

Improving Global Governance of Pandemic Response

Lessons from COVID-19

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As COVID-19 has become less of an emergency and more endemic, the attention of policymakers at the national, regional, and global levels has inevitably shifted to other pressing matters. In the last quarter of 2022, stakeholders in global public health governance – be it international organizations (IOs) such as the World Health Organization (WHO), governments, industry, civil society organizations (CSOs), or academia – are taking the time to evaluate the lessons that policymakers can learn from the global experience of COVID-19 to ensure more equitable access to pandemic response products (PRPs),¹ especially vaccines, diagnostics, and treatments. There is a surprising amount of convergence around what the international community broadly needs to do in order to better respond to the next infectious disease pandemic:² invest massively to upgrade national health systems, especially in poorer countries; make legally binding commitments to build adequate contingency funding for equitably distributing PRPs to populations in low- and middle-income countries (LMICs) at about the same time as in richer countries; ensure geographic distribution of production facilities so that PRPs are available in all regions, thus protecting against supply shortages; strengthen the international global health architecture, including organizations such as the WHO, so that improved rules and better compliance can be ensured during a future pandemic. However, the one aspect that has had less convergence is which entity should be responsible for coordinating the

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¹ This is the term used in the July draft of the WHO pandemic instrument. WHO, *Working Draft, Presented on the Basis of Progress Achieved, for the Consideration of the Intergovernmental Negotiating Body at Its Second Meeting*, WHO Doc. A/INB/2/3 (Jul. 13, 2022), https://apps.who.int/gb/inb/pdf_files/inb2/A_INB2_3-en.pdf (last visited Nov. 29, 2023). This term can be considered to be synonymous with medical countermeasures (MCMs) but is preferred as this chapter deals with response measures.

² The International Epidemiology Association's Dictionary of Epidemiology defines a pandemic as "an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people." See www.oxfordreference.com/search?q=pandemic&searchBtn=Search&isQuickSearch=true (last visited Nov. 29, 2023.)

global response to an infectious disease pandemic, including ensuring procurement and equitable distribution of PRPs, and how such an entity should function.

Focused on global response governance, this chapter highlights the crying need for an effective, adequately funded, empowered, lean, and flexible entity to lead the immediate global response to contain any future pandemic everywhere – an entity responsible for coordinating the procurement and equitable distribution of PRPs in LMICs wherever they are urgently needed.³ The primary goal of such an entity would be to contain the pandemic everywhere as soon as possible to minimize both human and economic losses. While there are many worthy long-term causes such as strengthening national health systems, enhancing local technological capacities, sharing intellectual property (IP) rights and manufacturing know-how on PRPs, gender equity, increasing job opportunities, and so on, this entity must stay focused on one goal alone: to effectively respond to containing the pandemic everywhere to minimize its devastating health and economic toll worldwide. This goal would automatically lead to the best outcomes globally, including in LMICs, as equity is best served by a quick end to the pandemic.

While prevention, preparedness, and response (PPR) to a future pandemic have invariably been linked, these require separate sets of actions at different points of time. While during COVID-19, prevention and preparedness – in terms of surveillance of the animal kingdom to detect deadly viruses that can jump to the human species, and to prevent their spread or to detect new variants of circulating deadly viruses; or in terms of building adequate health infrastructure, including training sufficient health personnel; or regionally distributed technological capabilities to produce PRPs – was low to abysmal in LMICs, the major failure in dealing with the pandemic was the lack of an effective, globally coordinated response to the spread of the SARS-CoV-2 virus, in order to end or contain the pandemic as quickly as possible. This chapter is concerned only with coordinating the immediate global response to future pandemics – on which there has been very little focus – as opposed to long-term arrangements on prevention and preparedness where recent efforts by the WHO, the Coalition for Epidemic Preparedness Innovations (CEPI), and the Pandemic Fund seem to be moving in the right direction, even if much more needs to be done. This chapter does not purport to provide all the answers on global governance for pandemic response but at least attempts to raise the questions that the international community needs to ask itself.

This chapter consists of four sections. Section 1 provides a background that situates the global governance challenges in responding adequately to the spread of COVID-19. Section 2 gives a brief description of the challenges faced by global health institutions during the COVID-19 pandemic, and Section 3 lists some of the key initiatives taken and ideas put forward on global pandemic governance following

³ It is clearly impractical to argue for a global procurement entity that would procure PRPs for all countries, including HICs and UMICs.

the pandemic. Section 4 then sets out arguments favoring the need for an entity responsible for responding to future pandemics, raising key questions that must be resolved.

1 BACKGROUND

COVID-19 has been the deadliest pandemic that the world has faced in over 100 years. In the almost four years from its discovery, the SARS-CoV-2 virus and its variants have officially infected over 770 million people and taken about 7 million lives.⁴ The official deaths reported are widely recognized to be vastly underestimated, with total deaths projected to be almost three times more at over 18.6 million deaths by April 2023.⁵ Additionally, countless of the infected survivors are suffering from debilitating long-term symptoms. To put these figures in perspective, in the decades since the beginning of the HIV/AIDS epidemic, 84.2 million people have been infected with the HIV virus, of which about 40.1 million people have died.⁶ Today, about a quarter of the world's population is infected with tuberculosis, which kills around 1.5–1.6 million persons every year.⁷ By these standards, COVID-19 has killed many more people globally faster than any other known pandemic, with the exception of the Spanish Flu of 1918–1919.⁸

It is widely recognized that the global response to this deadly pandemic was chaotic and uncoordinated.⁹ COVID-19 was not controlled in a timely way despite many key actors in the international health governance community having anticipated the rapid spread and high mortality very early on in the pandemic. And even though several effective COVID-19 vaccines became available at the near-miraculous speed of about a year, thanks in part to the sharing of the genome sequence of SARS-CoV-2 virus by China as early as January 2020. Given the anticipated scale of the pandemic, COVID-19 vaccine manufacturers correctly expected high demand that guaranteed them high revenues and profits. But even so, an important catalyst for the rapid development and deployment of vaccines was the derisking of private research and development (R&D) through public funding,

⁴ For the latest figures, see WHO, *WHO Coronavirus (COVID-19) Dashboard*, <https://covid19.who.int> (last visited Nov. 29, 2023).

⁵ See Institute for Health Metrics & Evaluation, *COVID-19 Projections*, <https://covid19.healthdata.org/global?view=cumulative-deaths&tab=trend> (last visited Nov. 29, 2023).

⁶ See WHO, *HIV*, www.who.int/data/gho/data/themes/hiv-aids#:~:text=Global%20situation%20and%20trends%3A,at%20the%20end%20of%202021 (last visited Nov. 30, 2022).

⁷ See WHO, *Tuberculosis*, www.who.int/news-room/fact-sheets/detail/tuberculosis (last visited Nov. 30, 2022).

⁸ The H1N1 virus (Spanish Flu) is estimated to have killed 50 million people worldwide in just two years. At that time there were no vaccines or treatments available. See Centers for Disease Control & Prevention, *1918 Influenza: The Mother of All Pandemics*, wwwnc.cdc.gov/eid/article/12/1/05-0979_article (last visited Nov. 29, 2023).

⁹ See DG, WHO's pleas to the global community in his speeches from January 2020, www.who.int/director-general/speeches (last visited Nov. 29, 2023).

and advance-purchase commitments made by many developed-country governments for some vaccines, even before full knowledge of their efficacy was available, notably by the United States and the European Union.

It is also widely acknowledged that during the COVID-19 pandemic there were sharp inequities in the access to PRPs, especially to life-saving vaccines. As of November 2023, about 80 percent of people living in high-income countries (HICs) had received at least one dose of these vaccines, as against only 33 percent of those living in low-income countries (LICs).¹⁰ The world is yet to reach an average of 70 percent of its population vaccinated, a target meant to usher in herd immunity. Yet only 10.9 million vaccine doses were needed to administer two doses to 70 percent of the global population, while 14.8 billion doses had been delivered, and 12.5 billion doses administered, as of November 2022.¹¹ This is because richer countries were administering third, fourth, and even fifth doses when most in LICs, including priority populations, had not even received one dose. By the second half of 2022, there was not much uptake of vaccines in poorer countries not only due to the decline in COVID-19 infection cases, but also increasing vaccine hesitancy, lack of correct information on vaccines, and the inability to scale up logistics and infrastructure.

At the very initial stages of vaccine supply, the most effective vaccines, the mRNA vaccines, were inevitably prebooked and overbooked by the richer countries, cutting LICs out. In addition, prioritization of supply to local manufacturers of critical components needed to manufacture vaccines by some countries, including the United States, hit vaccine manufacturers in LMICs; and supply to some regions, particularly Africa, suffered inordinate delays due to export restrictions on finished vaccines imposed by India in early 2021 after a deadly second wave of COVID-19 hit that country.¹²

In the initial months of the COVID-19 pandemic when there were no vaccines or treatments, a widely deployed preventive measure to contain the spread of the virus, initiated first in Wuhan, China with some success, was a virtual lockdown of the affected areas/cities/countries. Many governments all over the world restricted movement and closed borders for many months in 2020 and sporadically in 2021–2022. Even though these measures did not fully succeed in controlling the spread of the pandemic, it resulted in a sharp, simultaneous downturn in economic activity in many parts of the world, especially in 2020–2021.

COVID-19 was thus not just a devastating global health crisis; it was also an unprecedented global economic crisis. The International Monetary Fund (IMF)

¹⁰ For the latest data, see *Global Dashboard for Vaccine Equity*, UNDP Data Futures Platform, <https://data.undp.org/vaccine-equity> (last visited Nov. 29, 2023).

¹¹ See *Task Force on COVID-19 Vaccines, Therapeutics, and Diagnostics*, Multilateral Leaders Task Force on COVID-19, <https://data.covid19taskforce.com/data> (last visited Nov. 30, 2022).

¹² See Emily Schmall & Karan Deep Singh, *India and Its Vaccine Maker Stumble over Their Pandemic Promises*, N.Y. TIMES (May 7, 2021), www.nytimes.com/2021/05/07/world/india-serum-institute-covid19.html (last visited Nov. 29, 2023).

has estimated the loss to global GDP to be \$13.8 trillion through to 2024, largely due to a fall in demand that affected many economic sectors, such as travel and tourism.¹³ Many countries stepped up fiscal support programs in 2020 and 2021 – the IMF estimates the global fiscal deficit as a percentage of gross domestic product (GDP) due to stimulus packages and loss of tax revenue on account of COVID-19 to be 10.2 percent in 2020, 7.9 percent in 2021, and 5.2 percent for 2022, the biggest jump from 2019 levels being in advanced economies and emerging-market economies as compared to LICs.¹⁴ In terms of stimulus packages, Japan leads with almost 55 percent of its GDP, followed by Germany, Italy, and the United States. In the United States, this amounted to a cash injection of almost \$5.5 trillion to households, institutions, and businesses, which led to a quick economic recovery but adverse medium-term consequences, including unprecedented levels of inflation, leading to the current economic woes in major economies, including stagflation.¹⁵ Poorer and emerging-market economies had less to spend and thus suffered disproportionately higher economic losses, and they will take much longer to recover from COVID-19-related losses. Yet Argentina and Brazil spent 12 percent of their GDP on stimulus packages, while India spent 3.5 percent.¹⁶ The World Bank estimates that the lifelong earnings of students may be \$17 trillion less globally due to closures of educational institutions.¹⁷

All in all, the direct and indirect global economic losses due to COVID-19 five years on from the start of the pandemic may be conservatively “guesstimated” to be \$20–25 trillion. Therefore, future pandemic governance should embrace the twin goals of containing both the devastating loss of human lives and keeping global economic losses to the lowest possible level. And, in principle, the international community should logically be willing to spend even up to a trillion US dollars to achieve this goal.¹⁸

¹³ See Gita Gopinath, *A Disrupted Global Recovery*, IMF BLOG (Jan. 25, 2022), www.imf.org/en/Blogs/Articles/2022/01/25/blog-a-disrupted-global-recovery (last visited Nov. 29, 2023).

¹⁴ See IMF, *Strengthening the Credibility of Public Finances*, Fiscal Monitor 4 tbl.1.1 (Oct. 2021), www.imf.org/en/Publications/FM/Issues/2021/10/13/fiscal-monitor-october-2021 (last visited Nov. 29, 2023).

¹⁵ See Alicia Parlapiano et al., *Where \$5 Trillion in Pandemic Stimulus Money Went*, N.Y. TIMES (Mar. 11, 2022), www.nytimes.com/interactive/2022/03/11/us/how-covid-stimulus-money-was-spent.html (last visited Nov. 29, 2023).

¹⁶ See *Value of COVID-19 Fiscal Stimulus Packages in G20 Countries as of May 2021, as a Share of GDP*, STATISTA, www.statista.com/statistics/1107572/covid-19-value-g20-stimulus-packages-share-gdp (last visited Nov. 30, 2022).

¹⁷ See Press Release, World Bank et al., *Learning Losses from COVID-19 Could Cost This Generation of Students Close to \$17 Trillion in Lifetime Earnings* (Dec. 6, 2021), www.worldbank.org/en/news/press-release/2021/12/06/learning-losses-from-covid-19-could-cost-this-generation-of-students-close-to-17-trillion-in-lifetime-earnings (last visited Nov. 29, 2023).

¹⁸ The problem is that a similar amount may be needed to deal with climate change and, as the result of COP-27 in November 2022 showed, it is hard to get donors to actually make the amount needed available.

2 CHALLENGES FACING CURRENT GLOBAL HEALTH INSTITUTIONS

Logically, it is the WHO that has the mandate within the United Nations (UN) system to be the specialized agency to deal with global health challenges such as deadly pandemics. However, despite its Director General (DG) and his senior management team's early initiatives and strenuous efforts toward global solidarity, the WHO proved ineffective in containing the pandemic even after nearly three years of its declaration of a public health emergency of international concern (PHEIC). The WHO has also been criticized for failing to notify the world in time, for failing to trace the origins of the virus SARS-CoV-2 that caused the pandemic, and for not being able to achieve equity in the distribution of needed PRPs.

That a new virus named SARS-CoV-2 was spreading rapidly in Wuhan, China and resulting in a very high proportion of infected persons dying was known to the world only at the end of December 2019, when China notified the WHO. The WHO's initial reaction was to play down this news and to advise that no travel restrictions were necessary.¹⁹ Only on January 30, 2020 – after the DG himself visited Beijing – did the WHO declare this to be a PHEIC. By then there were 7,818 total confirmed cases reported worldwide, with 82 cases reported in 18 countries outside China.²⁰ The rate of spread of COVID-19 globally was rapid. For example, by March 7, 2020 the number of confirmed cases outside China surpassed 100,000; twelve days later it reached 200,000; just three days after that 300,000; and within two more days the total number of global cases was 400,000.²¹ On March 11, 2020 the WHO took the additional step of declaring COVID-19 to be a pandemic and began issuing regular advisories – sometimes contested by scientists and experts – on steps to be taken to prevent the rapid spread of the virus. By this date, the health system in a rich country, Italy, was already struggling to cope with the number of hospitalizations and deaths, and the country was in lockdown,²² a pattern repeated in many countries around the world.

One primary reason why the UN system, as it is currently structured, cannot be solely depended upon to fulfill the primary role of responding to deadly pandemics is that its decision-making through a one country, one vote system or through consensus is not only time-consuming but leads to delayed and ineffective solutions,

¹⁹ See WHO, *WHO Advice for International Travel and Trade in Relation to the Outbreak of Pneumonia Caused by a New Coronavirus in China* (Jan. 10, 2020), www.who.int/news-room/articles-detail/who-advice-for-international-travel-and-trade-in-relation-to-the-outbreak-of-pneumonia-caused-by-a-new-coronavirus-in-china (last visited Nov. 29, 2023).

²⁰ See *Archived: WHO Timeline – COVID-19* (Apr. 27, 2020), www.who.int/news/item/27-04-2020-who-timeline-covid-19. This statement has since been replaced by another on Jun. 29, 2020. See www.who.int/news/item/29-06-2020-covid-timeline (last visited Nov. 29, 2023).

²¹ See one timeline of the relevant stages of COVID-19 here, www.reuters.com/article/us-health-coronavirus-timeline-idUSKBN23ZoUW (last visited Dec. 19, 2022).

²² See *COVID-19 Pandemic in Italy*, WIKIPEDIA, https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Italy (last visited Nov. 30, 2022).

an outcome that is unaffordable in response to a pandemic like COVID-19. As leading scholars have stated, “even as the UN system seeks to bring the world together, governments have too often responded alone, as the universal system of international organizations has faced continuing obstacles in realizing global solidarity.”²³

It should not be surprising that the WHO, dependent as it is on its key members, is not able to pressure any of those member states into acquiescence. This is as true of the United States as it is of China. Leading scholars have pointed out ten specific areas where the response was inadequate and rightly put WHO’s slow responses to the COVID-19 pandemic in context by stating that “the WHO has lacked high-level political backing, financing, and convening power.”²⁴

The High-Level Independent Panel set up by the G20 said this: “The current global health architecture is not fit-for-purpose to prevent a major pandemic, nor to respond with speed and force when a pandemic threat emerges. As the Global Preparedness Monitoring Board highlights, the system is fragmented and complex, and lacks accountability and oversight of financing of pandemic preparedness.”²⁵

Similarly, other public health experts have recognized the need for new governance structures in order to respond to future pandemics. As leading health law scholars aptly put it: “Global health governance is at a crossroads, necessitating a new governance model . . . *The global governance institutions that develop in the aftermath of the COVID-19 crisis will determine the response to future threats.*”²⁶

Some of the key systemic reasons why either the WHO needs to be radically restructured or a new global coordination entity set up for pandemic response are listed below.

A UN Agency and Decision-Making

As a specialized agency of the UN, the WHO follows the rule of decision-making by vote, where an agreement cannot be reached through consensus. There is no permanent executive committee of key funding member states that oversees its program and budget, nor does any country hold the right of veto, unlike the UN Security Council. This makes it very difficult for major financial contributors to control the priorities and functioning of the organization. This is, of course, a problem for all UN agencies that are funded by member states’ contributions, but none are as important in the context of a pandemic as the WHO.

²³ See Jeffrey D. Sachs et al., *The Lancet Commission on Lessons for the Future from the COVID-19 Pandemic*, 400 THE LANCET 1224 (2022).

²⁴ See *id.*

²⁵ See G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness & Response, *A Global Deal for Our Pandemic Age*, <https://pandemic-financing.org/report/high-level-summary> (last visited Nov. 30, 2022).

²⁶ See Lawrence O. Gostin et al., *Reimagining Global Health Governance in the Age of COVID-19*, 110 AM. J. PUBLIC HEALTH 1615 (2020) (emphasis added).

B Budget

The WHO's budget consists of member governments' assessed contributions (less than 20 percent when COVID-19 struck) and tied voluntary contributions from both member states and private contributors (over 80 percent). This has resulted in a loss of control over its own budget as voluntary contributors tie their contributions to specific projects/programs. Currently, there are no limits on the share of any single voluntary contributor. This could ensure that some voluntary contributors set the global health priorities instead of the member states of the WHO. This topsy-turvy budget structure is reflective of the aforementioned institutional structure.

While an increase in member states' assessed contributions seems the obvious solution, it is difficult in practice to achieve. An agreement in May 2022 only aims to increase each state's contributions progressively so as to reach 50 percent of the WHO's budget by 2030–2031 from about 16 percent.²⁷ It is to be seen if even this will be achieved or will require a further time extension.

C The Nonbinding Nature of Its Recommendations

Even though the WHO, through its Health Assembly, does have the power under article 19 of its constitution to have its member states agree to and adopt conventions and agreements (provided that these are adopted by two-thirds of its membership), this has been done only once in its history, when it adopted the Framework Convention on Tobacco Control in 2003. Despite that exception, the WHO has no means to enforce its agreements as, unlike the WTO, it has no interstate dispute settlement mechanism. In the context of the COVID-19 pandemic, under article 21 of its constitution, the WHO can *inter alia* put in place quarantines or other procedures to contain the international spread of the disease. The WHO only declared COVID-19 to be a PHEIC at the end of January 2020,²⁸ and while it issued technical guidance all through the pandemic, even if was not always timely or noncontroversial, it has no power over its member states to enforce its guidance in dealing with the pandemic or to ensure compliance.

D Multiplicity of Actors on Global Public Health

In the past, lack of faith in the effectiveness of the WHO has led to a multiplicity of public, private, and public–private actors to finance and implement different global

²⁷ See Press Release, WHO, World Health Assembly Agrees Historic Decision to Sustainably Finance WHO (May 24, 2022), www.who.int/news/item/24-05-2022-world-health-assembly-agrees-historic-decision-to-sustainably-finance-who (last visited Nov. 29, 2023).

²⁸ There is, of course, a danger of dilution of the importance of declaring a PHEIC if it is done hastily, without adequate cause. There was disagreement within the WHO'S Emergency Committee in the case of monkeypox recently. The other problem is that there is no clear criteria for ending the PHEIC status. See www.reuters.com/business/healthcare-pharmaceuticals/who-says-monkeypox-remains-global-health-emergency-2022-11-01 (last visited Nov. 29, 2023).

health programs outside of the WHO, for example, Joint United Nations Programme on HIV/AIDS (UNAIDS), the Global Fund to Fight HIV/AIDS, Tuberculosis, and Malaria, as well the new Financial Intermediary Fund (FIF) for Pandemic Prevention, Preparedness, and Response located in the World Bank (now called the Pandemic Fund). There has also been a mushrooming of public–private partnerships such as Gavi, the Vaccine Alliance, the TB Alliance, and the Rollback Malaria initiative. The US government too chose to start its own health aid programs rather than work through the WHO or the UN – for example, the US President’s Emergency Plan for AIDS Relief (PEPFAR) and the US President’s Malaria Initiative. Some private actors, such as the Bill & Melinda Gates Foundation, also contribute a major part of the WHO’s budget and can control health priorities there too. As a result, the WHO’s preeminent role in tackling global public health issues has inevitably begun to shrink in recent decades.

3 INITIATIVES TAKEN ON GLOBAL PANDEMIC GOVERNANCE DURING COVID-19

Correctly anticipating that inequitable distribution of vaccines and other PRPs may be a problem (as it was for vaccines during the H₁N₁ or Swine Flu epidemics), the Access to COVID-19 Tools (ACT) Accelerator was jointly launched by a number of organizations, notably the WHO and Gavi, the Vaccine Alliance, toward the end of April 2020.²⁹ Within the ACT Accelerator, COVAX was the vaccines pillar,³⁰ responsible for the procurement and equitable distribution of COVID-19 vaccines. It was jointly convened by CEPI, Gavi, and the WHO, and worked in collaboration with UNICEF.³¹ In practice, COVAX, including its advance market commitment (AMC) that aimed to supply vaccines free of cost to ninety-two LICs and LMICs,³² was administered by Gavi, in close coordination with UNICEF, which managed the procurement and delivery of the vaccines. Following guidance from the WHO, COVAX aimed to cover initially at least 20 percent of the population of each country equally, and targeted delivery of 2 billion doses by the end of 2021, so that at least priority populations such as health workers and vulnerable persons would be protected, without any attention paid to actual need based on the spread of the

²⁹ See WHO, *Access to COVID-19 Tools (ACT) Accelerator: A Global Collaboration to Accelerate the Development, Production and Equitable Access to New COVID-19 Diagnostics, Therapeutics and Vaccines* (Apr. 20, 2020), [www.who.int/docs/default-source/coronaviruse/access-to-covid-19-tools-\(act\)-accelerator-call-to-action-24april2020.pdf?sfvrsn=5f721eaf_6](http://www.who.int/docs/default-source/coronaviruse/access-to-covid-19-tools-(act)-accelerator-call-to-action-24april2020.pdf?sfvrsn=5f721eaf_6) (last visited Nov. 29, 2023).

³⁰ There were separate pillars for diagnostics and therapeutics in ACT-A.

³¹ See Gavi, *COVAX Facility*, www.gavi.org/covax-facility (last visited Nov. 30, 2022).

³² These comprised of thirty-one LICs, forty-nine LMICs, and twelve IDA-eligible UMICs, with a combined population of 4 billion.

disease.³³ There was another arrangement for self-financing participants, including HICs, which was not much used. The idea was that COVAX would procure vaccines for all participating countries (eventually numbering 195). COVAX started functioning in June 2020, well before any vaccines had even been approved, but it soon became clear that the rich countries would be served first by vaccine manufacturers as they were the first in line based on advance-purchase arrangements made outside of COVAX, and as COVAX struggled in 2021 to raise the money needed to place orders on behalf of LMICs.

Following the IMF estimates of \$50 billion needed to fully vaccinate 40 percent of the global population by the end of 2021 and 60 percent by mid-2022 to end the pandemic,³⁴ the WHO got this revised to at least 70 percent of the global population being fully vaccinated by mid-2022.³⁵ Yet, according to the IMF and the WHO, by mid-2022 only 61 percent of the global population had received two doses of vaccination and as many as 130 countries had yet to meet the 70 percent target.³⁶

COVAX, although well-intentioned and with the eventual backing of 195 participating economies, was hampered right from the beginning by a lack of funding, shortages of inputs and vaccines, the noncooperation of supplier countries, which opted to prioritize their entire populations with primary and multiple booster doses or reap the benefits of “vaccine diplomacy” through bilateral deals. COVAX could supply only half of this target – that is, 1 billion doses by January 2022.³⁷ Up to October 2022, it had shipped a total of 1.84 billion doses to 146 countries, of which 1.65 were to AMC countries. Seven countries had not received vaccine doses to cover even 15 percent of their population as of October 2022.³⁸

Yet global supply of COVID-19 vaccines had reached 11 billion doses by the end of 2021 and almost 18 billion doses as of October 2022. These changes show that

³³ See COVAX, Minutes of COVAX Shareholders Council, ¶ 2.3 (Jan. 28, 2021), www.gavi.org/sites/default/files/covid/covax/governance/COVAX-Shareholders-Council-2021-Mtg-01-Approved-Minutes.pdf (last visited Nov. 29, 2023).

³⁴ See RUCHIR AGARWAL & GITA GOPINATH, A PROPOSAL TO END THE COVID-19 PANDEMIC (2021), www.imf.org/-/media/Files/Publications/SDN/2021/English/SDNEA2021004.ashx (last visited Nov. 29, 2023).

³⁵ Total LMIC population (minus China) was taken by ACT-A to be 5 billion – see pp. 23–27 of the Annex of the *Consolidated Financing Framework for ACT Accelerator Agency and In-Country Needs*, www.who.int/initiatives/act-accelerator (last visited Nov. 30, 2022). COVAX eventually aimed to meet the needs of the adult population in AMC92 countries (population of 3.8 billion), with India’s needs capped at 20 percent. By February 2022 COVAX had commitments of 2.4 billion donor-funded, including donated doses, and sought to finance only 600 million additional doses.

³⁶ See IMF, IMF-WHO COVID-19 Vaccine Tracker, www.imf.org/en/Topics/imf-and-covid19/IMF-WHO-COVID-19-Vaccine-Tracker (last visited Nov. 30, 2022).

³⁷ See Benjamin Mueller & Rebecca Robbins, *Where a Vast Global Vaccination Program Went Wrong*, N.Y. TIMES (Aug. 2, 2021), www.nytimes.com/2021/08/02/world/europe/covax-covid-vaccine-problems-africa.html (last visited Nov. 30, 2022).

³⁸ For the latest data, see UNICEF, COVID-19 Market Dashboard, www.unicef.org/supply/covid-19-market-dashboard (last visited Nov. 30, 2022).

global supply was no longer a problem from the end of 2021, unlike in the first three quarters of 2021. The problem was the delayed funding of COVAX resulting in delayed placement of orders and the highly inequitable distribution of the doses initially, added to the fact that even these deliveries of vaccines were not always rapidly translated into vaccinations, namely jabs into arms, due to innumerable logistical problems and the lack of uptake due to slowing demand.

Although at least fifty vaccines were approved by at least one national authority, and twelve vaccines approved for emergency use by the WHO by December 2022,³⁹ only two were in high demand. These were the mRNA vaccines marketed by Pfizer–BioNTech and Moderna, as they showed high levels of effective protection against severe disease, but they were mostly available only in richer countries. These vaccines also needed storage at very low temperatures, equipment for which is not readily available in most LMICs.

The Oxford–AstraZeneca vaccine did not need such low storage temperatures and was the most widely used in LMICs, with 3 billion doses delivered up to mid-2022, and an estimated 600 million lives saved due to it in the very first year of rollout.⁴⁰ Unfortunately, by the time problems of inadequate vaccine production and supply were resolved, other problems such as the lack of adequate infrastructure, equipment, personnel, and logistics for quick vaccination delivery, as well as vaccine hesitancy and low uptake due to declining rates of infection, became the predominant barriers to improving vaccination rates in poorer countries.

Sadly, the estimated global wastage of vaccines was as high as 1.1 billion doses due to lack of predictability in donated dose deliveries in LMICs, multi-dose packaging, and relatively short expiry dates.⁴¹ Some promising versions of mRNA vaccines are available from China⁴² and India,⁴³ but the demand for COVID vaccines is on the decline for the reasons discussed above, and the goal of vaccinating the world against COVID-19 is losing momentum. It is likely that any annual vaccinations required against COVID-19 will bypass much of the population in poorer countries, just as is in the case with annual influenza vaccinations.

As for treatments, several known medicines were tested against COVID-19 even before vaccines were available. Of these, and after several fatal mistakes, an old generic medicine, dexamethasone, was considered to be one of the most effective

³⁹ See <https://covid19.trackvaccines.org/vaccines/approved/> (last visited Nov. 29, 2023).

⁴⁰ See University of Oxford, *Oxford Vaccine Saved Most Lives in Its First Year of Rollout* (Jul. 15, 2022), www.ox.ac.uk/news/2022-07-15-oxford-vaccine-saved-most-lives-its-first-year-rollout (last visited Nov. 29, 2023).

⁴¹ See *Global Wastage of COVID-19 Vaccines Could Be 1.1 Billion Doses*, AIRFINITY (Jul. 11, 2022), www.airfinity.com/articles/global-wastage-of-covid-19-vaccines-could-be-1-1-billion-doses (last visited Nov. 29, 2023).

⁴² See www.reuters.com/business/healthcare-pharmaceuticals/china-approves-its-first-mrna-vaccine-domestic-drugmaker-cspc-2023-03-22/ (last visited Nov. 29, 2023).

⁴³ See www.thehindu.com/sci-tech/health/genovax-india-made-booster-dose-mrna-vaccine-to-cost-2292/article67005507.ece (last visited Nov. 29, 2023).

treatments for seriously ill patients. The UK government estimated, at the end of 2021, that the drug had saved a million lives worldwide and 22,000 in that country alone.⁴⁴ Gilead's remdesivir showed some efficacy in reducing time in hospital, but not enough to justify its widespread use.

Toward the end of 2021 or early 2022, two patented drugs, Merck's molnupiravir and Pfizer's Paxlovid™ (nirmatrelvir in combination with ritonavir), were approved in many jurisdictions specifically to treat COVID-19 patients to prevent hospitalization and death. By mid-2022, molnupiravir was seen as not being as effective as once believed and Paxlovid™ is effective only in vulnerable populations.⁴⁵ Also, just as for vaccines, the demand for these therapeutics has declined. It is now expected that only 15 million doses of molnupiravir and 50 million doses of Paxlovid™ will have been sold by the end of 2022.⁴⁶ Both these medicines were licensed to the Medicines Patent Pool (MPP) for onward sublicensing for sale in most LMICs.⁴⁷ These licensed companies were expected to begin production by the end of 2022 or early 2023. An Indian manufacturer was the first and only one to get its version of the licensed Paxlovid™ prequalified by the WHO by December 2022.⁴⁸ by which time the demand for the product had waned.

Several evaluation reports are now available on the functioning of COVAX, with recommendations for future pandemic preparedness and response, including one by COVAX itself, as well as an external evaluation of ACT-A with COVAX, commissioned by the Facilitation Council of ACT-A led by Norway and South Africa.⁴⁹ These and other reports agree that there need to be several improvements in governance arrangements to contain future pandemics.

The WHO also launched the Covid-Technology Access Pool (C-TAP), with the hope that producers of vaccines, therapeutics, and diagnostics would deposit their proprietary technology, data, and know-how to enable these to be widely

⁴⁴ See www.england.nhs.uk/2021/03/covid-treatment-developed-in-the-nhs-saves-a-million-lives/ (last visited Dec. 19, 2022).

⁴⁵ See Carl Zimmer et al., *Coronavirus Drug and Treatment Tracker*, N.Y. TIMES (updated Aug. 31, 2022), www.nytimes.com/interactive/2020/science/coronavirus-drugs-treatments.html (last visited Nov. 29, 2023).

⁴⁶ See Robert Hart, *Weak Demand for Covid Antivirals Dampens Roaring Sales*, FORBES (Jul. 25, 2022), www.forbes.com/sites/roberthart/2022/07/25/weak-demand-for-covid-antivirals-dampens-roaring-sales/?sh=728142c9757a (last visited Nov. 29, 2023).

⁴⁷ See MPP's Contribution to the Global Response to COVID-19, Medicines Patent Pool, <https://medicinespatentpool.org/covid-19> (last visited Nov. 30, 2022).

⁴⁸ See <https://extranet.who.int/prequal/medicines/cvo12> (last visited Nov. 29, 2023).

⁴⁹ See WHO, COVAX: Key Learnings for Future Pandemic Preparedness and Response (Sep. 14, 2022), www.who.int/docs/default-source/coronaviruse/act-accelerator/covax/covax_key-learnings-for-future-ppr-sept-2022_final79e93576-3ed8-4c5a-8771-3df8de437f6b.pdf?sfvrsn=2b801aa6_2 (last visited Nov. 29, 2023); WHO, External Evaluation of the Access to COVID-19 Tools Accelerator (ACT-A) (Oct. 10, 2022), www.who.int/docs/default-source/coronaviruse/act-accelerator/act-a-external-evaluation_october_2022.pdf?sfvrsn=c4b6541a_3 (last visited Nov. 29, 2023).

disseminated to enhance global production of the needed PRPs.⁵⁰ While some research organizations and universities, including the NIH, have submitted several technologies to this pool, these are yet to be sublicensed through the MPP, and none of the major vaccine producers have participated.⁵¹

Regional organizations, including multilateral development banks, also took initiatives to help members acquire vaccines and other medical countermeasures. In December 2020, the Asian Development Bank (ADB) launched the \$9 billion Asia-Pacific Vaccine Facility (APVAX) to help its members procure vaccines.⁵² As of September 2021, the ADB had committed \$2.3 billion under APVAX.⁵³ Others, such as the African Union's African Vaccine Acquisition Task Team (AVATT) and the Pan-American Health Organization (PAHO), started taking initiatives in early-to-mid 2021 to procure vaccines with the buy-in of their member states as complements to individual countries' bilateral vaccine contracts⁵⁴ (and to increase the local production of vaccines). Many believe that regional partnerships/platforms are required not just as a first step, but as the only way to successfully deliver PRPs at the country level. And that, ultimately, adequate financing of regional initiatives would lead to global coordination and the advantages of scale.

Several prominent voices in civil society, including academics, in the United States and elsewhere, came together and advocated for greater political engagement, suggesting the convening of a summit of world leaders that would support a global framework for a COVID-19 response.⁵⁵ The background document of September 2021 sets out such a framework, which clearly recognized that a planning and implementation arrangement was needed to end the acute phase of the pandemic. While the tasks to be handled by such an arrangement were set out in

⁵⁰ WHO, *Share Your Intellectual Property, Knowledge or Data*, www.who.int/initiatives/covid-19-technology-access-pool/take-action-now (last visited Nov. 30, 2022).

⁵¹ As of the end August 2023, one vaccine manufacturer contributed its technology to C-TAP. See www.who.int/news/item/29-08-2023-who-initiative-signs-new-licensing-agreements-on-covid-19-technologies (last visited Nov. 29, 2023).

⁵² See Press Release, Asian Development Bank, \$9 Billion ADB Facility to Help Developing Member Countries Access and Distribute COVID-19 Vaccines (Dec. 11, 2020), www.adb.org/news/9-billion-adb-facility-help-members-access-and-distribute-covid-19-vaccines (last visited Nov. 29, 2023).

⁵³ Asian Development Bank, *ADB's COVID-19 Response for Developing Asia Surpasses \$20 Billion* (Sep. 13, 2021), www.adb.org/news/features/adb-covid-19-response-developing-asia-surpasses-20-billion (last visited Nov. 29, 2023). However, in November 2021, another \$1.5 billion was approved for India under APVAX.

⁵⁴ See Press Release, UN Economic Community for Africa, *Africa Announces the Rollout of 400m Vaccine Doses to the African Union Member States and the Caribbean* (Aug. 5, 2021), <https://reliefweb.int/report/world/africa-announces-rollout-400m-vaccine-doses-african-union-member-states-and-caribbean> (last visited Nov. 29, 2023); PAHO, *PAHO Will Begin Procuring COVID-19 Vaccines to Expand Access in Latin America and the Caribbean* (Aug. 11, 2021), www.paho.org/en/news/11-8-2021-paho-will-begin-procuring-covid-19-vaccines-expand-access-latin-america-and (last visited Nov. 29, 2023).

⁵⁵ See *Framework for a Global Action Plan for COVID-19 Response*, COVID Collaborative, www.covidcollaborative.us/framework-for-global-action#framework (last visited Nov. 29, 2023).

some detail, the proposal was less clear about who should be responsible for these. A suggestion was made to appoint a UN envoy who would function with the support of the Multilateral Leaders Task Force, as well as empower a global task force on supply and manufacturing.⁵⁶ Again, in April 2022, one group issued a call for global action to end the pandemic and prevent the next.⁵⁷ Civil society and academia have a useful role to play, and their voices must be channeled, as was usefully done through the Pandemic Action Network.⁵⁸

Several concrete suggestions have been made to engage the global political leadership at the highest level. The Independent Panel for Pandemic Preparedness and Response (IPPPR) was the first to make a recommendation on this, suggesting that a Global Threats Council at the level of heads of state be established under the General Assembly of the United Nations (UNGA) to lead on pandemic preparedness and response.⁵⁹ The DG WHO suggested establishing a Global Health Emergency Council and a Committee on Health Emergencies under the auspices of the World Health Assembly, rather than creating a parallel architecture.⁶⁰ The draft of the Pandemic Agreement⁶¹ under negotiation has proposed a Conference of Parties (COP) at the head of the governance structure, with subsidiary bodies under it. It is clear that member governments of the WHO are loath to hand over control of decision-making to either the WHO Secretariat or any other independent body. However, UN intergovernmental meetings are unable to resolve urgent issues speedily, as attested by the failure of successive COPs to take any concrete steps to halt climate change under the United Nations Framework Convention on Climate Change (UNFCCC) that entered into force in March 1994.

During COVID-19, it was the G20, under the presidency of Italy and then Indonesia, that took the concrete step of establishing a Joint Finance-Health Task Force (JFHTF) in October 2021 reporting to Health and Finance Ministers of G20 countries, to enhance the collaboration and global cooperation on issues relating to this and future pandemic prevention, preparedness, and response. This body

⁵⁶ See https://static1.squarespace.com/static/5f85f5a156091e13f96e4d3/t/612bddf261a6761518707858/1630264819870/Framework_FINAL_8.29.pdf (last visited Nov. 30, 2022).

⁵⁷ See AFRICA CDC ET AL., SEIZING THE MOMENT: GLOBAL ACTION TO END THE COVID-19 CRISIS AND PREVENT THE NEXT PANDEMIC (Apr. 20, 2022), www.covidcollaborative.us/assets/uploads/pdf/Seizing-the-Moment-Global-Action-to-End-the-COVID-19-Crisis-and-Prevent-the-Next-Pandemic.pdf (last visited Nov. 29, 2023).

⁵⁸ See Pandemic Action Network, *Priority Policies & Actions*, www.pandemicactionnetwork.org/policies-and-actions/covid-19-response (last visited Nov. 30, 2022).

⁵⁹ See THE INDEPENDENT PANEL FOR PANDEMIC PREPAREDNESS & RESPONSE, COVID-19: MAKE IT THE LAST PANDEMIC (2021), https://theindependentpanel.org/wp-content/uploads/2021/05/Summary_COVID-19-Make-it-the-Last-Pandemic_final.pdf (last visited Nov. 29, 2023).

⁶⁰ See Report by the Director-General, *Strengthening the Global Architecture for Health Emergency Preparedness, Response and Resilience*, WHO Doc. A75/20 (May 23, 2022), https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_20-en.pdf (last visited Nov. 29, 2023).

⁶¹ See the draft of October 30, 2023 at https://apps.who.int/gb/inb/pdf_files/inb7/A_INB7_3-en.pdf (last visited Nov. 29, 2023).

endorsed the WHO targets that 40 percent of LMIC populations be vaccinated by the end of 2021 and 70 percent by mid-2022. The JFHTF meetings were attended by representatives of international organizations such as the WHO, World Bank, IMF, and UNICEF.⁶² A High Level Independent Panel (HLIP) on Financing the Global Commons for Pandemic Preparedness and Response was commissioned on January 26, 2021.⁶³ At the fourth meeting of G20 Finance and Health Ministers, it was agreed that a Finance & Health Coordination Platform for Pandemic PPR Financing (Coordination Platform) could work to raise funds and assist in the optimal allocation of financing resources for pandemic PPR and could gradually and selectively be broadened beyond the G20 membership. This idea, however, failed to take off. Instead, at the same time, the World Bank Pandemic Fund was endorsed, which effectively put an end to the Coordination Platform idea.⁶⁴

The G20 – despite being an incoherent grouping of countries with divergent national interests – has been a source of excellent reports and ideas in the JFHTF. The G20 works with a temporary secretariat brought in by each rotating president on an annual basis, although the JFHTF is assisted by a temporary secretariat located at the WHO and financed by the World Bank.⁶⁵

From as early as April 2021, in a panel discussion convened by the Center for Strategic & International Studies (CSIS), I began advocating for the establishment of an International Pandemic Fund with sufficient funds to procure PRPs for LMICs, and which would have a lean, flexible governance structure headed by an Executive Board consisting of donors/contributors that would take decisions on the basis of votes weighted according to the amount of contributions made.⁶⁶ Based on an interview in May 2021, the following was recorded:

One way to distribute vaccines globally and equitably would be to establish an “International Pandemic Fund” as proposed by Jayashree Watal. Largely (pre-)

⁶² See Italian Ministry of Economy & Finance, *The G20 Established a Joint Finance-Health Task Force to Strengthen Pandemic Prevention, Preparedness and Response* (Oct. 29, 2021), www.mef.gov.it/en/inevidenza/The-G20-established-a-joint-Finance-Health-Task-Force-to-strengthen-pandemic-prevention-preparedness-and-response (last visited Nov. 29, 2023).

⁶³ See Italian Ministry of Economy & Finance, *The G20 Establishes a High Level Independent Panel on Financing the Global Pandemic Preparedness and Response* (Jan. 27, 2021), www.mef.gov.it/en/inevidenza/The-G20-establishes-a-High-Level-Independent-Panel-on-financing-the-Global-Pandemic-Preparedness-and-Response-00001 (last visited Nov. 29, 2023).

⁶⁴ See www.g20.org/g20-finance-ministers-and-health-ministers-agree-to-support-financial-intermediary-fund-for-pandemic-ppr/ (last visited Nov. 30, 2022).

⁶⁵ See G20, WIKIPEDIA, <https://en.wikipedia.org/wiki/G20> (last visited Nov. 30, 2022). The Joint Finance-Health Task Force, however, has established a Secretariat housed at the WHO and supported by the World Bank, to assist its work. See Italian Ministry of Economy & Finance, *supra* note 57.

⁶⁶ See Jayashree Watal et al., *The Importance of Intellectual Property in Healthcare Innovation during Covid-19*, Center for Strategic & International Studies (Apr. 22, 2021), www.csis.org/events/importance-intellectual-property-healthcare-innovation-during-covid-19 (last visited Nov. 30, 2022). I briefly explain my proposal at 55’10” to 58’44”.

financed by the EU and the USA, such an organization would provide money and expertise and, with a speedy decision-making process and without much ado, would distribute the necessary goods where they are needed. According to Watal, setting up this body would be possible in the short term and could already be used in the multilateral fight against this very pandemic.⁶⁷

The details of the proposal were shared widely in the publicity garnered through the CSIS panel, as well as a presentation made at Georgetown University Law Center, based on which I held discussions with several experts in this area.⁶⁸

In July 2021, the G20-commissioned HLIP submitted its report and called for both a finance and governance mechanism and proposed a Global Health Threats Board as well as a Global Threats Fund, structured as a FIF at the World Bank. The HLIP authors believed that such a board, bringing Health and Finance Ministers together within an inclusive G20-plus group, would offer the best alternative in effective pandemic governance.⁶⁹

In May 2022, Ruchir Agarwal and Tristan Reed fleshed out a credible proposal on finance and governance. They advocated the establishment of an “Advance Commitment Facility” (ACF) for the pooled procurement of vaccines and other countermeasures for LMICs that would have funds ready from day zero of the declaration of a future infectious disease pandemic.⁷⁰ To ensure finance from day zero, they proposed that a financier (a commercial bank/consortium of development banks/private foundation/newly established global health financing agency) establishes a credit line of \$20 billion for the ACF on day zero, backed by advance commitments made by participating countries. This is about the amount raised by ACT-A.⁷¹ They put forward four options to mitigate the credit risk: one, legally binding pledges by donors, as done for Gavi; two, participating LMICs themselves give joint guarantees to cover risk, as done in PAHO’s Revolving Fund, or to obtain credit in advance, as done by the AVAT, which secured credit from the African Export–Import Bank to purchase COVID-19 vaccines; three, the financier issues a pandemic-linked bond and holds the proceeds in safe securities, ready to be

⁶⁷ See Maximilian Steinbeis & Evin Dalkilic, *Three Crises and One Waiver*, VERFASSUNGSBLOG (May 7, 2021), <https://verfassungsblog.de/three-crises-and-one-waiver> (last visited Nov. 29, 2023). Note that the Pandemic Fund is largely financed by the United States and European Union, which contributed almost two-thirds of the \$1.7 billion as of November 2023.

⁶⁸ See Jayashree Watal, *How Can Global Pandemic Governance Be Improved?*, GEORGETOWN ZOOM (Feb. 15, 2022), the recording is available at request from the O’Neill Institute of Global and National Health Law, Georgetown University.

⁶⁹ See G20 High Level Independent Panel, *supra* note 25.

⁷⁰ See Ruchir Agarwal & Tristan Reed, *Financing Vaccine Equity: Funding for Day Zero of the Next Pandemic* (World Bank, Policy Research Working Paper No. 10067, 2022), <https://documents1.worldbank.org/curated/en/0995000105262228687/pdf/IDU0cdc5294e039a8045fbaa670908d56a28371.pdf> (last visited Nov. 29, 2023).

⁷¹ The ACT-A evaluation reports states that \$23.5 billion was raised, of which 72 percent came from six governments: the USA, Germany, Japan, the United Kingdom, Canada, and the European Union.

distributed in a pandemic or for the principal to be repaid if no pandemic is declared before its maturity;⁷² and four, the financier and its shareholders retain all the risk, where payments are made only during the pandemic and no commitments are made in advance.⁷³ The last option appears to me to be the most feasible that can be rapidly agreed to, say in the Executive Board of the World Bank, in the face of a deadly pandemic, even if there is currently no enthusiasm for it.

In terms of governance, Agarwal and Reed suggest that the ACF be governed by an independent board, comprising the representatives of LMICs, donor countries, and the financier, which would delegate the day-to-day management to an independent management team with no conflicts of interest, and would follow rules agreed in advance by all participating countries. The model of both users and donors being part of the governing board exists in the Global Fund.⁷⁴

Significantly, these ideas were largely endorsed in October 2022 by the aforementioned independent external evaluation report of ACT-A. The modifications rightly introduced in this evaluation report from the Aggarwal–Reed paper are the representation of regional bodies to ensure better regional and global coordination, mobilization of additional funding, and the idea that contributions should be based on a fair-share allocation model. Details on governance are not included except to say that it should be strong and inclusive. A close reading of the external evaluation report shows that key lessons for future pandemic response would *inter alia* include:

- A pandemic ACF with access to a credit line that relies on strong and inclusive governance with a stronger representation of regional bodies.
- A coordinated mobilization of additional funding during the pandemic rather than by individual agency efforts.
- A central funding pool, which allows for a stronger needs-based allocation (this was not agreed to by all stakeholders).⁷⁵
- Additional resource mobilization by a fair-share model that defines a minimum amount to be pledged by donors with the proviso that this needs to be acceptable to all.⁷⁶

⁷² This option would require the contributors (whether donors or LMICs) to make legally binding pledges to pay annual interest payments to the financier.

⁷³ Option 4 is a theoretical possibility where the financier, say a multilateral development bank, would require a capital increase by shareholders to cover any potential losses on the credit line after the pandemic is over. In this case, the bank would have to provision for expected losses ahead of time, which, if the bank faces a binding capital constraint, could reduce its resources available to lend for other purposes.

⁷⁴ See The Global Fund, *Members*, www.theglobalfund.org/en/board/members/#:~:text=The%20Board%20of%20the%20Global,partnership%2C%20fundraising%20and%20information%20sharing (last visited Nov. 30, 2022).

⁷⁵ Agarwal and Reed suggest an independent panel of experts that would advise on the product allocations.

⁷⁶ See ACT-Accelerator Facilitation Council, *ACT-A Evaluation*, www.act-a.org/evaluation (last visited Nov. 30, 2022).

Based partly on the June 2021 report of the HLIP,⁷⁷ which called for a fund with an annual investment of \$15 billion in pandemic preparedness and response, a FIF for pandemic prevention, preparedness and response was approved by the World Bank's board in June 2022. It was finally established in September 2022 and launched as the Pandemic Fund in November 2022 by the G20.

On the eve of the World Bank proposal of April 2022 for the establishment of a FIF for pandemic preparedness and response, the WHO put out a press release supporting the FIF but at the same time laying down multiple conditions for its functioning. The WHO said *inter alia* that:

“The FIF should move away from an outdated and inequitable donor/beneficiary framework and adopt a global public goods approach *where all countries contribute in some way, and all have access to benefits from the fund*. . . . Many of the pandemic preparedness and response roles envisioned for the FIF demand deep expertise, capacities, and implementation support that only the WHO can provide. . . . The participation of the WHO in the FIF should go beyond the role of a technical advisor, or operations. *The WHO should have a seat at the decision-making table and a central role in implementing the FIF*.⁷⁸

Although the G20 Health and Finance Taskforce gave the WHO and the World Bank an equal role in planning the FIF, there were obviously tensions between the two organizations right from the planning stage. As of mid-November 2022, only a little more than 10 percent of the annual budget of \$10.5 billion (an amount of \$1.4 billion) had been committed to the Pandemic Fund, of which only about \$536 million had been received.⁷⁹ This fell far short of its own target of \$10.5 billion and of the \$15 billion annual commitment called for by the HLIP or the \$20 billion advocated by Agarwal and Reed based on the actual expenditure of the ACT-A.⁸⁰

⁷⁷ See G20 High Level Independent Panel, *supra* note 25. For the summary of recommendations, see Ngozi Okonjo-Iweala et al., *Rethinking Multilateralism for a Pandemic Era*, IMF (Dec. 2021), www.imf.org/en/Publications/fandd/issues/2021/12/Multilateralism-Pandemic-Era-Okonjo-Iweala-Shanmugaratnam-Summers (last visited Nov. 29, 2023).

⁷⁸ See WHO, *Delivering on the G20 Leaders Commitment to Build an Equitable and Effective Financial Intermediary Fund (FIF) for Pandemic Preparedness and Response (PPR)* (Apr. 19, 2022), [www.who.int/news/item/19-04-2022-delivering-on-the-g20-leaders-commitment-to-build-an-equitable-and-effective-financial-intermediary-fund-\(fif\)-for-pandemic-preparedness-and-response-\(ppr\)](https://www.who.int/news/item/19-04-2022-delivering-on-the-g20-leaders-commitment-to-build-an-equitable-and-effective-financial-intermediary-fund-(fif)-for-pandemic-preparedness-and-response-(ppr)) (last visited Nov. 30, 2022) (emphasis added).

⁷⁹ See World Bank, *Financial Intermediary Funds (FIFs)*, <https://fiftrustee.worldbank.org/en/about/unit/dfi/fiftrustee/fund-detail/pppr#1> (last visited Nov. 30, 2022). A sum of \$1.27 million is currently committed for administration of the Pandemic Fund. This is an amount that is bound to increase as its functions/tasks increase.

⁸⁰ See Task Force on COVID-19 Vaccines, Therapeutics and Diagnostics for Developing Countries, *Joint Statement of the Multilateral Leaders Task Force on COVID-19 Vaccines, Therapeutics, and Diagnostics for Developing Countries following Its Second Meeting*, WHO (Jul. 30, 2021), www.who.int/news/item/30-07-2021-joint-statement-of-the-multilateral-leaders-task-force-on-covid-19-vaccines-therapeutics-and-diagnostics-for-developing-countries-following-its-second-meeting (last visited Nov. 29, 2023).

The Pandemic Fund's remit is defined narrowly as bringing "additional, dedicated resources for pandemic prevention, preparedness, and response, incentivize countries to increase investments, *enhance coordination among partners*, and serve as a platform for advocacy."⁸¹ It has also been said to provide "a dedicated stream of additional, *long-term financing* to strengthen PPR capabilities in low- and middle-income countries and address critical gaps through investments and technical support at the national, regional, and global levels."⁸² The Pandemic Fund's website further states:

FIF financing could help strengthen and sustain PPR capacity in areas such as zoonotic disease surveillance; laboratories; emergency communication, coordination and management; critical health workforce capacities; and community engagement. FIF-financed projects can also help strengthen PPR at the regional and global levels, for example, by *building capacity for medical countermeasures*. The FIF can support peer-to-peer learning, provide targeted technical assistance, and help with the systematic monitoring of PPR capacities. (Emphasis added)

This would reassure existing organizations/entities involved in different aspects of pandemic preparedness and response that there is no intention of taking over or duplicating any of their functions. However, if a critical gap in funding is involved, what of the other critical gap of global pandemic response governance, namely pooled procurement of PRPs for LMICs? How can the Pandemic Fund achieve its avowed goal of enhancing coordination among its partners involved in a global response to a pandemic? How would the international community address the total lack of coordination in the global response to COVID-19? If the charter of the Pandemic Fund were to merely strengthen national health systems or route funds to various implementing agencies, would many LMICs be motivated to use such an entity, let alone finance it?

In terms of governance, the Pandemic Fund's Governing Board⁸³ led by two co-chairs (Indonesia and Rwanda) includes twenty-one voting members with representation of nine sovereign donors, nine sovereign co-investors (countries that could benefit from Pandemic Fund projects while also contributing to them), one philanthropic and two civil society organizations (one from the Global North and the other from the Global South).⁸⁴ In addition, there are several nonvoting members, including the chair and vice-chair of the Technical Advisory Panel and the G20 Presidency. The World Bank, in its various capacities, and the WHO participate as

⁸¹ See World Bank, *supra* note 79 (emphasis added).

⁸² See World Bank, *FAQs: Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response* (Jun. 30, 2022), www.worldbank.org/en/topic/pandemics/brief/factsheet-financial-intermediary-fund-for-pandemic-prevention-preparedness-and-response (last visited Nov. 29, 2023).

⁸³ The Governing Board is co-chaired by experts from Indonesia and Rwanda.

⁸⁴ See World Bank, *supra* note 82.

observers on the Governing Board alongside other multilateral development banks (MDBs) and agencies selected as implementing entities.⁸⁵

4 NEED FOR A GLOBAL RESPONSE COORDINATOR AND CHIEF PROCURER FOR FUTURE PANDEMICS

As demonstrated in the preceding section, the existing global governance architecture failed to respond coherently and effectively to end or contain the COVID-19 pandemic. Therefore, the world needs to come together and agree a global strategy as well as a credible implementation entity to better respond to future global infectious disease pandemics. Such a planning and implementation entity must have the necessary funding to enable efficient manufacture and procurement of vaccines and other PRPs and ensure their equitable distribution in LMICs based on actual need, even if it means swapping periods of delivery with HICs and UMICs so that those in greatest need get the products first.

While it may look as though the international community has solved the global pandemic governance issues with the establishment of the Pandemic Fund, it is becoming increasingly clear that this entity will only deal with preparedness and not with response.⁸⁶ It will provide initial funding to incentivize national governments to invest in three priority areas: comprehensive disease surveillance and early warning systems; laboratory systems; and human resources and public health and community workforce capacity. Clearly the Pandemic Fund will not deal with procurement and distribution of PRPs, a role assigned in COVID-19 to ACT-A and in the future possibly to an ACF, as recommended by the ACT-A evaluation report. It is certainly not the one-stop International Pandemic Fund – that should be the overarching coordinating entity responsible for containing a pandemic as quickly as possible – that I had advocated for. Many questions arise about the management of a global response to a future infectious disease pandemic and about the nature of governance of a new LMIC procurement and global response coordination entity that would be most effective in containing a future pandemic. Some of these questions are raised below and require consideration by the international community but, given the October 2023 draft of the WHO Pandemic Agreement,⁸⁷ it is clear that only general language on response may be agreed and

⁸⁵ See www.worldbank.org/en/programs/financial-intermediary-fund-for-pandemic-prevention-preparedness-and-response-ppr-fif/governance-structure (last visited Nov. 29, 2023).

⁸⁶ See Amanda Glassman, *How a Pandemic FIF Should Be Different: Reflections on the World Bank White Paper*, Center For Global Development (Jun. 2, 2022), www.cgdev.org/blog/how-pandemic-fif-should-be-different-reflections-world-bank-white-paper (last visited Nov. 30, 2022). She notes that while “response” is in the title of the current white paper, it is difficult to see how the new FIF could accommodate response financing as well as preparedness for emerging threats in its current version.

⁸⁷ Cf. *supra* note 61.

that, despite the activism around this issue, equity in the distribution of PRPs will remain a vague objective.

*A Scope of Mandate of a Procurement and Global Response
Coordination Entity*

There is therefore a case for an independent entity responsible for the procurement of PRPs for LMICs in order to contain a pandemic. The task of global coordination of pandemic response and procurement and distribution of needed PRPs can logically be combined. The key question that the international community needs to ask itself is whether there should be a designated overarching coordinating agency that was so badly lacking during COVID-19 or whether this job would once again be divided between the WHO, the World Bank, or other IFIs, Gavi, the Vaccine Alliance, UNICEF, the G20's JFHTF, the Global Fund, and others, as was the case during COVID-19. As we have seen, the Pandemic Fund does not, so far, claim such an ambition for itself.

Where should this overall response coordinating entity be housed? The WHO Pandemic Treaty negotiations that are set to be decided upon by WHO member states at the World Health Assembly by May 2024 do not seem to call for any such entity. It is as yet unclear which entity would succeed the ACT-A, that was set up *inter alia* to be responsible for the procurement and equitable distribution of PRPs during COVID-19. A transitional plan for ACT-A ran until March 2023. The plan outlined the role of the ACT-A Tracking and Monitoring Task Force, co-chaired by India and the United States, to “provide an important forum for maintaining a coordinated approach to tracking financing requirements and pledges and facilitating resource mobilization for ACT-A if needed in this next phase.”⁸⁸

If the entity is housed at the WHO, which currently has the mandate to respond to pandemics, how would the WHO be financially and politically empowered to effectively undertake these twin tasks and how would the proposed COP deal with potential conflicts among its members? For example, were the entity to share crucial price and availability information on PRPs, as called for in the Agarwal–Reed proposal, would some member states object? So far the WHO has left decisions and implementation up to national authorities. The distribution of PRPs in accordance with the dynamic, changing needs in LMICs calls for global coordination. This is why there is a need for a neutral and political independent entity responsible for the procurement and equitable distribution of PRPs.

Would it be more effective to empower the existing Pandemic Fund to take on the role of global response coordination, as well as of the procurement and distribution of PRPs for LMICs? For the Pandemic Fund to be able to raise adequate

⁸⁸ See www.who.int/news/item/28-10-2022-act-accelerator-launches-six-month-plan-as-world-transitions-to-long-term-covid-19-control (last visited Dec. 21, 2022).

money, it needs to be closely linked with both the IMF and the World Bank, following from option 4 of the Agarwal–Reed proposal. If the Pandemic Fund could control funds of up to \$20 billion upon its inception, as eventually raised for ACT-A, it would be able to effectively coordinate with producers of PRPs to decide allocation based on need, keeping in mind the goal to end the pandemic as quickly as possible. The WHO could continue to chair the Technical Advisory Panel of the Pandemic Fund, which would include independent experts to ensure that decisions are taken based on actual need and capacity to use these PRPs, and not on extraneous political considerations. However, there is little appetite in the Pandemic Fund to take on this role. More on political leadership below.

What should be the scope of the tasks undertaken by this entity:

- Is there a perceived procurement advantage in financially supporting the product innovators of PRPs most likely to succeed (the “winners”) early in a future pandemic and even before regulatory approvals in order to supply LMICs – as done by rich country governments during COVID-19? This would certainly facilitate the quicker and more assured supply of essential products such as diagnostics, PPE kits, vaccines, and therapeutics, starting early during a future pandemic for LMICs. If there is no LMIC procurement and response coordination entity, who would take the risky decision to do so? On the other hand, would such a new entity cause confusion with CEPI, the Foundation for Innovative New Diagnostics (FIND), and others that already are or will be separately seeking funds to finance R&D to get effective PRPs within 100 days of any future pandemic, and clash with HIC and UMIC procurers? This would not happen if it is the entity mandated to ensure global coordination. If the new entity were merely to be an additional donor/financier of these organizations – as the Pandemic Fund was intended to be – it would not have sufficient clout to coordinate among its partners to find the most effective path to ending the pandemic.
- The new procurement and response coordination entity should ideally aim to be a monopsony procurer itself, instead of part-financing several implementing entities – a large single buyer – acting on behalf of LMICs. It would thus require the requisite technical and commercial expertise to identify potential producers, negotiate legally binding contracts, and release grants to them, based on predetermined milestones. Through this power to choose manufacturers/suppliers, this entity could ensure that the supported private companies, including product developers, agree to strictly enforced pre-agreed production targets, equitable distribution, and, ideally, to appropriate, differential prices. Realistically, the entity would have to leave it to each supported originator company to decide whether, to whom, and where, to license its product to meet

predetermined output targets. However, incentives could be built in to ensure geographical distribution of manufacturing of PRPs in the interest of minimizing supply disruptions. Similarly, while intellectual property rights could be retained by originators, incentives could be used to encourage voluntary licenses. However, the top priority of the entity should always be to end the pandemic as soon as possible.

- Currently, there is no one-stop shop to which potential vaccine or other PRP producers in LMICs could turn to obtain the technical expertise and know-how to produce needed vaccines and other PRPs. There has been an increasingly vociferous demand from the developing world for originator companies to share their technologies, including any IP rights and know-how, with entities located in LMICs in different regions of the world. The pharmaceutical industry has, however, consistently pushed back against this demand, claiming that it would discourage necessary innovation to market new PRPs. This is turning out to be one of the contentious points in the WHO Pandemic Agreement negotiations.⁸⁹ What kind of incentives – both carrot and stick – should be given to originator companies for the widespread, voluntary sharing of their technologies? Some promising ideas include carrots, such as limited subsidies to originators to finance the additional costs of continually updating technology transfer documents/know-how to LMICs or ensure staff visits, or sticks, such as imposing strict contract conditions that spell out the duty to transfer continually updated technologies to a minimum number of regionally distributed manufacturers or, in appropriate cases, outright patent, and know-how, buy-outs. However, the sticks may inhibit PRP originators *ex ante* from making agreements with the entity and therefore must be used judiciously.
- Would the new procurement and response coordination entity itself finance projects to build regional/local capacity to produce PRPs, or should this be left to MDBs? The former is inadvisable as this entity would need to retain the services of experienced technical and commercial personnel to build capacity and facilitate technology transfer across multiple possible platforms (such as viral vector or mRNA for vaccines). All this should be left to individual companies supported and incentivized by this entity to achieve the goal. However, regional organizations such as PAHO and Africa CDC could be financed to assist/monitor projects set up by supported companies to build such capacity for R&D

⁸⁹ See Jennifer Rigby & Emma Farge, *Big Pharma May Have to Reveal Government Deals in WHO's Draft Pandemic Rules*, REUTERS (Nov. 17, 2022), www.reuters.com/business/healthcare-pharmaceuticals/big-pharma-may-have-reveal-government-deals-whos-draft-pandemic-rules-2022-11-17 (last visited Nov. 30, 2022).

and manufacture of PRPs. There is no reason why the entity could not finance innovative, quality, “homegrown” PRPs in LMICs.

There are other areas that proved to be weak links during COVID-19 and need strengthening:

- How would the entity be equipped to deal with supply chain problems, be it equipment, raw materials or expendables needed in local manufacture? In the interest of keeping the mandate of the entity focused and within reasonable bounds, it should only deal with urgent, important supply chain problems that require global coordination. It should be left to regional organizations to help LMICs build capacity for independently assessing which vaccines, diagnostics, or treatments are optimally suited for the region, taking account of the availability of existing infrastructure and numbers of health and other workers. Similarly, building local drug regulatory capacity in LMICs should be outside the mandate of this entity.

There are other lesser matters which can have many correct responses.

- Would it be necessary for the procurement and response coordination entity to commit all participating governments, as a quid pro quo for participation, to prohibit export restraints and forced priority supply of any kind, including inputs and components, on PRPs financed by it; and also to reduce tariffs to zero on these, or should this be left to the WTO?⁹⁰
- Should it be the task of the procurement and response coordination entity to create the most reliable one-stop global dashboard and analysis of pandemic statistics, be they the number of cases, deaths, or supply of PRPs? During COVID-19 there were multiple sources for this kind of data and no one source that was comprehensive for all purposes.
- Should it be the task of the procurement and response coordination entity, upon technical advice of health experts, including those at the WHO, to put out authenticated daily information bulletins on every aspect of prevention and treatment during the pandemic that would clearly call out misinformation being spread? If this entity is to be central to the global effort to coordinate the response to future pandemics, this should be one of its roles so that – for example – vaccine hesitancy does not become one of the biggest barriers to vaccine distribution efforts. However, coordination with the WHO should remain very close.

⁹⁰ The WTO has been less effective thus far in getting its members to adhere to its rules to prohibit export restraints or to expand the plurilateral pharmaceutical zero-for-zero agreement in terms of coverage or membership, although lengthy negotiations are not the answer during a pandemic.

B Funding

Given the meager funding so far of less than \$1.5 billion as against the target of \$10.5 billion,⁹¹ how could the Pandemic Fund begin to deal effectively and adequately with pandemic preparedness for and response to future pandemics? Clearly, now that the pandemic is not the top priority for policymakers, it is difficult to obtain annual financial commitments or even one-off commitments from key economies such as the G20 countries and other HICs/UMICs.

The first point that needs to be agreed to is a charter for the proposed procurement and coordination entity. This charter has to state clearly that the entity's goal is to end the pandemic as soon as possible, and to this end it will procure and distribute PRPs to participating LMICs, focusing on an equitable pandemic response. This may have to be led by and agreed with two or three major donors, who will then invite others to join in according to a fair-share formula. One idea that I espoused to incentivize such contributions was to allow for weighted voting in the General Board based on the level of contributions. If contributing governments competed to get more votes on the Board, they would contribute more. This comes up against the problem of the inclusion of and voting rights for beneficiary LMICs, and this can be addressed in terms of representation in governance structures. However, it is only fair that those who pay more into the kitty of the principal procurement and response coordination entity should have a greater say compared to those who make a much smaller contribution. Another way is to guarantee a seat on the Board only to those who make a minimum contribution of, say, \$300 million. This is the principle followed in other FIFs administered by the World Bank, although the minimum amount varies. These may not be sufficient to incentivize rich-country donors, who may continue to narrowly prioritize national-level goals, despite the huge economic losses to their countries from future pandemics.

Therefore, alternatively, following the Agarwal–Reed proposal, the World Bank could be the obvious financier to extend a credit line to finance a new pandemic procurement and response coordination entity that would take effect once the WHO declares a pandemic, making its shareholders take the credit risk. Clearly, shareholders of the World Bank, notably the HICs and UMICs, need to agree to this in advance. Given the estimated \$20–25 trillion of global economic losses, one would expect this to be agreed more readily in national self-interest by the Executive Board of the World Bank, but this too requires statesman-like leadership from key members.

Another source of future pandemic response funding could have been the IMF's Resilience and Sustainability Facility (RSF)⁹² but this confines itself to providing

⁹¹ The United States and the European Union make up two-thirds of this total. The target itself is based on the gap estimated by the G20 JFHTF and is less than \$15 billion per year over the next five years that the HLIP called for.

⁹² This facility provides loans from the Resilience and Sustainability Trust, a fund of \$50 billion which is based on voluntary contributions from IMF members with strong external positions,

long-term loans to countries undertaking policy reforms to reduce possible balance of payments risks, including those related to pandemic preparedness. The IMF should rise to the economic challenge of the next pandemic by taking a quick decision to allocate additional money through SDRs to its members and better incentivize its richer members to rapidly reallocate to the RSF, say, within a month of the WHO declaring a pandemic. This would enable LMICs to make timely commitments to respond to the pandemic and contribute to the procurement and response coordination entity.⁹³ During COVID-19 this decision was taken more than a year after the WHO declared it to be a pandemic, and even then it was unclear that LMICs could use this money for PRP procurement. The IMF then must also be included in the governance structure of the proposed response entity. Indeed, the proposed entity could be a joint subsidiary of the IMF and the World Bank, just as the International Trade Centre in Geneva is for the WTO and UNCTAD.⁹⁴

For the proposed entity to be truly in control of global coordination efforts, it would need to be able to make significant budgetary contributions to the implementing agencies it wishes to coordinate with, including the procurement agency, to play a role in the crucial decision-making of these agencies. In other words, the entity must have real clout with these agencies. For example, if a separate ACF were to come together to procure vaccines and other needed PRPs for LMICs, its main financier, say the World Bank/IMF, should be in a position to provide more than half of its budget.

On the other hand, if most of the funding of such an entity must come from LMICs on a fair-share allocation model, an idea that has merit even if little support, then the quid pro quo for participating LMICs could be that the entity be held accountable to deliver a timely, equitable share of the PRPs to each participating country according to its needs during the next pandemic. The fair-share allocation formula, as also advocated by the ACT-A evaluation report, will have to be worked out but one can imagine that variables such as GDP, population, and economic stability will play a role. For this model to work, there must be a high degree of trust in the Governing Board and management of the entity as “need” has necessarily to be a dynamic concept that is reviewed regularly by the management team as guided by its Board. It will be necessary to work out how many LMICs – or what share of the

including those wishing to channel SDRs for the benefit of vulnerable LMIC members. See details at www.imf.org/en/About/FAQ/Resilience-and-Sustainability-Trust#Q5 and www.imf.org/en/About/Factsheets/Sheets/2023/Resilience-Sustainability-Facility-RSF (last visited Nov. 30, 2023).

⁹³ Fifty organizations had written to G20 leaders in 2022 to ask the IMF to channel \$100 billion in SDRs to the RST and create a roadmap to unlock new lending from MDBs for future pandemic response. See Pandemic Action Network, *Call for G20 Leaders to Take Pandemic Action* (Oct. 25, 2022), www.pandemicactionnetwork.org/news/call-for-g20-leaders-to-take-pandemic-action (last visited Nov. 30, 2022).

⁹⁴ See <https://intracen.org/about-us/governance> (last visited Dec. 20, 2022).

LMIC population – would need to participate and procure from this entity for it to reach the tipping point where other LMICs would believe that they too had to join to get the best deals – in terms of both price and quantities supplied.

The Pandemic Fund has already accepted contributions from private/philanthropic/other nonstate donors. For example, the Bill & Melinda Gates Foundation has contributed \$15 million.⁹⁵ In today's world, where nonstate donors contribute large sums to global health, it would be foolish to exclude them from financing the procurement and response coordination entity. However, it is unclear whether the entity should necessarily be intergovernmental, whether a limit should be placed on nonstate actors' contributions to its kitty, and what role such entities will play in decision-making in the Governing Board. The following section will consider these governance issues.

C Governance

Much of the effectiveness of the global procurement and coordination entity in fulfilling its goal of coordination with its partners will depend on its close relationship with implementing or collaborating agencies, most importantly the WHO. It is unclear how the Pandemic Fund would fulfill this coordination function. If turf battles ensue on multiple issues that come up for decision to the Board, the Pandemic Fund will remain largely ineffective even if it is fully funded to the extent needed. From the aspirational statements on equity in the draft pandemic instrument being negotiated in the WHO it is clear that member states are unwilling to dramatically change the structure and functioning of the WHO and create a future procurement and response coordinating entity within it. It is to be seen if the potential reform of the International Health Regulations envisages a restructuring of the WHO such that its powers, finances, and credibility improve, overcoming potential criticism of its handling of the COVID-19 pandemic in the early months and equipping it to deal better with the next pandemic. As we saw earlier, the WHO has publicly demanded a seat at the decision-making table and a central role in implementing the Pandemic Fund. Yet the WHO must recognize that its very governance structure as a specialized UN agency will stand in the way of major financial contributors trusting it fully. Much will depend on the maturity and expertise of the Pandemic Fund's board members as well as the working relationship between the secretariats of the implementing partners.

Returning to the principle of voting on the Board being weighted by the contributions made by each member, it seems only fair that those who pay more into the procurement kitty should have a larger say compared to those who make a much smaller contribution. To give a seat at the decision-making table to a \$500 million contributor and to a \$1million one does not seem conducive to attracting large

⁹⁵ See World Bank, *supra* note 79.

contributions from donors, as their role in governance would seem to be diluted. However, the charter and rules of the proposed entity need to make clear that the one objective that cannot be diluted in any way is to end the pandemic as quickly as possible by providing the PRPs where they are needed most. In other words, there can be no favoritism or other external objectives to detract from this objective. Similarly, it would not be working to fulfill this objective if it didn't make the funds of the entity go as far as possible in the procurement of PRPs by negotiating the lowest possible prices with suppliers.

If the future procurement and coordinating entity is open to all LMICs to contribute (in finances or in kind), all should, in principle, be represented on its Board. This would not only ensure democracy but also accuracy in decisions taken. As there are 136 LMICs,⁹⁶ in the interest of not making the Board too unwieldy one could allow a group of countries in the same region (say Sub-Saharan Africa or the African Union) or like-minded countries (say emerging market economies or smaller Organisation for Economic Co-operation and Development countries) to get a seat on the General Board if their pooled contribution is over the minimum threshold of say \$300 million. The issue of which country would represent the group on the Board would then be left to inner-group democratic processes. There are several options: either the seat is fixed with the highest contributing country or rotated among the top contributors within this group on a six-monthly or yearly basis. In any case, all countries should participate to decide on group-level positions for all issues coming up for decision and, in turn, receive a detailed briefing after each meeting.

As for nonstate actors, such as philanthropies, the rules should be the same – only those contributing the minimum amount would be seated at the Board. It is possible to allow a group of nonstate actors to get a seat, with the same principles of inner-group democracy applying as described above. This may motivate some of the large public health philanthropies to contribute the minimum to “buy” a seat on the board.

How could recipient countries have a say in the decision-making of a future procurement and coordinating entity? Other pooled funded organizations such as the Global Fund do include recipients as members of the Board, as in this case there is a clear distinction between donors and recipients. Recipients who are also funders can be represented by group, as noted. However, recipients who make no contributions to the kitty could also play a useful role in decision-making, for example by anticipating problems in the timing of financing or delivery of PRPs. The Board must be aware of possible conflicts of interest.

Post-COVID-19, CSOs that are involved with various aspects of pandemic PPR have mushroomed. These organizations can play an important role in ensuring

⁹⁶ Of these, twenty-eight are LICs, fifty-four LMICs, fifty-four UMICs. See World Bank, *World Bank Country and Lending Groups*, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups> (last visited Nov. 30, 2022).

transparency, for example in monitoring the proper use of funds by the entity, or securing PRPs at appropriate prices. Should CSOs be included in the decision-making process of a future procurement and coordinating entity, or merely be observers on the Board? I would suggest that observer seats be allocated to a group of the most relevant and responsible CSOs, adhering to the same principle of group representation and rotation discussed above.

D Political Leadership

It is clear that during the earlier stage of the COVID-19 pandemic, it was the G20, under the leadership of Italy and Indonesia, that took a proactive role in establishing the Pandemic Fund. A Joint Health and Finance Task Force was set up at the meeting of the first G20 Joint Meeting of Health and Finance Ministers in October 2021. In the communique issued after this meeting the ministers said *inter alia*:

[W]e will take steps to help boost the supply of vaccines and essential medical products and inputs in developing countries and remove relevant supply and financing constraints. We reiterate our support to strengthen the resilience of supply chains, to increase vaccine distribution, administration, as well as local and regional manufacturing capacity in LMICs, including through voluntary technology transfer hubs in various regions . . . building on the work of the G20 Informal Group of Finance and Health Experts, we establish a G20 Joint Finance-Health Task Force (the Task Force) aimed at enhancing dialogue and global cooperation on issues relating to pandemic PPR . . . The Task Force is member led and operates by consensus. Task Force members will be Health and Finance officials . . . It will report to Health and Finance Ministers in early 2022 and will be assisted by a secretariat housed at the WHO, with the support of the World Bank.⁹⁷

In its report submitted in July 2021 the HLIP recommended the establishment of a Global Threats Board consisting of G20+ Finance and Health Ministers, which would complement the Global Threats Council comprising heads of state under the UNGA recommended by the IPPPR. This is a role that can be undertaken by the G20.

The G20 Joint Health and Finance Task Force did continue under India's presidency but appears to have only taken note of work of the Pandemic Fund,⁹⁸ This has put paid to the idea that this body could become the preeminent political body giving credence to a procurement and response coordination entity. Given the continuity of this task force through three different rotating presidencies, it is now up to Brazil to ensure that the G20 Joint Health and Finance Task Force remains a

⁹⁷ See ITALIAN G20 PRESIDENCY, JOINT G20 FINANCE AND HEALTH MINISTERS MEETING (2021), www.mef.gov.it/inevidenza/2021/article_00067/G20-Joint-Finance-and-Health-Ministers-Communique-29-October-2021.pdf (last visited Dec. 30, 2022).

⁹⁸ See <https://pib.gov.in/PressReleaseFramePage.aspx?PRID=1950549> (last visited Nov. 30, 2023).

coherent forum to monitor, coordinate, and supply PRP needs in LMICs in a future pandemic. The WHO has itself recommended that the “G20 Finance and Health Ministers must prevent any territorial disputes,”⁹⁹ and, as mentioned earlier, the G20 has already agreed to a Finance and Health Coordination Platform for Pandemic PPR Financing (Coordination Platform). This could work to raise funds and assist in the optimal allocation of financing resources for pandemic PPR and could gradually and selectively be broadened beyond the G20 membership.

The G20 includes, of course, the G7 countries. While the leadership of the G20 countries is important, the money has to be raised from G7 countries. Could the proposed entity be solely financed by LMICs’ contributions, and are there other effective existing MDBs in the Global South that work in the interest of LMICs and could take on this political leadership responsibility? Would, for example, the New Development Bank – the BRICS (Brazil, Russia, India, China, and South Africa) bank based in Shanghai, China – be able to effectively deal with providing the financing and political leadership to ensure PRP equity in LMICs?¹⁰⁰ The management task of bringing COVID-19 to an end through equitable distribution of vaccines needs more than mere distribution of loans and it is unclear that the New Development Bank can rise to this task in the absence of strong political leadership from China to mobilize the LMICs. Besides, it would not be in the interest of LMICs to cut themselves off from G7 funding. These are matters that need to be discussed further in the G20 under India’s leadership before the pandemic is forgotten altogether.

Last but not least, the existing Multilateral Leaders COVID-19 Task Force (World Bank, IMF, WHO, and World Trade Organization) that aimed to nudge governments, industry, international institutions, and other relevant stakeholders to do the right thing through a data dashboard and joint statements, cannot provide the political leadership but can play a role in conceptualizing future procurement and response coordination efforts.

E Relationship of the Pandemic Fund with Regional Institutions

Even within the global procurement and response coordination entity, it could be more effective if each region was assigned the responsibility for containing the pandemic, or specific regional institutions or entities such as the AVATT, the PAHO, or the Asian Development Bank were financed to do so. It must be borne

⁹⁹ See WHO, *supra* note 78.

¹⁰⁰ In April 2020, the NDB set up a mechanism to offer emergency assistance program loans to its member countries, helping them combat the COVID-19 pandemic. It has so far approved seven antivirus-related emergency loans, totaling about \$7 billion, of which \$2 billion went to China and South Africa in two installments, and \$1 billion each to the other BRICS members, Brazil, Russia, and India. See Press Releases, New Development Bank, www.ndb.int/newsroom/press_release (last visited Nov. 30, 2022).

in mind that splitting vaccine procurement by region, though having the advantage of tailoring demand to specific conditions and needs, may leave each entity with insufficient bargaining power to obtain adequate quantities at fair prices and in a timely manner. Therefore, it may be more important to work closely with such regional entities even while centralizing procurement of PRPs.

What about the day-to-day functioning of the global procurement and response coordination entity? It would be crucial to ensure effective and speedy decision-making through a small, independent, and efficient decision-making team supervised closely by the Board, as suggested by Agarwal and Reed – an idea that has been endorsed by the ACT-A evaluation report. However, much will depend on how “independent” and “neutral” the team can really be. This will in turn depend on the prior affiliation and character of those chosen for the team.

5 CONCLUSION

What we have learned from our experience so far with containing COVID-19 is that the key constraint for overcoming a future pandemic is inadequate funding and coordinated global response to contain the pandemic, and that the glaring lack of a coherent, well-coordinated global strategy to procure and equitably distribute vaccines and other PRPs to LMICs led to new variants of the SARS-CoV-2 virus, thus unnecessarily prolonging the pandemic. In response, this chapter advocates for a new, independent, global procurement and response coordination entity and has raised key questions that need to be debated in considering how the effectiveness of this entity can be optimized to plug this gap for future pandemics.

LMICs urgently need an effective entity that is responsible for ensuring the timely procurement and equitable distribution of vaccines and other PRPs to contain or end global infectious disease pandemics as quickly as possible. Such an entity should be fully empowered financially, and be independent, lean, and flexible if it is to meet its primary goal to contain the pandemic everywhere as soon as possible in order to minimize both human and economic losses. This goal would lead to the best outcomes globally, including in LMICs, as equity is best served by a quick end to the pandemic.

Although the financial solutions on offer by multilateral development and financial institutions, including the Pandemic Fund, would help pandemic preparedness at the national level, the pandemic would not end unless there was a coherent, empowered, and efficient global response coordination and procurement entity. Unfortunately, effectively containing global pandemics is not the only transboundary public good problem that the international community is grappling with; a few others that come to mind are reducing the deleterious impact of climate change, eliminating extreme poverty, dealing with antimicrobial resistance, and addressing other urgent public health and economic development and security challenges to prevent cross-boundary spillovers. The international community, including the

international financial institutions, need to find ways to effectively tackle all these transboundary public goods without further loss of time; and in doing so should not underestimate the reality of future pandemics. Should the international community not take the steps now to empower an entity to effectively lead the world out of future pandemics as quickly as possible then humanity will be fated to muddle through – as we have done during COVID-19 – based upon the underlying, incorrect premise that that each country can solve its own problems without concern for the rest of the world, resulting in an unprecedented loss of lives and livelihoods all over the globe.