confront today’s global challenges. Ours is a global movement of civil society, governments, private sector partners, technical partners and communities affected by the diseases fighting in more than 120 countries around the world. Our global reach, innovative partnerships and economies of scale mean we can maximize the impact of every dollar.

We cannot afford to fail. If we do not increase investment in fighting AIDS, TB and malaria, we must accept that we are effectively abandoning the 2030 goals to end these diseases as public health threats. If we do not build pandemic preparedness, we are leaving the world vulnerable to future pandemics. And we won’t be able to say that we did not know.

It is by working together that we will get back on track to end AIDS, TB and malaria as epidemics, and make the world a safer place from infectious disease. By building on the foundations of strong, inclusive health systems. By relying on the resilience and innovation of the communities on the front lines of pandemics. By refusing to accept that anyone, anywhere, should die of preventable, treatable diseases simply because of who they are or where they live. By fighting inequality, and by committing to turn today’s challenges into an opportunity to build back better. By fighting for what counts.

Twenty years ago, the world created the Global Fund to fight what were then the deadliest pandemics killing millions of people a year: HIV, TB and malaria. Led by communities affected by these diseases, we fought back, refused to accept that injustice, and united partners to halt these diseases. Over the last two decades, the Global Fund partnership has proved that when the world works together, we can force the world’s deadliest diseases into retreat. Together, we have saved more than 44 million lives. We have reduced the combined death rate from HIV, TB and malaria by more than half. Our united efforts have increased life expectancy across low- and middle-income countries. Together, we are working to make the world more equitable – a place where everyone is safe from deadly infectious diseases.

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Quantities of text from the original page have been omitted for simplicity, as they do not significantly add to the overall context or message.
In Djibouti, people living with HIV often face stigma and discrimination. These barriers can prevent people – particularly women – from getting the treatment and testing services that they need.

To help ensure access to services, the Global Fund is working in partnership with UNDP and UNAIDS to support mobile brigades – teams of medical staff who bring HIV testing and prevention services to communities through mobile clinics. Many of the doctors and health care workers on the mobile teams are women, which means that women in the community often feel more comfortable in seeking testing and treatment. The mobile teams also decrease the time it takes to travel to a clinic and eliminate the stigma that may be associated with visiting a particular health center.

When COVID-19 hit, the mobile teams were able to quickly adapt to help fight the global pandemic. The teams offered COVID-19 testing and helped maintain HIV services.

Decades of experience in fighting HIV, TB and malaria prepared many low- and middle-income countries in the Global Fund partnership to quickly respond to COVID-19, using the same laboratories, disease surveillance, community networks and trained health workers that were already in place to fight HIV, TB and malaria. Like in Djibouti, building on existing infrastructure has proved to be the speediest and surest way to fight COVID-19 and prepare for future pandemics.
Annexes

Annex 1: Methodology for Estimating the Resource Needs for HIV, TB and Malaria

As most of the funds raised for the Seventh Replenishment of the Global Fund, 2023-2025, will be implemented in grants over the years 2024-2026, the total resource need has been defined as the amount of funding that would be required over the 2024-2026 period for every country in the Global Fund portfolio to achieve the intervention coverage and impact levels expected in the respective disease Global Plans for 2026. The costs for reaching the 2026 Global Plan service delivery and impact targets from the 2023 level are derived using the same methods and models employed in the construction of the Global Plans cost.

The resource needs over 2024-2026 are taken from the respective Global Plans which are described below. The global resource needs were adjusted to reflect the portfolio of countries eligible for Global Fund support. The disease specific global plan costing estimates factor in health systems costs differently, and as such are not directly comparable.

A short description of the Global Plans

For HIV the estimate of resources needed for 2024-2026 is based on the latest targets and modelling approach set out in the UNAIDS Prevailing Against Pandemics analysis and the UNAIDS Global AIDS Strategy 2021-2026. The framework for the 2025 targets places people living with HIV and communities at risk at the center of the response and emphasizes that comprehensive and evidence-based HIV services must be tailored to individual subpopulations based on their particular needs. It also recognizes that societal, service and system enablers are needed to reach the high levels of service coverage and impact. The HIV response is situated within a multisectoral framework for global health and sustainable development. In the Global AIDS Strategy, coverage scales up from 2020 levels to targets in 2025 and remains constant after 2025. For most interventions this means a linear increase in costs through 2025 and then smaller increases after 2025. For treatment, the increases in the number of people on treatment are partially offset by the assumptions of declining cost per person treated.

The Global AIDS Strategy includes accelerated scale-up of HIV prevention and treatment tools over the first few years of the strategy. Specific elements include the rapid scale-up of antiretroviral (ARV) therapy, significantly higher coverage of prevention interventions for key populations, economic empowerment activities for girls in countries with very high HIV prevalence, voluntary medical male circumcision in priority countries and preexposure prophylaxis. The 2030 global target is a 90% reduction in new
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HIV infections and AIDS-related deaths from 2010 levels.

The Global AIDS Strategy costing estimate also builds in assumptions of shifting more care from facility- to community-based delivery, recognizing the importance of strengthening community systems and improved viral suppression. This will deliver cost savings and improve the uptake of services and bring them closer to the people who need them. It also assumes continued reductions in the average cost of treatment due to continued reductions in drug costs, and reduced visit and testing schedules for those maintaining viral suppression.

The Global AIDS Strategy also includes costs for scaling up societal enablers to address social barriers. Specifically, the plan includes costs for expanding programs to support access to justice, stigma and discrimination, and gender-based violence.

Above site-level costs and resources for procurement and supply chain strengthening, health management information systems, human resource capacity building, and management and administration are included as a fixed mark-up on the direct costs and for the interventions, based on their use in the fully costed plan. The strategy emphasizes the importance of addressing inequalities supported by investments in data systems and analysis throughout the planning cycle.

During the period of the Replenishment, mitigating steps needed to tackle resistance are assumed to be taken, with the net result being that the overall effectiveness and costs of the intervention types used are not diminished. That is, new drugs are phased in to maintain the same, or higher, level of effectiveness as assumed now.

For TB, the estimate of resources needed for 2024-2026 has been prepared in close collaboration with the Stop TB Partnership. The Partnership is currently expected to approve a new TB Global Plan in mid-2022, to replace the 2018-2022 plan which was based on the UN High-Level Meeting Commitments.26 The Global Fund has therefore worked with the Stop TB Partnership Task Force and Working Group on Resource Needs to ensure that the modelling and assumptions are consistent with the strategy. The new strategy is based on a more comprehensive normative approach to estimating costs from approximately 50 service and unit costs arranged into screening and care algorithms that meet patient needs and conform to current guidelines. It also includes new service elements and new diagnostic methods including a new point-of-care rapid molecular test, non-sputum based test, improved drug sensitivity testing, next generation sequencing and AI-based ultramobile X-ray screening. Drug regimens included in the costing include four-month or less TB treatment, six-month or less drug-resistance TB treatment and more options for the shorter TB preventive treatment regimens. Health and community systems, private sector engagement, enablers, equity and stigma are also given prominence in the coming strategy period.

Resource needs for TB include the expansion of preventive therapy for child and adult contacts and HIV patients and other populations at high risk of TB infection, implementation of new treatment guidelines and regimens, as well as the implementation of modern diagnostic tools such as X-ray and GeneXpert. In addition, the plan includes laboratory costs, procurement and distribution of commodities, health-care utilization and program management costs. Costs related to enabling activities including advocacy and communication, direct patient support, mobile technology, public-private mix activities and community engagement are included in this estimate. As far as possible, the costing model for TB explicitly accounts for necessary investments in health systems for the provision of the set of TB services included in the Global Plans, and this is done by making use of the World Health Organization’s financing database.

Costs for this period include new tools and treatment regimens; it is noted that achieving the 2030 and 2035 milestones of the End TB Strategy continue to require additional new tools not currently available, including improved point-of-care tests and effective TB vaccines.

Estimated resource needs have increased compared to previous estimates. Reasons for this include the increasing use of relatively more costly treatments for drug-resistant TB; scaling up of preventive therapy; modernized diagnostics and enabling activities that support greater impact and a significant portion of the planned scale-up occurring during the 2024-2026 period.

The spread of drug-resistant TB, of all types, is modelled, and the cost and effectiveness of treatment is assumed to be modified in future years accordingly. In particular, it is assumed that treatment success rates will increase to 90%, reflecting an expansion of treatment options for patients with drug-resistant TB and new drugs (including bedaquiline) and increased patient support and in-patient care.

For malaria27 the estimate of resources needed for 2024-2026 are from the Global Technical Strategy for Malaria 2016-2030, 2021 Update (GTS), based on the GTS update, to reach over 80% coverage of currently available interventions, malaria investments, including both international and domestic contributions, need to increase substantially above the current annual spending of US$3 billion. The annual investment will need to increase to an estimated total of US$6 billion by 2025 and US$10.3 billion by 2030. The cost of implementation has been estimated from the quantities of goods required for expanding interventions, multiplied by the estimated unit cost for the provider to deliver each intervention, and an analysis of the surveillance and financing data available in national strategic plans. It is important to note that the malaria costing does not include the essential health system costs required to deliver case management through the public sector. Key increases in the resources needed for malaria over the 2024-2026 period are driven by the scale-up of mosquito nets. In addition to increasing insecticide treated net coverage during this period, there is also a switch to using more costly, new technology nets (pyrethroid-PBO or pyrethroid-chlorfenapyr) to combat pyrethroid insecticide resistance. There are relatively small increases in resources needed as a result of increasing coverage of other interventions during this period (seasonal malaria chemoprevention (SMC), intermittent preventive treatment of malaria in infants (IPTi), RTS,S malaria vaccine, indoor residual spraying (IRS)) and the costs associated with increasing the coverage of diagnosis and treatment are largely offset by reductions in burden. Costs include scale-up of the following interventions: vector control with long-lasting insecticidal nets or IRS, chemoprevention in pregnant women and children, diagnostic testing of fevers for malaria, malaria case treatment and surveillance. Other program elements were included as fixed costs (including routine epidemiological and entomological components, malaria indicator surveys and enhanced surveillance in countries with low levels of transmission) and other interventions such as intermittent preventive treatment in pregnancy and rapid diagnostic tests for non-malaria fever. The 2023 update emphasizes improvements to equity, efficiency and impact through the use of data to stratify and tailor malaria interventions to the local context and that a resilient health system underpins the overall success of the malaria response. The RTS,S vaccine is introduced in line with projections by Gavi, the Vaccine Alliance.
Annex 2:
Methodology for Projection of Available Resources

To estimate the amount of funding available in Global Fund-eligible countries over 2024-2026, a forecast was developed for financing from domestic and other external sources. The methodology to project financing was similar to that of the financing forecast in earlier Investment Cases as described below. The forecast was carried out for all countries eligible for Global Fund support according to the 2021 eligibility list, except for countries that were not historically provided individual country allocations and those supported by the non-governmental organization (NGO) rule.

1. Domestic financing
As governments increasingly finance the national response to HIV, TB and malaria, a key input to the exercise was the forecast of domestic resources available for the three disease programs. The methodology to project domestic financing was structurally similar to that of the financing forecast for the Investment Case for the Global Fund Replenishment 2017-2019 (published in December 2015) and 2020-2022 (published January 2019). However, to reflect the budget pressures and macroeconomic uncertainties caused by the COVID-19 pandemic, the forward projections this time were almost exclusively based on a baseline scenario that projects growth in health investments in line with the projected growth in government expenditures.

The basis for the domestic financing forecast were government commitments for the three disease programs, submitted and reviewed as part of countries’ funding requests for the 2020-2022 allocation period. When the Investment Case forecast was developed, commitments data for 2020-2023 were available for 231 (92%) components. For the remainder of the components, commitments of the previous cycle, which extended to at least 2022, were used for the forecast.

Domestic commitments are projected based on:
- Growth in government expenditure derived from World Economic Outlook data, published by the International Monetary Fund (October 2021 update).
- The Domestic Investments Priority Index (DIPI), which uses projected growth in government expenditure as a baseline, and, in addition, assumes that financing from the “underspending countries” reaches by 2030 benchmark levels of spending according to disease burden and size of government expenditure. The DIPI value is calculated for each country as follows:

\[ \text{DIPI} = \frac{\text{disease spending}}{\text{total government spending}} \]

\[ \text{disease burden} \]

Countries are ranked by their DIPI value. For countries with a DIPI value below the 80th percentile, their domestic spending is projected so that by 2030 it reaches the 80th percentile value. The underlying rationale for this approach is that countries that spend less on the disease program relative to their peers with similar disease burden and ability to pay are the countries with the greatest potential to increase their spending.

Given macroeconomic and fiscal uncertainties due to the COVID-19 pandemic, the forecast of domestic financing for the investment case is based on:
- Baseline projections based on growth in government expenditure for all components, except for TB components of India and Indonesia.
- DIPI projections for the TB component of India and Indonesia. These two countries account for nearly half of the TB burden in the Global Fund portfolio and have demonstrated strong political will to end TB. Further, the Global Fund is actively engaged in catalyzing innovative financing initiatives that support additional mobilization of domestic resources in both countries.

The original projections are made based on commitments against the cost categories of countries’ national strategic plans. Adjustments are made in order to make them comparable to the cost categories underlying the costing of the respective Global Fund Resource Needs.

Applying this methodology leads to an overall estimate of US$58.6 billion of domestic resources over the 2024-2026 period, an increase of 30% over the current three-year period, which implies an average year-on-year increase of 9%. The breakdown of the US$58.6 billion across the three diseases and across geographical regions is given in these three charts:

Figure 25: HIV Domestic Financing in 2024-2026, by WHO Regions (Total US$26.2B)

Figure 26: TB Domestic Financing in 2024-2026, by WHO Regions (Total US$24.2B)

Figure 27: Malaria Domestic Financing in 2024-2026, by WHO Regions (Total US$8.2B)
2. Non-Global Fund external financing

Non-Global Fund external financing provided directly to countries was estimated using the latest data made available by countries for the 2020–2022 allocation period, which is assumed to remain constant over 2024–2026. The latest available data from the Institute for Health Metrics and Evaluation (IHME) Development Assistance for Health (DAH) and the Organization for Economic Co-operation and Development (OECD) Creditor Reporting System (CRS) on funding available through regional and global initiatives, which are not disaggregated by countries was assumed to remain constant over 2024–2026 and included in the aggregate resources available to finance the Investment Case.

The breakdown of external funding over a three-year period by disease is as follows:

- **HIV** US$17.6 billion
- **TB** US$1.8 billion
- **Malaria** US$3.8 billion

For malaria, in addition to the non-Global Fund Official Development Assistance (ODA) amounts, it is assumed that the cost for the introduction of the RTS,S vaccine over 2024–2026 of US$370 million will be covered by Gavi, the Vaccine Alliance, and that treatment cost of US$1.7 billion, which the Global Technical Strategy assumes to be contributed by the private sector, will be covered. These amounts have therefore been added to the total projected financing for malaria.

3. Global Fund financing

The Investment Case assumes that Global Fund financing for the three diseases for the 2024-2026 period is at the level of US$18 billion. Based on the actual expenditures of the last six years, an amount of US$1 billion is assumed to reflect operational expenditures of the Global Fund Secretariat within the model. This indicative minimum will be adjusted subject to Audit and Finance Committee approval of the Strategy costing and operating expenditure required by the Secretariat to deliver on this ambitious Investment Case. The remaining US$17 billion were distributed across the three diseases according to the Board-approved global disease split foreseen for the 2022-2025 allocation methodology. The global disease split approved by the Global Fund Board (GF/BD/94, 10 November 2021) means that available funds for country allocation up to and including US$12 billion will be apportioned as follows: 50% for HIV and AIDS, 18% for TB, and 32% for malaria, and that any additional available funds for country allocation above US$12 billion will be apportioned as follows: 45% of such funds will be apportioned to HIV and AIDS; 25% of such funds will be apportioned to TB; and 30% of such funds will be apportioned to malaria.

### Annex 3:

**Methodology for Impact Modelling**

The modelling was carried out in two steps. In the first step, disease transmission models were used to project impact up to 2023 based on different scenarios for the development of programs before the Replenishment period (Section i). In the second step, projections for available funding over 2024-2026 were used in the disease transmission models to project impact and service delivery for the same period and beyond (Section ii).

The models used and modelling groups undertaking these analyses are those that were responsible for the modelling in the respective disease global plans as described below. The models are population-scale dynamic transmission models, which have, over several years, been reviewed and developed in collaboration with international modelling consortia. The scope and application of the models is described in Section iii.
Section ii: Projecting service delivery and impact over 2024–2026

The estimation of impact during the period 2024–2026 involved two stages described below. The first stage is the allocation of resources between countries, subcountry units and intervention elements. The second determines the impact on the epidemic that would result from that configuration of interventions. The starting point for this part of the analysis is the projection that has been made for the epidemic states and intervention configurations to the end of 2023 (see Section i above).

Stage 1: Determining the allocation of resources between countries, subcountry units and intervention elements

For each country and disease, the models are used to find the program configuration that would allow the greatest impact (i.e., the lowest value for deaths; and new infections (HIV)/or cases (malaria, TB) 33) given a cap on the total cost of the program, for a wide range of values for the cap. The program configuration in the model can vary in the extent to which different services are scaled up, nationally or in particular regions, prioritizing maintaining at least the existing levels of treatment.

Then, two types of funding for programs are projected for each disease for the Replenishment period (see Annex 2: Methodology for Projection of Available Resources); (i) non-Global Fund resources (comprising domestic and external sources other than the Global Fund); and (ii) funds available for programs from a successful Global Fund Replenishment.

The Global Fund budget that would become available for use in each disease area, based on the Replenishment and split between the three diseases assuming the global disease split of the 2020–2022 allocation model, would be allocated between countries to maximize the overall performance of the Global Fund portfolio of countries. 33 33 The same applies to non-Global Fund external funding amounts within each disease, which are not country specific.

Stage 2: Projecting impact and service delivery over 2024–2026

The simulation models are used to project the impact on the epidemic that would result from the program that is specified by the procedure described above. Projections for after the Replenishment period assume that whatever program configuration is achieved by the end of 2026 is maintained thereafter.

Intervals for the projections represent the uncertainty due to uncertainty in the overall disease burden, uncertainty in the development of programs through 2021–2023 and uncertainty in the effectiveness and costs of the proposed interventions.

The quantification of impact on the program scale-up in terms of lives saved over 2024–2026 is computed by comparing modelled-based trajectories of deaths compared with a “null” counterfactual scenario, defined as follows:

● For HIV and AIDS, no antiretroviral therapy (ART) from the beginning of 2021 onwards and maintenance behaviors and all other interventions as they were at the beginning of 2021;
● For tuberculosis (TB), no prevention or treatment for TB from the beginning of 2021 onwards; and
● For malaria a resumption of the mortality rates for malaria as were without intervention (taken to be the rates estimated for the year 2000).

The impact in terms of infections (for HIV) or cases averted (for TB and malaria) is estimated by comparing model-based trajectories of infections or cases based on the Replenishment scenario compared with a counterfactual scenario (continued COVID-19 disruption) in which disease control programs were assumed to be maintained at 2020 service levels.

The choice of counterfactual reflects the recommendations of a Global Fund health impact experts meeting held in July 2014 and is aligned with the counterfactual used in setting impact targets set in the Global Fund 2017-2022 Strategy for reduction in incidence and lives saved.

The models make projections of the impact of the epidemics made by countries that are in the Global Fund portfolio, but the funding for the correct treatment approaches and psychosocial support as a routine part of care. According to the Global Plan, prevention, based on the latest preventive treatment regimens, should be provided to all eligible contacts, ART patients and other persons at high risk of TB infection. The Global Plan aims to fast track the rollout of a vaccine (at least 60% efficacious to up to 80% of children and adults older than 10 years of age) after 2026.

● For malaria, the following assumptions are made:
  - Roll-out of RTS,S vaccine consistent with projections that Gavi has formulated, the cost of which is assumed to be covered by Gavi.
  - Scale-up of malaria treatment provided by the private sector follows the Global Technical Strategy (GTS), such that the ratio of public to private sector treatments remains constant.
  - Efficiency with which long-lasting insecticidal nets (LLINs) are distributed (coverage achieved per LLIN in every country comes to follow that recorded in the most successful to date. 33 33
  - The model incorporates the increasing risk of insecticide resistance, but otherwise assumes that changing epidemiological circumstances do not have a material impact on the cost or effectiveness of the program.

For TB and malaria, following the approach set out in the respective Global Plans, it is assumed that the introduction of innovations and new tools considered necessary to achieve the respective Global Plan targets in full will be implemented progressively between 2024 and 2030.

For HIV, the modeling makes projections based on the assumption that the program can be sustained in the years following the Replenishment.

33 33 Equal weighting is given to the reduction in total deaths and infections/case in the period 2024–2026, relative to the same period in the null counterfactual, under the assumption that the program can be sustained in the years following the Replenishment.

33 33 Using the same approach to defining material impact as done for each country 33 33 Bertozzi-Villa et al. Maps and metrics of insecticide-treated net access, use, and maximal impact as done for each country. 33 33 Bertozzi-Villa et al. Maps and metrics of insecticide-treated net access, use, and maximal impact as done for each country. 33 33 Bertozzi-Villa et al. Maps and metrics of insecticide-treated net access, use, and maximal impact as done for each country. 33 33 Bertozzi-Villa et al. Maps and metrics of insecticide-treated net access, use, and maximal impact as done for each country. 33 33 Bertozzi-Villa et al. Maps and metrics of insecticide-treated net access, use, and maximal impact as done for each country. 33 33
Section iii: Description and application of models

HIV: Scenarios were modelled by Avenir Health using the Goals model, which was set up for 24 countries. The interventions with direct impact included are the same as in the Global AIDS Strategy: ARV therapy, voluntary medical male circumcision, programs to prevent mother-to-child transmission, condom promotion and distribution, outreach services to key populations (sex workers, men who have sex with men, people who inject drugs), opioid substitution therapy, preexposure prophylaxis (for adolescents, serodiscordant couples and key populations in selected countries), and behavior change communications. Costs included in the Strategy estimates besides the direct-impact interventions (including community mobilization, testing, enabling environment and program support) are accounted for by applying a proportional mark-up to the intervention costs, following the methods of UNAIDS.

TB: Avenir Health estimated the epidemiological impact by applying the TB Impact Model and Estimates (TIME) model, which was used to capture the potential impact achieved by implementing the Global Plan to End TB. The model was applied in 78 Global Fund-eligible countries. Unit cost estimates for diagnostics, drugs, and other supplies were obtained from four sources: the Value TB study database, WHD Global TB Program’s CHOICE Health service delivery costs, global health costing consortium, Global Drug Facility product catalogue following the recommendations, and a methodology adopted by a Stop TB-led technical working group convened to develop the resource needs estimates for the TB Global Plan, which will be published later in 2022. Program support costs were obtained from the expenditure that countries submit each year to WHQ.

Malaria: Impact modelling was performed using the malaria transmission model developed at Imperial College, which contributed to the development of the WHO Global Technical Strategy for Malaria. It represents the 60 Global Fund-eligible countries that have stable Plasmodium falciparum transmission and includes geographic specificity to the first administrative level. Those countries with unstable P. falciparum, P. vivax or that were in prevention of reintroduction stages were not modelled.

For each disease area, models are produced for a subset of countries in the Global Fund portfolio that account for the vast majority (77% for HIV, ~98% for TB, ~99% for malaria) of the burden of disease. For HIV, extrapolations are made to the full portfolio by assuming that the trajectory of the “unmodelled” countries indexed to the year 2020 is the same as in “modelled” countries.

Further details on the approach to modelling are available in methodological documents developed for the Global Fund Strategy target-setting exercise modelling.

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Further details on the approach to modelling are available in methodological documents developed for the Global Fund Strategy target-setting exercise modelling.

The economic return on investment (ROI) projected to be made during the Global Fund Seventh Replenishment period was estimated for each country and disease via two methods: “intrinsic” and “instrumental” valuation of the averted burden of the three diseases over the period 2021-2026. Estimates of the “intrinsic” value of health are based on what individuals are willing to pay for improvements in their own health (Section i), whereas the “instrumental” valuation considers the extent to which reductions in sickness and premature deaths increase productive work (Section ii).

The Investment Case scenario was compared to a “continued COVID-19 disruption” counterfactual scenario in which disease control programs were assumed to be maintained at 2020 service levels. For the investment and counterfactual scenarios, the modelling that has been conducted as part of this Investment Case (see Annex 3: Methodology for Impact Modelling) has estimated the annual number of cases, deaths, disability-adjusted life years (DALYs), and cost. The cost of the investment compared to the counterfactual scenario is a net cost that includes both the cost of the interventions, i.e., those that prevent cases of disease or improve treatment, as well as health sector cost savings from not having to treat as many cases. For both valuations, and following standard approaches,38,39 the present value of the projected stream of future costs and benefits was calculated by applying a discount rate of 3% per year.

As Global Fund investment in countries varies as a proportion of the total cost of the investment scenario, a Global Fund-specific ROI ratio was derived by weighting the disease-specific costs and benefits according to the countries’ share of Global Fund allocations during 2021-2023.

Section i: Intrinsic valuation

Following the methodology of recent Benefit Cost Analysis (BCA) guidelines,38,39 an adjusted Value of a Statistical Life-year (VSLY) calculation was used to calculate country- and year-specific VSLYs that anticipate economic growth in Global Fund-supported countries:
Annex 5: Methodology for Calculations on Health Inequality Across Countries

The analysis of mortality profiles from the impact modelling gives a set of annual estimates of life expectancy across countries. In addition to discussing the distribution of gains informally – e.g., looking at how the gains are distributed across groupings of countries – we estimate the impact of investments on health inequality across countries.

In this analysis, health inequality is measured by the Gini index applied to life expectancy, with countries weighted by their respective population size.46 The Gini index is equal to zero if life expectancy is the same across all countries; the higher the index, the more uneven life expectancy is distributed across countries. It should be noted that the Gini index is more commonly applied to income and takes much larger values for comparisons by income levels. This reflects that income differs much more across countries than life expectancy, e.g., gross domestic product (GDP) per capita in 2021 ranged from US$230 (South Sudan) to US$131,000 (Luxembourg) (differing by a factor of 571), while life expectancy ranged from 52.9 years (Central African Republic) to 84.3 years (Japan). However, a poor health outlook and low incomes affect well-being in very different ways, so health inequality and income inequality should not be compared as equal in kind. Depending on the context, we also describe this health inequality as an inequity, to emphasize inequalities across countries that are avoidable and can be mitigated by global action, as evident from the gains achieved in reducing mortality from HIV, TB, and malaria over the last two decades.47

The impact of investments during 2021-2026 on health inequality across countries was projected, using life expectancy as a summary indicator of health attainment. These estimates were obtained in two steps: (Section i) life expectancy was calculated for each country and year, and investment scenario; (Section ii) estimates of life expectancy across countries were transformed into indicators on health inequality across countries. 

Section i: Estimating life expectancy

The estimates build on life tables estimated and projected in the United Nations (UN) World Population Prospects 2019,46 which has also been used as a source for demographic data and projections in the impact modelling. These life tables provide estimates of mortality by age group (ages 0-1, 1-4, 5-9 and in five-year segments to age 99, and 100+). These data are available by five-year interval and were transformed into annual estimates by linear interpolation between period midpoints. From these life tables, survival tables were constructed showing for each age the probability of surviving to that age. Life expectancy was calculated as the expected duration of life (equivalent to the area under the survival curve), applying established methods for this purpose.49 For validation purposes, estimates of life expectancy thus generated from UN Population Division life tables were compared with estimates of life expectancy included in the UN World Population Prospects (WPP) 2019, obtaining a very close match.

For the Investment Case and the counterfactual scenario, age-specific mortality profiles by disease were obtained from the impact modelling for HIV, TB and malaria undertaken for the Investment Case, and summed to obtain the combined contribution of HIV, TB, and malaria to mortality.

To obtain all-cause mortality under the respective scenarios, it is first necessary to link the results from the scenarios to the data and projections from WPP 2019. The projections in WPP 2019 do not build on disease-specific components, but rely on extrapolation and historical precedent. Instead, we create a disease-specific WPP benchmark assuming that disease-specific mortality is proportional to all-cause mortality in their projections. Age-specific all-cause mortality for each scenario was then obtained by subtracting the difference in the contribution of HIV, TB and malaria to mortality between that scenario and the WPP benchmark to the all-cause mortality estimates from WPP 2019.

Section ii: Estimating health inequality across countries

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Annex 6:
Global Fund Replenishment and Implementation Cycles

Replenishment conferences:
Partners pledge new funds and resources at the launch of each three-year funding cycle, known as a Replenishment period.

Replenishment period:
The Global Fund continues to raise funds and support over the three-year Replenishment period.

COVID-19 Response Mechanism (C19RM):
An emergency funding mechanism to provide further support to countries to respond to the pandemic, mitigate the impact on programs to fight HIV, TB and malaria and urgently reinforce systems for health.

Implementation period:
Funds raised during the Replenishment period are typically programmed and implemented over three years. Grant implementation typically starts one year after resource allocations to countries have been communicated.
<table>
<thead>
<tr>
<th>Glossary</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ACT-Accelerator</td>
<td>Access to COVID-19 Tools Accelerator: A global collaboration of leading public health agencies to accelerate the development and equitable distribution of tests, treatments and vaccines — and the strengthening of health systems — that the world needs to fight COVID-19.</td>
</tr>
<tr>
<td>AFD</td>
<td>Agence Française de Développement (France)</td>
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<tr>
<td>AMR</td>
<td>Antimicrobial resistance: AMR occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines, making infections harder to treat and increasing the risk of disease spread, severe illness and death.</td>
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<tr>
<td>Antiretroviral therapy</td>
<td>Medication that allows people living with HIV to live healthy lives, and that prevents them from passing the virus on to others.</td>
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<tr>
<td>BACKUP Health/GIZ</td>
<td>Global Program BACKUP Health of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (Germany)</td>
</tr>
<tr>
<td>Bi-directional testing</td>
<td>When people are simultaneously screened and tested for TB and COVID-19. This is a cost-effective solution to contain transmission of both diseases through early diagnosis and facilitates rapid enrolment of those with TB onto treatment.</td>
</tr>
<tr>
<td>C19RM</td>
<td>COVID-19 Response Mechanism: Through C19RM, the Global Fund supports countries to mitigate the impact of COVID-19 on programs to fight HIV, TB and malaria, and initiates urgent improvements in health and community systems.</td>
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<tr>
<td>CCM</td>
<td>Country Coordinating Mechanism: The local committee of health, government and community experts that design and guide Global Fund-supported programs in countries.</td>
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<tr>
<td>CEP</td>
<td>Coalition for Epidemic Preparedness Innovations</td>
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<tr>
<td>Challenging operating environments</td>
<td>Countries or regions characterized by poor governance, disasters or conflict and requiring flexible approaches to deliver needed services and medicines.</td>
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<tr>
<td>Co-financing</td>
<td>Additional domestic financing of health and HIV, TB and malaria. See the Global Fund Sustainability, Transition and Co-financing Policy.</td>
</tr>
<tr>
<td>Country ownership</td>
<td>The idea that decisions about Global Fund program priorities are best made at the local level through an inclusive process involving all stakeholders.</td>
</tr>
<tr>
<td>DFAT</td>
<td>Department of Foreign Affairs and Trade (Australia)</td>
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<tr>
<td>Disease split</td>
<td>How the Global Fund apportions funds among the three diseases at a global level.</td>
</tr>
<tr>
<td>Domestic resource mobilisation</td>
<td>The process through which countries raise and spend their own funds to provide for their people.</td>
</tr>
<tr>
<td>DR-TB</td>
<td>Drug-resistant TB: Forms of TB that do not respond to one or more antibiotics.</td>
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<tr>
<td>Endemic, Epidemic, Pandemic</td>
<td>An endemic disease is found in a geography or population and is ongoing. An epidemic is the rapid spreading of disease that has spread worldwide. It is fine to use epidemic when referring to the three diseases for example, “ending AIDS, tuberculosis and malaria as epidemics.” However, malaria is an endemic disease with the potential to become an epidemic.</td>
</tr>
<tr>
<td>FCO</td>
<td>Foreign, Commonwealth &amp; Development Office (UK)</td>
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<tr>
<td>FIND</td>
<td>Foundation for Innovative New Diagnostics</td>
</tr>
<tr>
<td>First-line drugs</td>
<td>For TB: The first-line drugs that form the core of TB treatment regimens are isoniazid, rifampin, ethambutol and pyrazinamide.</td>
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<tr>
<td>GAC</td>
<td>Global Affairs Canada</td>
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<td>Gavi</td>
<td>Gavi, the Vaccine Alliance</td>
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<tr>
<td>HILP</td>
<td>G20 High Level Independent Panel</td>
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Carolyne Wasonga from Siaya, Kenya, is one of 400 peer educators who are part of a Global Fund-supported Kenya Red Cross Society program. Peer educators reach adolescent girls and young women with HIV prevention, treatment and care and help address cases of gender-based violence. The Global Fund/Brian Otieno