

THE PANDEMIC FUND

A BLUEPRINT FOR SUCCESS



Save the Children

Save the Children exists to help every child reach their potential.

In more than 100 countries, we help children stay safe, healthy and keep learning. We lead the way on tackling big problems like pneumonia, hunger and protecting children in war, while making sure each child’s unique needs are cared for.

We know we can’t do this alone. Together with children, partners and supporters, we work to help every child become whoever they want to be.

ACKNOWLEDGEMENTS

This report was written by Nidda Yusuf, Margot Nauleau and Karrar Karrar.

Many colleagues across the Save the Children movement contributed to the report. In particular, we thank Dylan Bruce, Marionka Pohl and Tara Brace-John for their comments, additions and guidance.

We also thank Professor Garrett Wallace Brown from the University of Leeds for his guidance.

Published by
Save the Children
1 St John’s Lane
London EC1M 4AR
UK

+44 (0)20 7012 6400
savethechildren.org.uk

First published 2022

© The Save the Children Fund 2022

The Save the Children Fund is a charity registered in England and Wales (213890), Scotland (SC039570) and the Isle of Man (199). Registered Company No. 178159

This publication is copyright, but may be reproduced by any method without fee or prior permission for teaching purposes, but not for resale. For copying in any other circumstances, prior written permission must be obtained from the publisher, and a fee may be payable.

Cover photo: Abdul-Karim (10 mths) with his mother Leila (25), receives treatment for malnutrition & diarrhoea at a Save the Children mobile clinic

Typeset by compoundEye

Background	1
1. Health systems centred around communities	4
2. Building resilient health systems	6
3. Equitable access for all countries	7
4. A sustainable fund for the future	8
Conclusion: a blueprint for success	10
Endnotes	11



Isabella is washing her baby Cecilia outside their home in Omugo refugee settlement.

THE PANDEMIC FUND

A BLUEPRINT FOR SUCCESS

With limited financing available for health, it is critical that we maximise the impact of the investments in the Pandemic Fund. By doing so we will make gains in child survival and improve health outcomes for all women, children and adolescents.

It is therefore essential that interventions must be equitable, inclusive, integrated and that all stakeholders play an equal part in their design:

HEALTH SYSTEMS CENTRED AROUND COMMUNITIES

- Proposals co-designed through a nationally led participatory approach
- Driven by local expertise to sustainably develop local skills for the long run
- Engaging non-traditional implementing entities to reach the last mile
- Inclusive of civil society and communities for meaningful buy-in at all levels of society
- Democratic, equitable and inclusive governance

BUILDING RESILIENT HEALTH SYSTEMS

- In line with national health action plans and priorities
- Aligned with nationally and internationally funded mechanisms and programmes
- Focused on making primary healthcare systems stronger
- Shifting away from health systems designed around diseases and institutions to health systems designed for people

EQUITABLE ACCESS FOR ALL COUNTRIES

- Providing universal and equitable access to the Fund for all countries
- With a co-financing model which balances each country's ability to pay with the need to incentivise PPR investments
- Developing an individualised approach for incentivising domestic spending on PPR in struggling economies
- With blended and highly concessional financing models made available for resource-constrained countries

A SUSTAINABLE FUND FOR THE FUTURE

- Funding harnessed from a range of donors
- Contributions accounted for outside of traditional official development aid budgets
- Influencing national policymakers to invest in PPR over the long term
- Actively improving and reforming health financing for sustainable impact

Background

The COVID-19 pandemic highlighted the fragile nature of the global pandemic prevention, preparedness and response (PPR) architecture. The pandemic has threatened lives, livelihoods and civil liberties. In addition to the lives lost, pandemic related disruptions led to a global recession, the largest since World War II with estimates of loss to the global economy standing at US\$13.8 trillion through to 2024.¹ For the first time in the 32 years, the Human Development Index (HDI), which measures a nation's health, education, and standard of living, has declined globally for two years in a row, falling back to its 2016 levels.² The pandemic and associated impacts adversely impact the rights of children and adolescents to survive, thrive, learn and be protected.

Adequate and well financed PPR mechanisms are needed to strengthen our collective capabilities to mitigate future emergencies. Existing instruments to tackle public health emergencies, such as the International Health Regulations, have limited scope in the absence of sustainable and predictable financing. The additional financing requirements associated with strengthening PPR capabilities have not been meaningfully addressed at the international level.³

Long-term and sustainable financing is critical to effectively strengthen health systems as well as to prepare for and respond to future public health emergencies.^{4,5} With political appetite high, interesting developments in the PPR space, and lessons to be learned from the global response to COVID-19, it is a good time to design and implement a financing instrument that is universally accessible to

all countries requiring support. This paper will explore the principles that will ensure the instrument is fit for purpose and can contribute to building robust health systems which can stand up to future pandemics.

LESSONS FROM THE COVID-19 RESPONSE

As of 5 October 2022, more than 6.5 million deaths from COVID-19 have been officially recorded by the World Health Organization, though estimates suggest the true figure could be three times higher.⁶ Health systems with weak public health and primary care capabilities, such as in testing, laboratory capacity and health information systems, make it difficult to provide an accurate estimate. In addition, this limits the ability to mount an effective public health response based on real-time data. Many health systems were unable to respond adequately to the increased demand for health care due to the pandemic, nor could they maintain routine health services.⁷

There is a clear need to invest in resilient primary care systems to enable effective adaptation to surges in demand and bolster global health security, while still maintaining critical essential health services, such as routine immunisation services. Furthermore, recent assessments of global health security capabilities⁸ highlighted that without dedicated financial investments to ensure this, countries are at risk of globally catastrophic biological events, potentially at a scale worse than COVID-19.

The World Health Organization and partners established the Access to COVID-19 Tools Accelerator (ACT-A) to reduce the inequalities in access to COVID-19 commodities. However, some countries, such as Madagascar, Papua New Guinea, Yemen, Senegal, and others, have yet to achieve even 10% COVID-19 vaccine coverage, far below the World Health Organization (WHO) recommendation (70% coverage).⁹ This stark disparity in coverage can be

“The ‘last mile’ of health service delivery is the first mile of health security”

Dr Mike Ryan
Executive Director of WHO Health
Emergencies Programme



Jeanne, the midwife, with expectant mother, Claudine

seen in Figure 1, with Africa particularly lagging behind in vaccine coverage rates.¹⁰

Despite global rhetoric around equity and an ambitious multilateral response in the form of ACT-A, inadequate financing hindered global efforts to ensure equitable access to COVID-19 tools. Financial support for ACT-A remained a critical challenge throughout. As of 25 July 2022, only \$5.71 billion of the 2021/22 funding target had been reached, leaving a \$11.14 billion financing gap.¹¹ In the early stages of the response, the lack of sufficient financial backing from international donors compromised negotiations for advance purchase agreements with manufacturers. Leading to ACT-A being overtaken by bilateral deals made by wealthier countries¹² and hampered ACT-A's ability to supply resource-constrained countries with vaccines during the most critical stages of the pandemic. The difficulty in raising financing during the crisis shows the importance of upstream investments in PPR to avoid having to leverage large investments during a response.

REBUILDING TRUST IN THE GLOBAL SYSTEM

A new Financial Intermediary Fund (FIF) named the Pandemic Fund, hosted by the World Bank, has been established to promote investments in pandemic prevention, preparedness and response (PPR). A paper prepared by the World Health Organization and the

World Bank for the G20 identified the greatest PPR financing gaps in countries with the smallest fiscal capacities to tackle them.¹³

The paper estimates the total annual financing need for the future PPR system at US\$ 31.1 billion. Given current and expected domestic and international financing for PPR, it estimates that \$10.5 billion each year would need to be filled by external financing sources. Comparatively, the Global Fund, currently the largest global health institution (GHI), asked for \$18 billion for its activities between 2023–2025. A fund that realises this financing ambition would become one of the largest multilateral players in health. At \$10.5 bn per year, there are reservations that donors' investments may come at the cost of reduced contributions towards other health priorities.¹⁴

Currently, the Pandemic Fund has raised approximately \$1.4bn, which is 13% of its target for year one. However, in doing so, it has overtaken both the Global Financing Facility and the Coalition for Epidemic Preparedness in size, when weighted on an annual scale.¹⁵

With limited external financing available, it is critical that the impact of these investments are maximised. Through a multistakeholder consensus process, we must strive to design an equitable, inclusive, integrated instrument, with decision-making driven by all actors equally.

FIGURE 1. INEQUITY DEFINED OUR GLOBAL COVID-19 VACCINE ROLLOUT

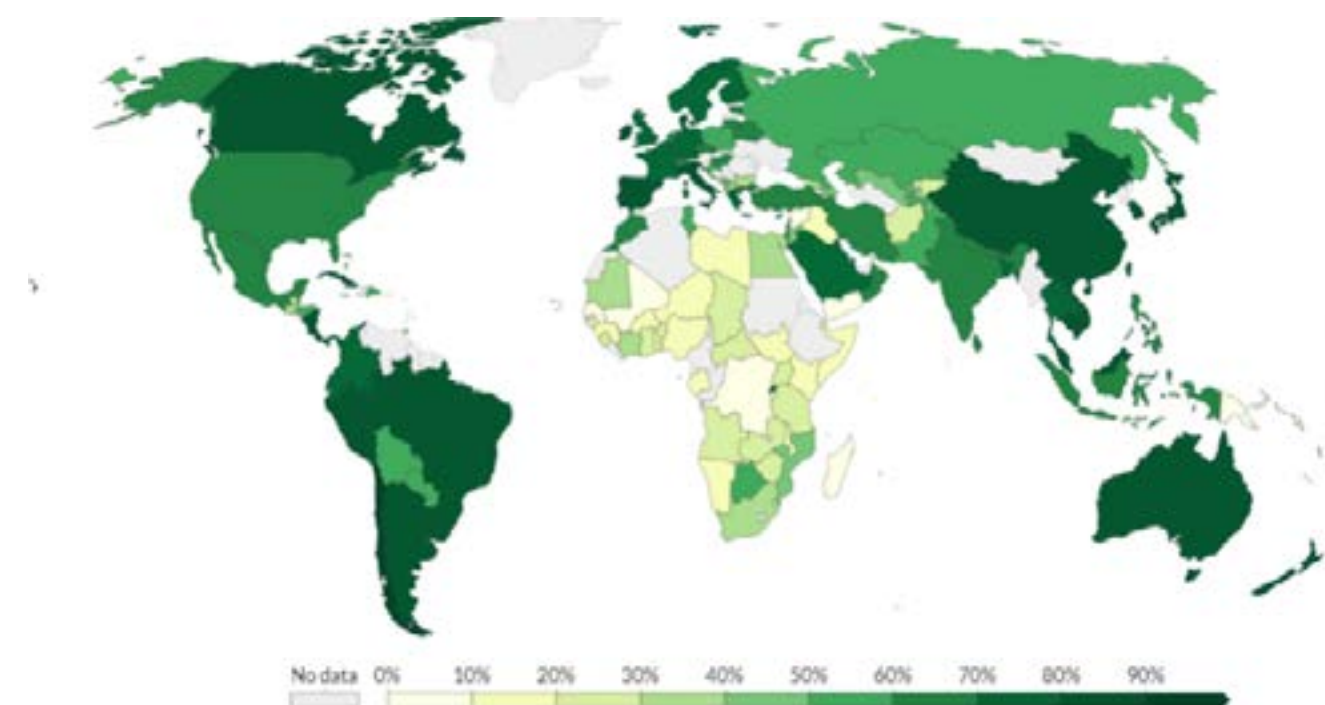
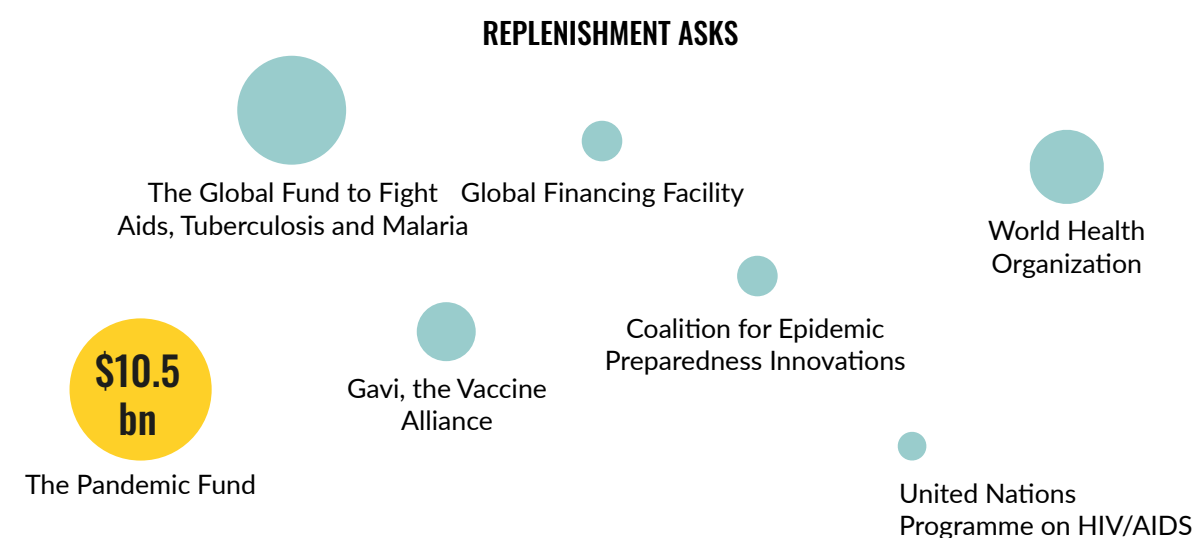


FIGURE 2. A FULLY FINANCED PANDEMIC FUND COULD SURPASS ALL OTHER HEALTH FUNDS



Source: Authors' own calculations and weighted on an annual scale



1 Health systems centred around communities

Systems thinking was adopted to understand both the complex relationships within the system and external factors.¹⁶ The WHO refers to the individual parts of the health system as ‘building blocks’, and the relationships and synergies between the building blocks form the system.¹⁷ Within this framework, the introduction of any additional components into the health system — such as PPR — would affect the entire system. Utilising a systems perspective, which grasps how different components of each health system relate to each other is critical to ensure PPR investments through the Pandemic Fund incrementally strengthen the entire health system. To reduce the risk of unintended effects, the Fund must be driven, governed and co-designed through a participatory approach, by an inclusive set of representatives and stakeholders from the countries and regions in which its programmes will be deployed. These individuals must have an expert-level understanding of their health system.

The COVID-19 Tools Accelerator (ACT-A) provides a good example of where interventions could have been better informed by national stakeholders and wider health system constraints taken into consideration. In the initial stages of the pandemic, some countries did not have the immediate capacity to deliver COVID-19 vaccines to their populations, and vaccines often had a short shelf life.¹⁸ This information was insufficiently factored into planning processes by ACT-A, leading to valuable doses exceeding their expiration date, resulting in a chronic waste of limited resources. An inclusive consultative process may have identified and addressed bottlenecks in the health system. An end-to-end solution could have been developed leading to more vaccines administered and less wastage of commodities that were in short supply. COVAX, the upstream commodity procurement component of ACT-A, received disproportionate attention and funding, whilst the fragility of the systems which were required to deliver these commodities were inadequately addressed and financed. This is



Deena lost her baby sister due to a lack of healthcare in Afghanistan

“Resilient health systems need to be able to increase and surge when new challenges come while continuing essential health services”

Dr. Juan Pablo Uribe
World Bank Global Director for Health, Nutrition and Population

demonstrated by the fact that of the \$10.8bn raised to date, \$10bn has been spent on procurement and less than \$1bn on strengthening the systems needed to ensure these commodities can be delivered in country.¹⁹

It is increasingly recognised that vertical donor-driven priorities are contributing to fragmentation and a lack of harmonisation within national health systems.²⁰ Examples of this include establishing parallel systems, such as health management information systems. These programmes effectively duplicate tasks and

FIGURE 3. WHO HEALTH SYSTEM BUILDING BLOCKS

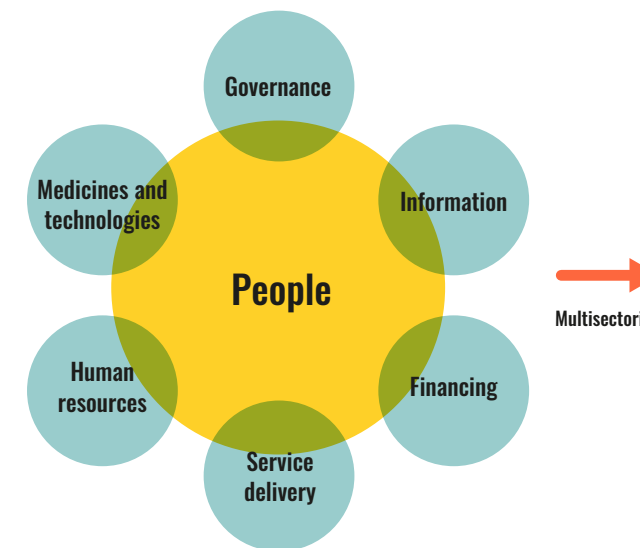
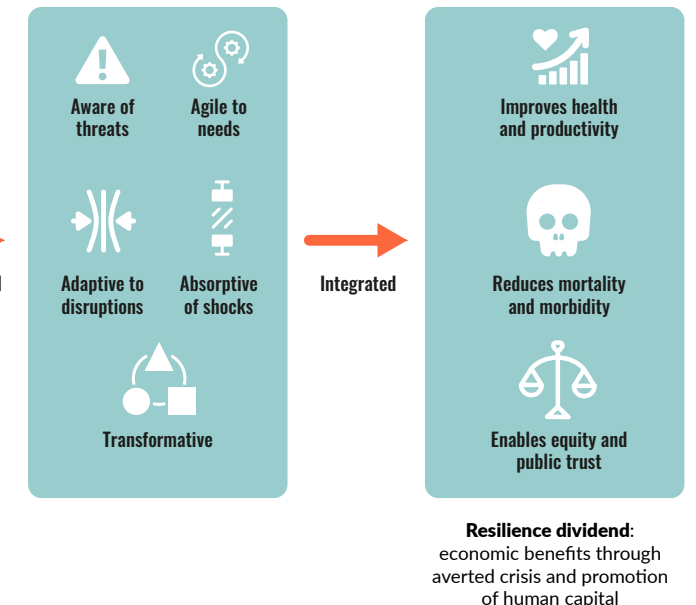


FIGURE 4. ADOPTED FROM WORLD BANK FRAMEWORK FOR HEALTH-SYSTEM RESILIENCE AS ONLY A SMALL PORTION OF THE FRAMEWORK HAS BEEN USED, NOT ALL



HOW CIVIL SOCIETY ORGANISATIONS, SUCH AS SAVE THE CHILDREN, CAN ADD VALUE IN PANDEMIC PREVENTION, PREPAREDNESS AND RESPONSE:

- Our Centre for Utilising Behavioural Insights for Children (CUBIC) uses behavioural science to positively influence and change behaviours. They found factoring in wider social determinants, social proofing and engaging national and local leadership has proven to raise confidence in the COVID-19 vaccine and improve vaccine uptake.
- Save the Children has also supported routine expanded programmes on immunisation service delivery, often in the hardest to reach populations.
- We have facilitated case management both at the community and primary care levels, and implemented health promotion activities, vector control interventions and vaccination campaigns to bolster epidemic preparedness and response.
- Save the Children has developed an online dashboard to map out and align civil society and local partner's COVID-19 vaccine delivery programmes. This was to improve visibility in-country and to ensure coherence across pandemic response efforts.

thereby place additional pressures on overburdened health workers.²¹ To avoid similar inefficiencies creeping into the design of this new instrument, the individual programmes must be conceptualised by those who understand their health systems, and the potential effects of interventions across the system best. Expertise from regional and global organisations, such as the WHO, are also critical to ensuring any unintended risks arising from introducing additional elements into the systems are minimised.

Furthermore, harnessing local expertise and local capacity would enhance capacity in country and contribute to sustainably strengthening PPR systems in the longer term. This can be achieved by representatives from national governments, and other national stakeholders providing the day-to-day management of individual projects and civil society organisations having a key role as implementing partners. This would require going beyond relying on traditional multilateral partners, such as Gavi, the Vaccine Alliance, the Coalition for Epidemic Preparedness Innovations, and the Global Fund to Fight AIDS, Tuberculosis and Malaria as the sole implementing entities.

New partnerships and ways of working are key to furthering PPR efforts. A multistakeholder response, inclusive of non-traditional partners, such as CSOs who have extensive expertise and reach in brokering community support and buy in, is a central factor in ensuring meaningful buy in at all levels of society.



2 Building resilient health systems

The WHO's Framework on Integrated People-centred Health Services (IPCHS) calls for shifting away from health systems designed around diseases and health institutions, and towards health systems designed for and with people.²² The joint World Bank-WHO paper on PPR financing needs and gaps identified the areas that needed investment in low- and middle-income countries (LMICs), however many of the constraints countries faced during the COVID-19 pandemic were because of weaknesses in core health systems capabilities. This varied from one context to the next, but a recurrent theme was the shortage of health workers, and large inequalities between and within countries.²³ In line with the essence of the IPCHS, the Pandemic Fund must be designed to provide evidence-based and impact-based investments in health system strengthening that are both PPR sensitive and contribute to the day to day needs of the population.

Thinking beyond a siloed focus on health security investments, the success of the Fund will lie in its effectiveness in strengthening health systems. This should be based on a foundation that focuses on ensuring access to quality routine health services for the most marginalised, whilst ensuring they are financially protected.

Disease prevention programmes and preparedness interventions should be tailored to and embedded into national health systems, to both enhance health outcomes and achieve health security. As an example, improving the turnaround times for laboratory testing would support a faster response to an epidemic risk, however such interventions must be designed to ensure that the improvements in capacities also contribute to enhancing the quality of care for existing conditions.

The Pandemic Fund has a comparative advantage in its composition, with the current implementing partners covering most of the global health landscape. Beyond the scope of its own activities, the fund is well placed to catalyse alignment, complementarity and integration

with other internationally funded mechanisms. This can be done through funded programmes, but also through the Secretariate playing a role in strategically guiding investment decisions of its partners. This should reach far beyond PPR and in line with national health action plans, priorities and existing domestic investments. This fund can lead the way in developing an approach that is geared towards delivering quality health systems based on people's needs, while reducing the fragmentation, duplication, and inefficiencies in the existing model.²⁴ The role of WHO as the lead technical agency is critical in shifting away from the status quo and ensuring meaningful linkages between national and global initiatives. This can be done through the development of new tools but also by developing new ways of working and new partnerships.

PPR INVESTMENTS CAN CONTRIBUTE TO HORIZONTAL HEALTH SYSTEMS STRENGTHENING IN THE FOLLOWING WAYS:

- A workforce which is well motivated, equipped and trained, that can offer quality care and can also task shift and adapt to changing circumstances.
- By strengthening key medical infrastructure, such as oxygen systems, health systems would be better equipped to respond to both chronic cases and acute crises, such as for the treatment of novel respiratory conditions.
- Interoperable health information systems, tailored to individual country contexts and wider infrastructure constraints, can provide accurate and timely data to inform public health decisions for both essential health services and during emergencies.



3 Equitable access for all countries

The White Paper²⁵ refers to incentivising greater investments from LMICs, including through matching funding from domestic resources. The White Paper that outlines the establishment of the FIF references a requirement for the matching of domestic resources. In addition, during a consultation at the World Bank in Geneva, it was outlined that the Fund will match country investments in PPR on a \$1:\$1 basis. Currently, the development of a more equitable model is under discussion. Co-financing, when appropriate, is a common tool used to incentivise additional domestic financing, and promotes government ownership, sustainability in public finances, and reduces the likelihood of fragmentation and backsliding once external assistance comes to an end.

Co-financing as a lever for generating domestic resources has proven successful. The Global Fund stipulates that the recipient government must commit additional domestic resources equivalent to between 15–30% of allocated funding, which has increased domestic health financing by 46% between 2014–2016.²⁶ However there have also been instances where the mechanism presents a barrier to governments accessing critical health interventions. Fragile states have struggled to meet Gavi's co-financing requirements to introduce vaccines for some of their highest burden diseases. One example is the GAVI-supported pneumococcal conjugate vaccine.²⁷ It may be a significantly more difficult task to convince decision makers to earmark funds for preventative initiatives.

Flexible approaches to co-financing requirements will be necessary to provide equitable access to interventions provided by the Pandemic Fund. In a 2021 report, the World Bank provided an analysis of governmental health expenditure in the context of the pandemic and subsequent economic crisis. The paper highlighted that low-income countries would have to make difficult resource allocation decisions in the coming years. Considering, low-income

countries lack the economic capacity to invest in PPR, on average they would have to reallocate 50% of their current health budget to close the financing gap.²⁸ The latest iteration of the paper shows a further decline in these countries' health spending capabilities²⁹ Without support, governments will have to make difficult choices between maintaining routine health services and lifesaving care, and bolstering health security for future threats.

Maximising buy-in from national governments can only be achieved by reducing these barriers. Without this, the fund risks inadvertently embedding structural inequities in its very design, where access to investments is contingent on countries' ability to pay, rather than needs based. This could result in the deprioritisation of the countries that have some of the greatest health systems gaps. A flexible, individualised, financing model, which balances each country's ability to pay with the need to catalyse investments, would generate greater investments in PPR.

For resource-constrained countries including fragile states, tailored criteria for incentivising domestic resources in PPR may be necessary. This could be income-adjusted, or more appropriately, adjusted for government spending. This approach should be multifactorial and capture the macro-level fiscal environment in-country, including factoring in debt repayments that are crowding out health spending.

Grant financing could also be blended with highly concessional forms of financing. Similarly, to the Global Financing Facility model, concessional lending for low-income countries could be complemented by the International Development Association (IDA), or an alternative mechanism. For middle-income countries, funding could be complemented by other forms of financing from international financing institutions. These would lower any immediate financing constraints and improve the appeal of allocating national resources for PPR purposes.



4 A sustainable fund for the future

Donors, international financing institutions, and the multilateral system must ensure enablers are in place to support national governments in sustainably financing PPR investments through domestic resources. As discussed above, many governments are facing budgetary constraints. The latest analysis shows that 41 countries face the prospect of lower per capita government spending in 2027 than in 2019 (pre-pandemic), resulting to a lost decade for public investment.³⁰

It is unclear how The Pandemic Fund would support countries to raise revenue or reform health financing systems to fulfil this additional demand on the health budget over the long term. Without a plan, this approach could lead to the crowding out of other priorities, such as essential health services,³¹ or result in additional unsustainable public debt.

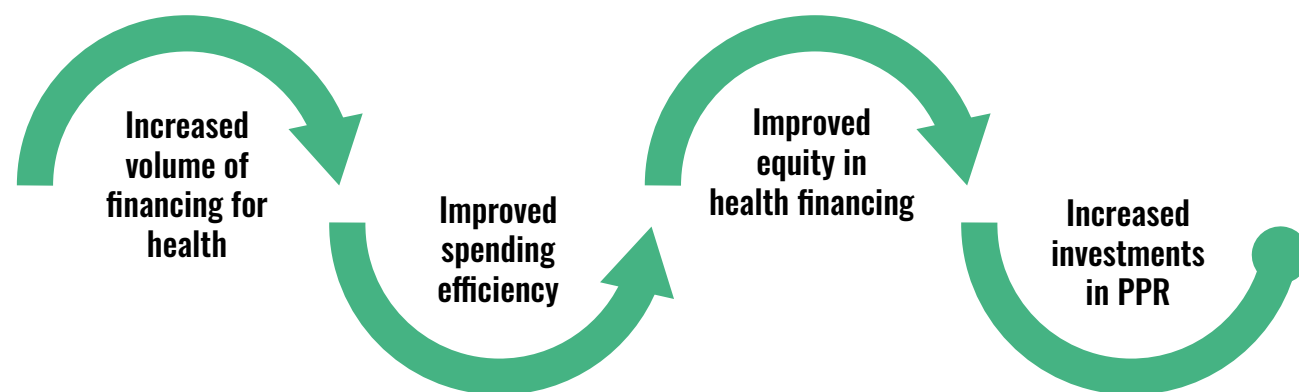
Many GHIs play a role in improving domestic financing for health in addition to their core mandate. The GFF supports health financing reforms in select countries for more sustainable results. This is in addition to its focus on improving reproductive, maternal, newborn, child and adolescent health and nutrition. The GFF, in collaboration with wider

World Bank expertise, has supported countries to improve public financial management (PFM), financial protection, spending efficiency, resource mapping and to finance the health system more equitably.³² Similarly, beyond the three core diseases, the Global Fund also plays an active role in domestic financing for health. The Global Fund has engaged in increasing domestic spending on health by supporting advocacy and technical assistance, improving PFM and health spending efficiency and effectiveness.³³

The Pandemic Fund is well placed to work with other GHIs and governments to identify where it could be best placed to provide expertise on the sustainable health financing agenda. Improving domestic health financing and increasing the volume of financing would also result in more and more sustainable investments in PPR in the longer term.

A WELL AND SUSTAINABLY RESOURCED PANDEMIC FUND

The critical enabling factor for strengthening weak health systems and global health security is a well-funded Pandemic Fund. Focusing on strengthening



the weakest health systems would contribute to global health security for all, and insulate against further shocks to economies.^{34, 35}

THE RESILIENCE DIVIDEND

The joint World Bank-WHO paper on PPR financing identified some specific areas where there are needs and gaps. If these are included in the scope of the FIF, it could contribute to strengthening global health security in the following ways:

- Rolling out awareness-raising campaigns in communities would reduce the risk of zoonotic threats, such as monkeypox, developing and spreading across the globe.
- Strengthening laboratory capacity anywhere in the world will contribute to quickly identifying existing and future threats, such as antimicrobial resistance.
- Investing in interoperable and cloud-based health information systems in one region would provide more timely surveillance information and avert outbreaks from spreading to others.

In monetary terms, one virus has the capability of costing the global economy an estimated \$13.8 trillion – the IMF's projected economic loss through to 2024 due COVID-19.³⁶ In contrast, the external financing requirement for PPR is \$10.5 billion per year for five years. Donor countries need to take responsibility and provide their fair share of financing to ensure this goal is met. Investments into the fund are designed to augment financing for health security, benefiting the donor directly by the reducing the risk of new biological threats. As such, this investment should not be confined to development assistance alone. Governmental donors and development agencies should be encouraged to view all contributions to the Fund as additional to their official development assistance budgets.

Importantly, contributions from non-traditional global health donors have been welcomed, such as from Indonesia and Singapore.³⁷ All other country donors must also invest in global health security, in line with their economic capabilities. This would ultimately double up as an insurance policy to insulate against further shocks to their economies.



Alice the midwife holds 18-day-old baby Alex who was named after her in White Plains Clinic, Liberia.

Conclusion: a blueprint for success

The response to the COVID-19 pandemic has provided lessons for us all. Upstream financing of PPR is the most cost-effective option to mitigate and better protect against emerging and future health threats. The Pandemic Fund presents a great opportunity to ensure we rebuild health systems with equity at the centre. This must be guided by the core values set out below:

NATIONALLY DRIVEN

Programmes co-designed through participatory approaches and aligned with national health action plans and priorities

SUSTAINABLE

Leveraged used to incentivise domestic investments, with a tailored approach for struggling economies

EQUITABLE

Universally accessible to all, based on need and donor contributions accounted for outside of ODA

COMPLEMENTARY

Effectively integrated with nationally and internationally funded mechanisms within the existing health system

EMPOWERING

National governments, stakeholders & civil society organisations are responsible for the day-to-day decision making

EFFICIENT

Local and regional expertise behind the delivery of PPR activities and building local capabilities for the long run

INCLUSIVE

Governed through an equitable and democratic structure and driven through diverse multistakeholder partnerships

Adopting these recommendations will help in ensuring an effective instrument is in place to best guarantee against future threats. This will secure a healthier world for today's women, children and adolescents, as well as future generations, ensuring that they are well protected, can survive and thrive.

Endnotes

1 "New IMF Staff Paper Strategy to Manage the Long Term Risks of COVID-19", International Monetary Fund, April 2022.

2 Human Development Report 2021-2022, United Nations Development Programme, 8 September 2022.

3 From panic and neglect to Investing in Health Security', World Bank, December 2017.

4 "Strengthening health systems to protect children's rights in times of public health emergencies", Save the Children, November 2021.

5 Health systems for health security", World Health Organisation, 25 June 2021.

6 "Covid-19: Global death toll may be three times higher than official records, study suggests", BMJ, 11 March 2022.

7 Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic', World Health Organisation, February 2022.

8 "2021 Global Health Security Index", 2021.

9 External Evaluation of the Access To COVID-19 Tools Accelerator (ACT-A), October 2022.

10 Share of people who completed the initial COVID-19 vaccination protocol vs. share who received at least one vaccine dose', Our World in Data, 2022.

11 "Access to COVID-19 tools funding commitment tracker", World Health Organisation, July 2022.

12 "No Regrets" Purchasing in a pandemic: making the most of advance purchase agreements, Global Health 18, 62, 17 June 2022.

13 "Analysis of Pandemic Preparedness and Response (PPR) architecture, financing needs, gaps and mechanisms", Paper prepared by the WHO and World Bank for the G20 Joint Finance & Health Task Force, March 22, 2022.

14 The Implications for Health Financing after COVID-19, working paper, University of Leeds, UK (g.w.brown@leeds.ac.uk).

15 "Closing the Gap: Global Pandemic Fund Tracker", Pandemic Action Network, ONE Campaign, September 2022.

16 "Systems thinking for health systems strengthening", World Health Organisation, 2009.

17 "Everybody's business — strengthening health systems to improve health outcomes: WHO's framework for action", World Health Organisation, 2007.

18 "The Absorption-Capacity Challenge". Global Health Security Consortium, August 2021.

19 COVAX CSO Dialogue with ACT-A CSO, 14th September.

20 Overcoming governance challenges in international health financing', Transparency International and the University of Leeds, 28 September 2022.

21 "Data disharmony: How can donors better act on their commitments?", Development Initiatives, March 2022.

22 "Framework on Integrated People-centred Health Services", World Health Organisation, 15 April, 2016.

23 "Probable Futures and Radical Possibilities. An exploration of the future roles of health workers globally", All Party Parliamentary Group on Global Health, August 2022.

24 "A SYSTEM-WIDE APPROACH TO ANALYSING EFFICIENCY ACROSS HEALTH PROGRAMMES", World Health Organisation, 2015.

25 "Establishment of a Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response (PPR)", World Bank Board Paper, World Bank, June 2022.

26 "FOCUS ON DOMESTIC FINANCING FOR HEALTH", The Global Fund, August 2019.

27 "Calling on the GAVI Board to Enable Introduction of Lifesaving Pneumonia Vaccine for Children in Fragile Settings". Stopppneumonia.org, June 9th, 2022.

28 "FROM DOUBLE SHOCK TO DOUBLE RECOVERY - IMPLICATIONS AND OPTIONS FOR HEALTH FINANCING IN THE TIME OF COVID-19. Technical update: widening rifts", World Bank report, September 2021.

29 "FROM DOUBLE SHOCK TO DOUBLE RECOVERY - IMPLICATIONS AND OPTIONS FOR HEALTH FINANCING IN THE TIME OF COVID-19. Technical update: old scars, new wounds", World Bank report, September 2022.

30 "FROM DOUBLE SHOCK TO DOUBLE RECOVERY - IMPLICATIONS AND OPTIONS FOR HEALTH FINANCING IN THE TIME OF COVID-19. Technical update: old scars, new wounds", World Bank report, September 2022.

31 Governance Challenges in International Health Financing: Lessons for the New Pandemic Fund, working paper, University of Leeds, UK (g.w.brown@leeds.ac.uk).

32 Improving Health Financing to Accelerate Progress towards Universal Health Coverage', The Global Financing Facility, 2022.

33 The Global Fund's Role and Approach to Domestic Financing for Health', The Global Fund, 21 July 2022.

34 "FROM DOUBLE SHOCK TO DOUBLE RECOVERY - IMPLICATIONS AND OPTIONS FOR HEALTH FINANCING IN THE TIME OF COVID-19", World Bank report, March 2021.

35 "Health systems for health security", World Health Organisation, 25 June 2021

36 "New IMF Staff Paper Strategy to Manage the Long Term Risks of COVID-19", International Monetary Fund, April 2022.

37 "World Bank Board Approves New Fund for Pandemic Prevention, Preparedness and Response", Press Release, World Bank, 30 June 2022.