



The Pandemic Agreement at an Impasse

Proportionality, Political Incentives, and the Future
of Global Health Governance

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Acronyms and abbreviations

Africa CDC – Africa Centres for Disease Control and Prevention

CEPI – Coalition for Epidemic Preparedness Innovations

COVAX – COVID-19 Vaccines Global Access

COVID-19 – Coronavirus Disease 2019

FIF – Financial Intermediary Fund

G20 – Group of Twenty

GDP – Gross Domestic Product

GPMB – Global Preparedness Monitoring Board

H5N1 – Influenza A virus subtype (Hemagglutinin type 5, Neuraminidase type 1)

HLIP – High-Level Independent Panel

HPW – Health Policy Watch

IHR – International Health Regulations

IGWG – Intergovernmental Working Group (on PABS)

IHME – Institute for Health Metrics and Evaluation

IHRP – International Health Reform Panel

INB – Intergovernmental Negotiating Body

LMICs – Low- and Middle-Income Countries

mRNA – messenger ribonucleic acid

NGOs – non-governmental organizations

ODA – Official Development Assistance

OECD – Organisation for Economic Co-operation and Development

PABS – Pathogen Access and Benefit Sharing

PHSMs – Public Health and Social Measures

PPPR – Pandemic Prevention, Preparedness and Response

REPPARE – Re-Evaluating the Pandemic Preparedness and REsponse agenda

SARS-CoV-2 – Severe Acute Respiratory Syndrome Coronavirus 2

WHA – World Health Assembly

WHO – World Health Organization

WHO AFRO – World Health Organization Regional Office for Africa

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Executive Summary

The repeated failure to conclude negotiations on the WHO Pandemic Agreement, culminating in further extensions of talks into 2026, reflects more than a temporary diplomatic impasse. It exposes deeper structural tensions within the proposed framework itself. The central unresolved issue – Pathogen Access and Benefit Sharing (PABS) – has become a focal point for wider disagreements concerning sovereignty, reciprocity, proportionality, and the future direction of global health governance.

Firstly, the Pandemic Agreement itself is symbolic of a transition of global health priorities from underlying determinants of health to a vertical, commodity-based approach, which is often seen as reimposing the prominence of interests of wealthy countries over greater health burdens in lower-income States. Prioritization of programs for high-burden diseases and resilience measures such as nutrition, sanitation and primary care are perceived as being displaced by a health security agenda that entails high investment for relatively low-burden outbreaks.

Secondly, at the very core of the current negotiation is a concern about the fundamental asymmetry between obligations and benefits. Countries are being asked to undertake increasingly concrete commitments involving pathogen sharing, genomic sequencing, surveillance expansion, regulatory alignment, and preparedness financing. In return, they are promised access to vaccines, therapeutics, diagnostics, technology transfer, and emergency financing during future crises. Yet, these benefits remain uncertain in timing, enforceability, affordability, and distribution (WHO 2025A). Many lower-resource countries therefore increasingly perceive the Agreement as institutionalizing binding obligations while

leaving the most valuable benefits dependent upon political discretion, manufacturing concentration, and market power.

These tensions are not new. Earlier disputes over “viral sovereignty,” particularly Indonesia’s refusal during the H5N1 outbreaks to continue sharing virus samples without stronger guarantees of reciprocal access, exposed longstanding concerns regarding equity and control within global health governance (Fidler 2008; Elbe 2010).

Covid-19 intensified these concerns. High-income countries secured priority access to vaccines while many lower-income countries relied on delayed and underwhelming multilateral mechanisms such as COVAX (Usher 2021). Yet, equal access to pharmaceutical commodities did not necessarily imply equal public health benefit across populations with very different demographic structures and disease burdens, particularly in younger African populations (Bell and Paul 2022).

The broader Pandemic Prevention, Preparedness and Response (PPPR) agenda also rests upon assumptions regarding pandemic frequency, severity, and economic risk that remain more contested than current policy discourse often suggests. Expanded surveillance and genomic sequencing inevitably increase outbreak detection. However, increased detection does not necessarily imply corresponding increases in severe disease burden or pandemic mortality. Analyses associated with REPPARE (Re-Evaluating the Pandemic Preparedness and REsponse agenda) demonstrate that, once changes in surveillance intensity and definitional expansion are accounted for, evidence supporting claims of sharply escalating pandemic frequency becomes considerably weaker than often portrayed within preparedness narratives (Brown et al. 2024; Bell et al. 2024A; Bell et al. 2024B).

Preparedness financing proposals are highly ambitious, with WHO, World Bank, and G20 estimates suggesting costs exceeding \$31 billion annually, excluding additional spending associated with One Health and manufacturing readiness initiatives (World Bank 2022A; G20 HLIP 2021). Critics note that many economic models underpinning these proposals rely upon contested assumptions regarding future pandemic burden and economic loss while insufficiently distinguishing between harms caused directly by pathogens and those generated by elective policy responses such as lockdowns and economic shutdowns.

Preparedness spending therefore cannot be evaluated in isolation from competing health priorities. Resources directed toward surveillance systems, emergency infrastructure, manufacturing readiness, and pharmaceutical stockpiles may further reduce fiscal space for addressing tuberculosis, malaria, nutrition, maternal health, sanitation, and broader health-system resilience. For many lower-resource countries, these continue to impose far greater and more immediate burdens on population health.

The Pandemic Agreement negotiations are further shaped by institutional and political incentives. International organizations gain expanded mandates and financing streams through preparedness frameworks. Governments seek to demonstrate vigilance against future threats while protecting domestic political interests. Pharmaceutical manufacturers benefit from long-term demand for manufacturing readiness, platform technologies, emergency procurement systems, and accelerated regulatory pathways. Negotiators themselves operate within systems that frequently reward visible progress toward agreement, rather than reassessment of underlying assumptions to ensure that good health outcomes are being achieved.

The result is the gradual emergence of a permanent preparedness architecture centered on surveillance expansion, emergency declaration, and accelerated pharmaceutical deployment. While elements of this approach may prove valuable under certain conditions, they also risk institutionalizing a highly centralized and biomedicalized model of public health governance whose proportionality, opportunity costs, and evidentiary foundations remain insufficiently examined.

Questioning the proportionality or urgency of the Pandemic Agreement does not imply opposition to international cooperation itself. Existing International Health Regulations already provide mechanisms for outbreak notification, information sharing, and coordination. The additional value provided specifically by the Pandemic Agreement remains insufficiently articulated beyond expanded preparedness financing, manufacturing initiatives, PABS arrangements, and further institutionalization of the wider PPPR agenda. Establishing treaty-like mechanisms through the Pandemic Agreement, and the imposition of minimum financing benchmarks, as proposed in the upcoming United Nations high-level

meeting on pandemics in September 2026, serve only to limit flexibility in the ability to respond to other and greater public health threats.

The present impasse should therefore not be viewed simply as diplomatic failure. Rather, it represents an important moment of political reassessment. Resistance from the Africa Group and other Member States reflects growing concern that the current framework risks institutionalizing costly obligations, uncertain benefits, and a permanent emergency-oriented preparedness architecture, without adequately addressing broader determinants of population health, national priorities, or structural inequities within global health governance.

The central question is not whether international cooperation on health emergencies is necessary. It is whether the current Pandemic Agreement represents the most proportionate, evidence-based, and politically sustainable model through which such cooperation should occur.

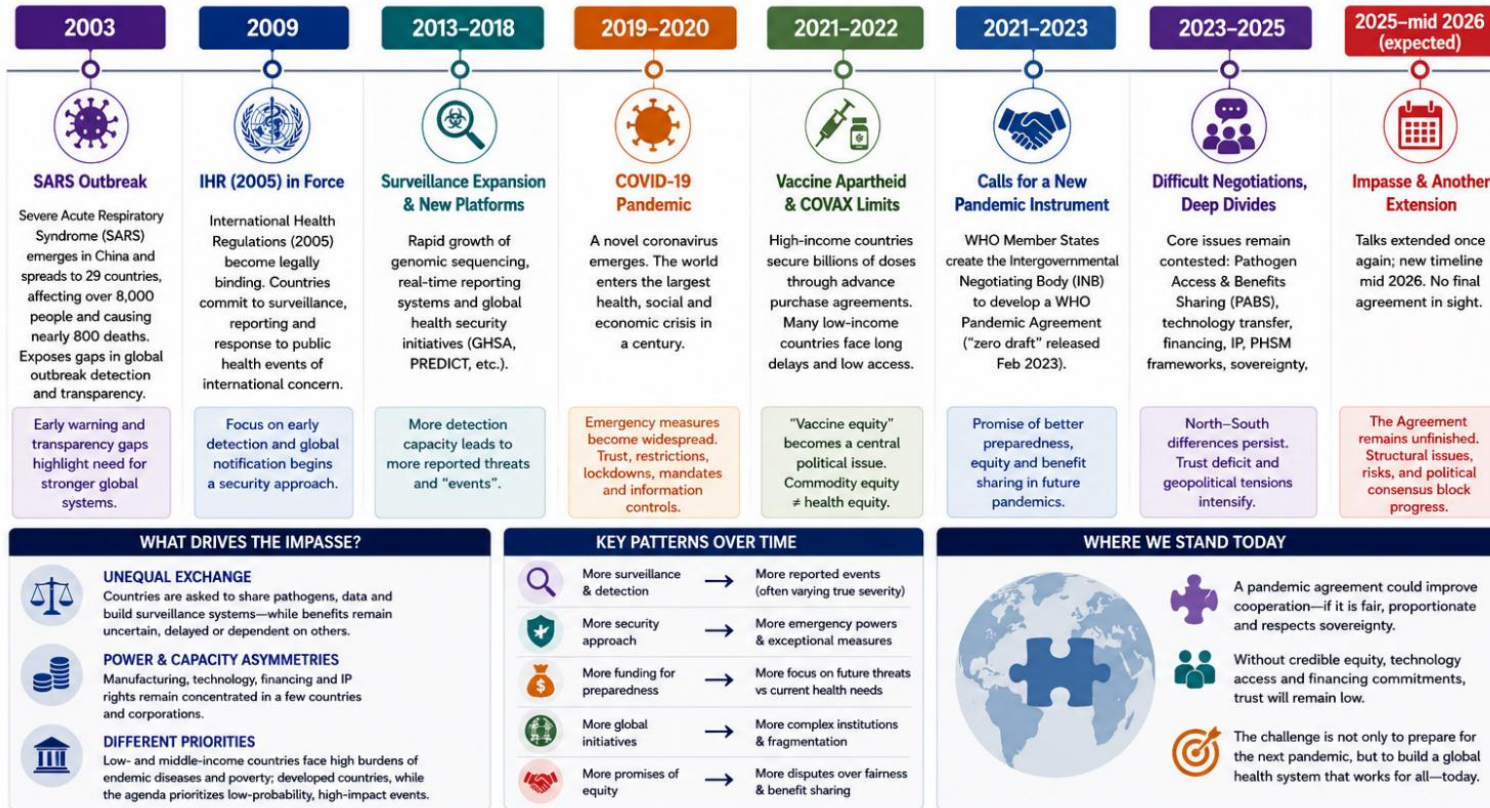
Introduction

Global public health has undergone fundamental change over recent decades. Structurally, it has seen a rapid expansion of international agencies and non-governmental organizations (NGOs) in response to expanding private (especially philanthropic) funding and official development assistance (ODA) for health. Some of these, such as Gavi, the Vaccine Alliance, CEPI (Coalition for Epidemic Preparedness Innovations) and Unitaid are public-private partnerships focused on the development and/or improved access to health commodities. Access to vaccines has been a dominant focus, but also a broader range of technologies reflecting recent innovations in biotechnology.

Programmatically, global public health has refocused significantly during this period on health security, most apparent in the pandemic prevention, preparedness and response agenda (PPPR). While increasingly prominent since the SARS outbreak of 2003, after COVID-19, health security and PPPR have come to dominate global health debates and funding (see Figure 1, below). The amendments to the International Health Regulations (IHR) agreed in 2024 (WHO 2024), and the Pandemic Agreement, provisionally agreed at the World Health Assembly in 2025 (WHO 2025A), have sought to codify these changes, putting the World Health Organization in a role of increased influence over coordination of national and international responses to infectious disease outbreaks.

From SARS 2003 to a Global Pandemic Treaty: A Timeline of Events

Two decades of contested governance, unequal access and an unfinished agreement



“ The pandemic treaty impasse is not just about legal text—it’s about power, priorities and the kind of global health future we choose to build. ”

Note: Timeline events are approximate and overlap. Focus is on governance and policy milestones.

Sources: WHO; UN O’Neill Institute; Usher (2021); Taylor (2022); Brookings (2023); Kaiser Family Foundation (2023); Reports of the Intergovernmental Negotiating Body for a WHO Pandemic Agreement (2023–2025).

Figure 1 – From Viral Sovereignty to a Global Pandemic Treaty

The evolution of pandemic governance from the H5N1 “viral sovereignty” dispute through Covid-19 and into the present Pandemic Agreement negotiations. The figure highlights the persistence of unresolved tensions surrounding sovereignty, equity, access, and benefit-sharing.

The diversion of funds necessary to increase PPPR effort and the broad focus on health security over the underlying determinants of health and wellbeing has raised questions regarding proportionality and value for money, particularly concerning health in low- and middle-income countries (LMICs). Analysis by REPPARE at the University of Leeds has demonstrated discrepancies between claims of urgency and burden driving the PPPR agenda and evidence on the ground (Bell et al. 2024A; Brown et al. 2024).

Similar disquiet delayed full consensus around the Pandemic Agreement, with continuing negotiation on the Pathogen Access and Benefit Sharing (PABS) annex delaying the full signing of the agreement. This disquiet reflects two concerns. First, there remains serious concern over what benefits can be relied upon from participating in pathogen and genomic data sharing for vaccine production. Second, there is a broader disquiet over the role of the WHO and the balance of decision-making between global and regional or national authorities. The International Health Reform Panel has previously published reports questioning the extent of centralization in global health policy and whether this is detrimental to good health governance (IHRP 2026A; IHRP 2026B).

This present report examines the impasse around the PABS annex of the Pandemic Agreement, its implications for global health, and potential ways forward that will ensure broader benefit.

1. Delay as Diagnosis, Not Failure

The repeated extension of negotiations over the WHO Pandemic Agreement provides important insight into the nature of the problem the Agreement seeks to address. Rather than representing a temporary procedural setback or failure of multilateral cooperation, the inability to resolve key issues – particularly around Pathogen Access and Benefit Sharing (PABS) – suggests the presence of deeper structural disagreements that cannot be resolved through incremental drafting adjustments alone.

This point is important because the Pandemic Agreement has frequently been framed by its proponents as an urgent and necessary response to lessons learned from Covid-19. Yet,

despite sustained political pressure to finalize negotiations, repeated negotiating rounds have failed to produce consensus. By mid-2026, the process had required multiple deadline extensions, with negotiations continuing well beyond original expectations. The persistence of disagreement indicates that Member States are not merely negotiating technical language, but contesting the underlying assumptions, obligations, and institutional logic embedded within the Agreement itself.

Moreover, concerns regarding the negotiation process have themselves contributed to growing unease among many delegations. During both the revised International Health Regulations (IHR) negotiations and the Pandemic Agreement discussions, substantial textual revisions were introduced late in the negotiating process, leaving limited time for review prior to formal consideration. Critics argued that compressed timelines disadvantaged lower-resource delegations with more limited technical and legal capacity, while also reducing opportunities for broader domestic scrutiny and deliberation. Sections of the Pandemic Agreement text were effectively finalized with only a short review window before negotiations moved toward closure, bypassing the longer deliberative periods normally associated with major international legal instruments.

These procedural concerns matter because the Agreement carries potentially significant long-term implications for national governance, public health financing, surveillance obligations, and emergency response systems. Negotiators are therefore not simply debating operational details, but questions of sovereignty, accountability, distributive justice, and institutional authority.

At its core, the Pandemic Agreement seeks to formalize a system of reciprocity in which countries contribute to global surveillance and preparedness infrastructure in exchange for future access to the benefits generated by that system. In principle, such collective action reflects a reasonable and potentially valuable objective. In practice, however, the experience of Covid-19 demonstrated how difficult such reciprocity becomes under conditions of uncertainty, scarcity, and national political pressure.

The Covid period exposed a central contradiction within contemporary global health governance. While international institutions emphasized solidarity, equitable access, and

multilateral coordination, actual distribution of critical countermeasures remained heavily shaped by national interest, manufacturing concentration, export controls, and bilateral purchasing power. High-income countries secured the majority of early vaccine supply through advance purchase agreements, frequently purchasing doses far exceeding immediate domestic population requirements. Meanwhile, many lower-income countries remained dependent on delayed multilateral mechanisms such as COVAX, which struggled with supply shortages, export restrictions, and unequal bargaining power (Usher 2021).

However, the resulting debates over “vaccine equity” also exposed a deeper conceptual tension between commodity equity and health equity. As Figure 2, below, demonstrates, equal access to a pharmaceutical commodity does not necessarily produce equal or proportionate health outcomes across populations with substantially different demographic profiles (see Figure 3), epidemiological exposures, health system capacities and competing health burdens. Most African countries, for example, possess markedly younger populations than high-income countries, with a median age of approximately nineteen years across much of the continent. In addition, evidence suggests that substantial proportions of many African populations had already experienced SARS-CoV-2 exposure relatively early in the pandemic, raising important questions regarding levels of natural immunity and the proportionality of universal mass vaccination strategies within these settings.

COMMODITY EQUITY vs HEALTH EQUITY

Same products ≠ Same health outcomes

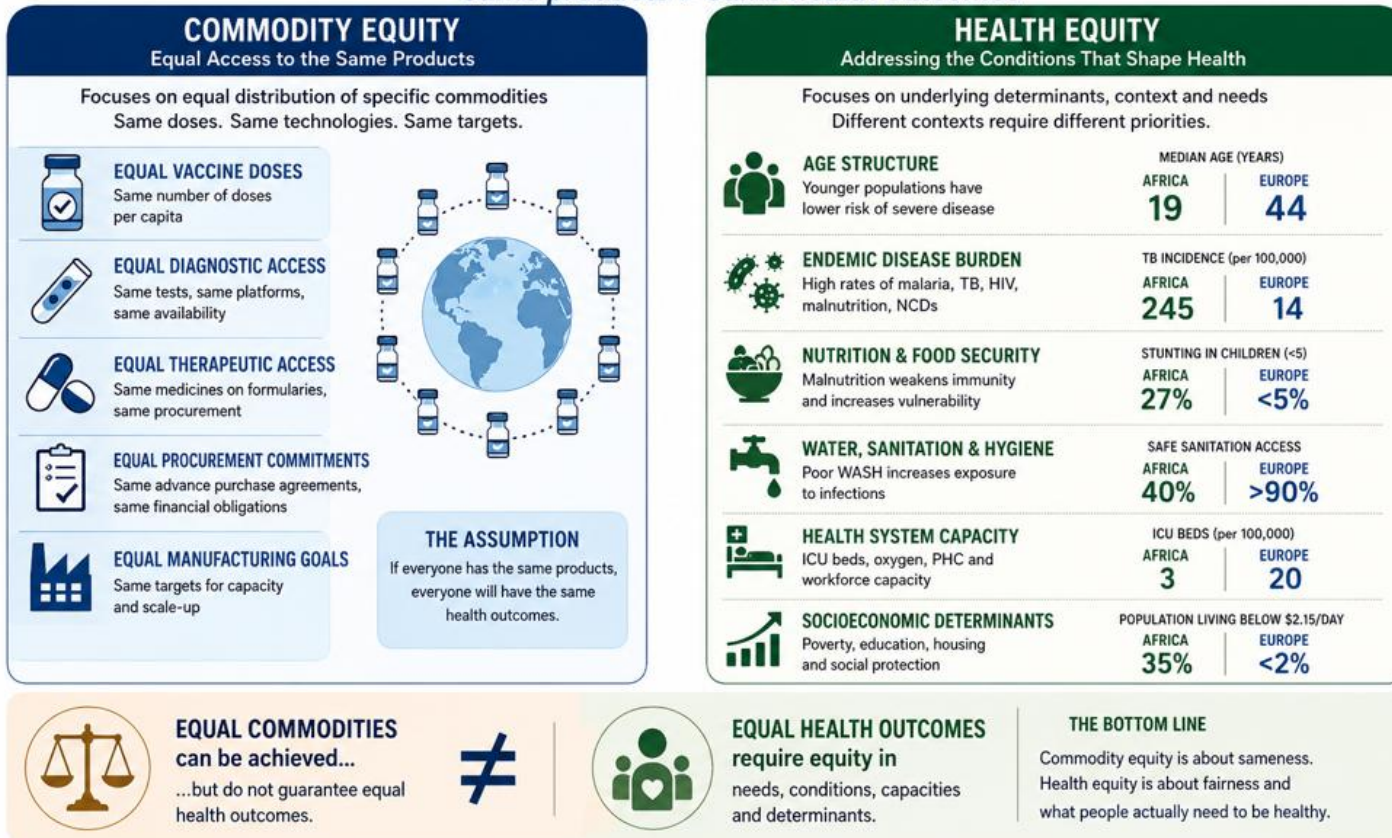


Figure 2 – Commodity Equity vs Health Equity

Equal access to biomedical commodities does not necessarily produce equal public health outcomes. Differences in age structure, endemic disease burden, nutrition, sanitation, and healthcare capacity may substantially alter the expected benefit of standardized pandemic responses across populations.

AFRICA vs EUROPE: DEMOGRAPHY & COVID-19 RISK

Age structure shapes risk. Identical policies may not be proportionate.

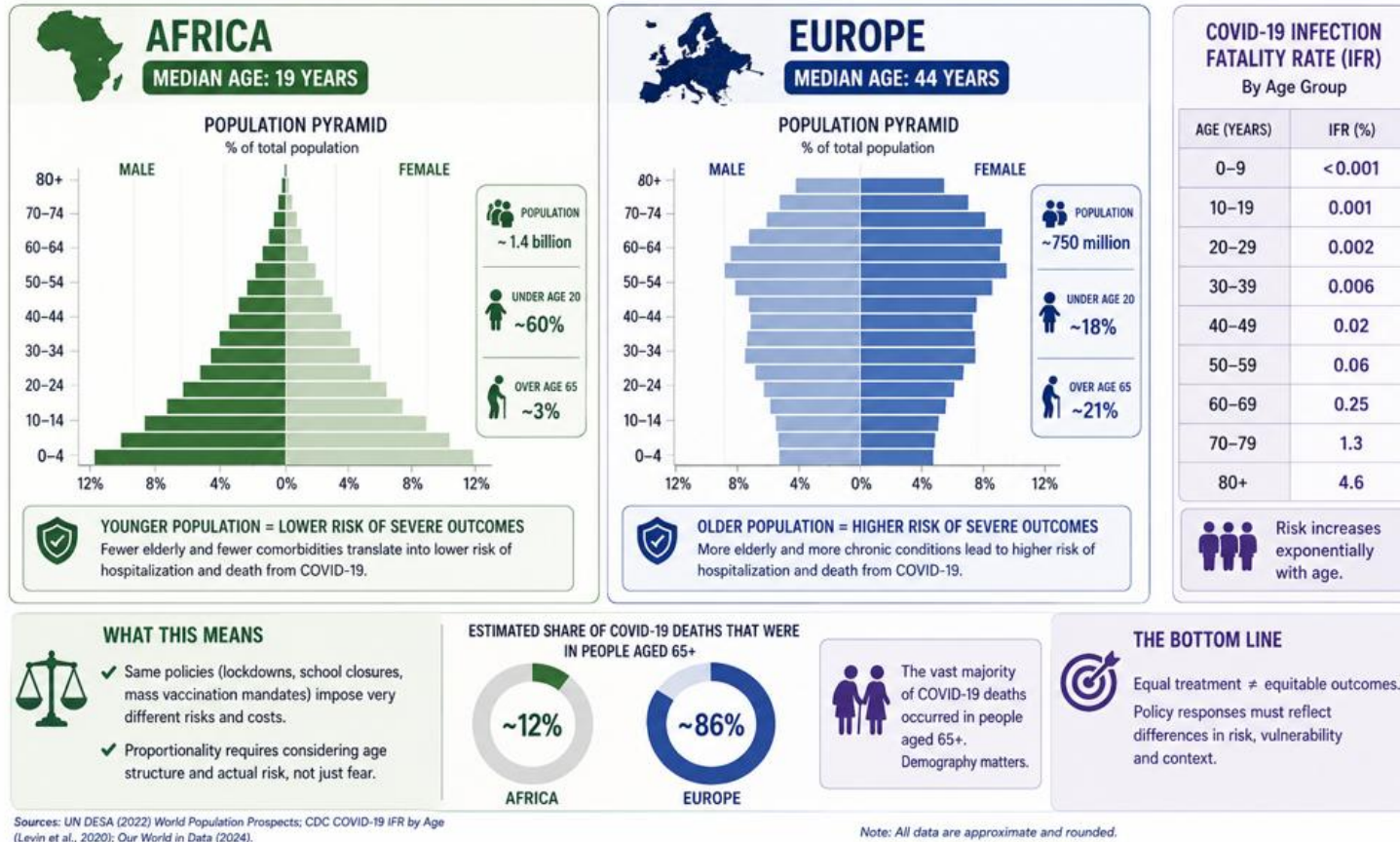


Figure 3 - Africa vs Europe: Demography and COVID-19 Risk

Demographic structure substantially shapes expected Covid-19 risk profiles. Younger populations in many African countries experienced markedly lower expected severe disease burden than older European populations, raising questions regarding the proportionality of uniform global response strategies.

This does not eliminate legitimate grievances regarding unequal access. Rather, it reframes them. The central issue was not solely whether identical quantities of vaccines were distributed globally, but whether global health governance structures adequately reflected differing local needs, priorities, and health contexts. For many lower-resource countries, the Covid response reinforced perceptions that major decisions regarding public health priorities remained heavily shaped by institutions, governments, and corporate actors located elsewhere. In this sense, the symbolic politics of vaccine access became inseparable from broader concerns regarding sovereignty, dependency, and distributive justice within global health governance.

These concerns were articulated explicitly by several delegations during the Pandemic Agreement negotiations. Indonesia's delegation to the Intergovernmental Working Group argued:

“Multilateralism is not simply about reaching an outcome. It is about producing an outcome that significantly changes the status quo.... We are asking for a higher standard. We recognize the pressure of the timeline, but some of the sticky issues are not about time but the willingness to find meaningful solutions. The time pressure alone should not lead us toward weak design, diluted commitments, or lowered expectations.” (HPW 2026B)

Similarly, the Nigerian delegation warned:

“Genuine disagreement between delegations on fundamental questions about sovereignty, about binding obligations, about who bears the cost of pandemic equity and who receives its benefits.... That disagreement is real, and this session must resolve it honestly, rather than paper over it with language that creates an appearance of agreement while delivering on none of its substance.” (HPW 2026A)

These statements are significant because they illustrate that the present impasse is not merely technical or procedural. Rather, it reflects unresolved disagreement regarding how global health cooperation should be structured, who should bear its costs, how benefits should be distributed, and whether existing institutional arrangements can credibly deliver on promises of equity under conditions of future crisis.

The current delay should therefore be interpreted less as diplomatic failure than as a crisis of political legitimacy. The inability to rapidly conclude negotiations reflects growing recognition among many Member States that the Pandemic Agreement has not yet resolved the central question upon which its legitimacy ultimately depends: how to align obligations, sovereignty, incentives, and public health priorities in a manner perceived as credible, proportionate, and equitable across highly unequal political and economic contexts.

2. Political Economy: States, Institutions, and Negotiator Incentives

Understanding the current impasse requires examination of the political economy underpinning the Pandemic Agreement negotiations. The positions adopted by States are shaped not simply by abstract commitments to cooperation or equity, but by strategic interests, institutional constraints, economic incentives, and historical experience. The negotiations are therefore not merely technical exercises in public health governance. They are political contests over sovereignty, authority, industrial capacity, and the future architecture of global health itself.

At the level of States, the central divide is relatively clear. High-income countries – particularly those hosting major pharmaceutical and biotechnology industries – have strong incentives to preserve flexibility over production, intellectual property, procurement policy, and emergency distribution decisions. While many publicly support principles of solidarity and equitable access, they have generally been reluctant to accept binding obligations that could constrain domestic political decision-making during future crises.

This tension became especially visible during Covid-19. Vaccine stockpiling by wealthier States was widely interpreted not simply as a temporary emergency measure, but as evidence that global solidarity remained subordinate to national interest whenever scarcity emerged.

The resulting political memory continues to shape current negotiations. Many Member States now approach PABS with the assumption that, during future emergencies, producer countries will once again prioritize domestic populations regardless of prior multilateral

commitments. The issue, therefore, is not solely access to a specific product, but whether the international system itself can be trusted to distribute risks, obligations, and benefits fairly during periods of crisis.

For many countries within the Africa Group and broader “Friends of Equity” coalition, these concerns extend beyond Covid itself. The negotiations have increasingly become vehicles for expressing wider dissatisfaction with structural inequalities embedded within global health governance, including dependence on external financing, limited manufacturing capacity, unequal bargaining power, and asymmetries in agenda-setting authority. As Pakistan’s delegation argued during negotiations:

“The PABS Annex must not be turned into a face-saving exercise for a strained multilateral system. A weak or unbalanced outcome will not strengthen the system; it will undermine it.” (HPW 2026D)

References to “neo-colonialism,” while rhetorically charged, reflect genuine concerns among some delegations that lower-resource States are expected to supply biological resources, data, compliance, and legitimacy while strategic control over financing, manufacturing, and emergency response remains concentrated elsewhere.

These dynamics are further complicated by the diversity of interests within negotiating blocs themselves. Some countries view the Agreement as an opportunity to secure financing, manufacturing partnerships, or technology transfer. Others remain skeptical of the broader PPPR framework and worry about long-term fiscal obligations, opportunity costs, and the expansion of centralized global health authority.

Overlaying these State-level dynamics are the institutional incentives shaping the negotiation process itself. Following Covid-19, the WHO positioned itself at the center of the PPPR agenda and moved rapidly to promote a new international treaty framework. From an institutional perspective, these incentives are understandable. The Pandemic Agreement offers opportunities to strengthen coordinating authority, expand technical influence, reinforce epistemic leadership, and support new financing mechanisms within an increasingly crowded global health landscape.

These incentives are not inherently illegitimate. However, they shape how risks are framed, how evidence is presented, and how urgency is communicated to Member States.

As Secretariat to both the Intergovernmental Negotiating Body (INB) and the Intergovernmental Working Group on PABS (IGWG), the WHO occupies a powerful agenda-setting position through its role in producing technical briefings, evidence summaries, and draft negotiating texts. Analysis by REPPARE demonstrates that many assumptions underpinning the broader PPPR agenda rely upon high-end modeling projections and economic estimates that insufficiently distinguish between direct disease burden and the secondary consequences of policy responses such as lockdowns and economic shutdowns (Brown et al. 2024).

Whether or not one accepts these critiques in full, they highlight an important governance issue: negotiations over pandemic preparedness are taking place in a context where many underlying evidentiary assumptions are as yet poorly supported (Wood et al. 2026; von Agris et al. 2025).

Institutional momentum has also shaped the pace and tone of negotiations. WHO leadership repeatedly emphasized the urgency of reaching agreement, frequently framing delay itself as a potential threat to global preparedness. During IGWG 6 in May 2026, Tedros Adhanom Ghebreyesus argued:

“The conflict in the Middle East and crises elsewhere in our world are reminders that health emergencies can erupt suddenly and affect multiple countries, increasing the risk of disease outbreaks.... A commitment to upholding international law, multilateral solutions and strong international collaboration to shared threats has never been more needed.” (HPW 2026C)

He further warned:

“There is a dangerous temptation to think more time might mean a better outcome... More time will not change fundamental positions... this week is the best chance – and probably the only chance – to secure an outcome on PABS.” (HPW 2026C)

For critics, however, such appeals to urgency risk restricting discussion precisely when major unresolved issues require full debate.

Perhaps less visible – but equally important – are the incentives shaping negotiators themselves. International negotiations are conducted not by abstract States but by individuals operating within bureaucratic systems where success is often measured through visible progress, negotiated compromise, and the conclusion of agreements. Career advancement, institutional reputation, and political signaling can all reinforce incentives toward continued negotiation momentum even where substantive disagreements remain unresolved.

The present impasse therefore reflects more than disagreement over technical drafting language. It reveals competing political visions regarding sovereignty, equity, public health governance, institutional authority, and the balance between national autonomy and centralized international coordination.

3. PABS and Viral Sovereignty: The Structural Fault Line

The Pathogen Access and Benefit Sharing mechanism sits at the center of the Pandemic Agreement and remains its most contentious component. Its purpose is to create a system through which countries that contribute to global surveillance and research – by sharing pathogens, biological samples, and genomic sequencing data – receive a fair share of the benefits generated by that system. In theory, this represents a reciprocal exchange. In practice, it exposes the fundamental asymmetry at the heart of the Agreement.

The obligations associated with PABS are relatively clear and immediate. Member States are expected to support timely pathogen sharing, strengthen surveillance systems, expand genomic sequencing capacity, and align domestic institutions with international reporting and coordination expectations. These commitments can be monitored and assessed. They may also require significant investment in laboratories, data systems, workforce development, regulatory structures, and emergency response institutions.

The benefits, by contrast, are far less certain. Access to vaccines, diagnostics, therapeutics, financing, and technology transfer depends on factors that the Agreement cannot fully control: manufacturing capacity, intellectual property rights, contractual arrangements, supply chains, export controls, liability frameworks, and domestic political decisions within producer countries. Even where proposals define percentages of production to be allocated through PABS, such provisions do not fully resolve questions of timing, prioritization, affordability, suitability, or performance under conditions of scarcity.

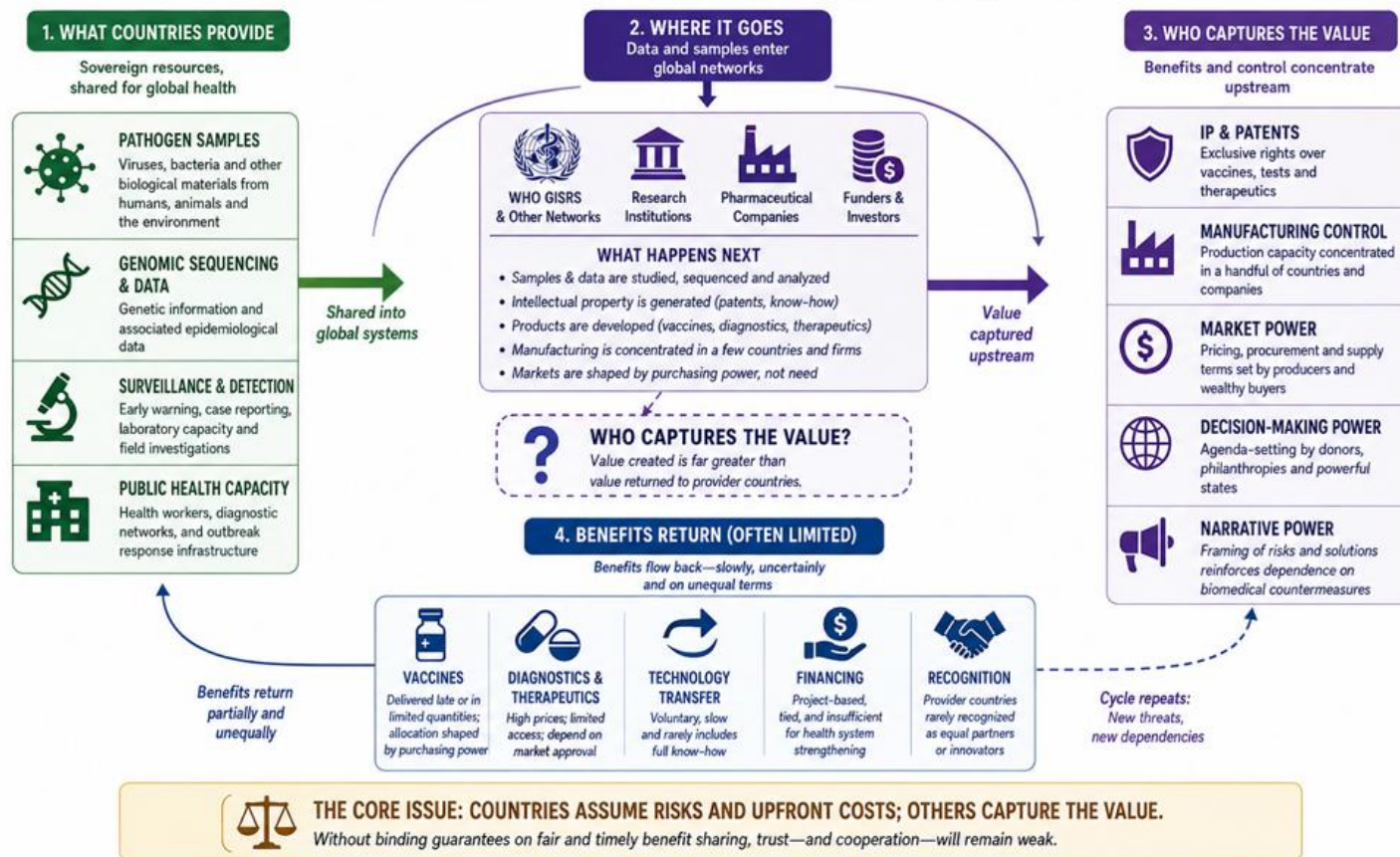
This is the structural fault line. Countries are asked to make concrete contributions into a global system, while the benefits they receive remain contingent on the behavior of actors outside their control. In a genuine emergency, producer States are highly unlikely to prioritize distant populations over their own domestic political imperatives irrespective of prior multilateral commitments. This is not simply a failure of solidarity. It reflects the enduring reality that sovereign States retain ultimate authority over production, procurement, export, and emergency distribution decisions within their jurisdictions.

A key historical precedent for this dispute emerged during the H5N1 avian influenza outbreaks of the mid-2000s, when Indonesia refused to continue sharing influenza virus samples with the WHO Global Influenza Surveillance Network. Indonesian officials argued that the viruses collected from Indonesian patients for transfer through WHO-linked surveillance systems were given to pharmaceutical companies in high-income countries that then developed patented vaccines that remained inaccessible or unaffordable to Indonesians themselves (Fidler 2008; Sedyaningsih et al. 2008; Elbe 2010).

Indonesia framed this dispute as one of “viral sovereignty.” The argument was that biological materials originating within national territory should not automatically be treated as global public goods when the benefits derived from those materials remained concentrated elsewhere. The controversy exposed a fundamental tension (depicted by Figure 4) within global health governance: countries were expected to contribute biological resources for the benefit of global surveillance and pharmaceutical development, but they lacked credible guarantees that resulting countermeasures would be returned to them in timely, affordable, and usable form.

VIRAL SOVEREIGNTY & THE PABS DILEMMA

Countries provide. Others profit. Benefits return slowly, if at all.



Sources: Fidler (2008); Elbe (2010); Sedyaningsih et al. (2008); WHO (2021, 2023); UNCTAD (2021); MSF (2022); Duke Global Health Innovation Center (2021).

Figure 4 – Viral Sovereignty and the PABS Dilemma

The structural asymmetry embedded within PABS arrangements. Lower-resource countries are expected to provide pathogens, genomic data, and surveillance capacity, while access to resulting countermeasures remains dependent upon manufacturing concentration, market power, and political discretion within producer States.

The Indonesian case matters because it demonstrates that current disputes over PABS are not merely post-Covid reactions or temporary negotiating tactics. They are the continuation of unresolved structural tensions embedded within earlier pathogen-sharing systems. The same questions remain: who owns pathogens, who controls data, who profits from biological materials, who receives countermeasures, and who decides what counts as fair benefit sharing?

The dispute also illustrates the limits of technocratic framing. Pathogen sharing is often presented as a technical requirement for global health security. Yet, for many States it is also a question of sovereignty, distributive justice, and historical power. When countries contribute biological materials and surveillance capacity into an international system, they are not merely performing a scientific function. They are entering a political exchange in which the credibility of reciprocity matters.

4. Cost, Risk, and Proportionality

One of the least resolved – but most consequential – questions underlying the Pandemic Agreement concerns proportionality. The scale of the proposed PPPR agenda implies sustained global investment at levels unprecedented for a category of risk whose frequency, severity, and expected future burden remain contested.

Current estimates from the WHO, World Bank, and G20 High-Level Independent Panel (HLIP) suggest that preparedness systems require more than \$31 billion annually globally (World Bank 2022A; G20 HLIP 2021). These estimates include investments in surveillance systems, laboratory infrastructure, workforce development, emergency coordination mechanisms, and institutional preparedness capacity. Additional World Bank estimates suggest that implementing the broader One Health agenda associated with the Pandemic Agreement could require another \$10.3–11.5 billion annually (World Bank 2022B).

These figures, however, likely understate the total economic implications of the PPPR agenda. They do not fully account for the costs associated with maintaining manufacturing readiness for future countermeasures, sustaining vaccine production infrastructure, or complying with

expanded regulatory and surveillance obligations at national level. The G20 HLIP alone estimated that maintaining “at-risk” manufacturing capacity could require between \$29 billion and \$60 billion over five years, alongside continuing maintenance costs estimated at approximately \$2 billion annually (G20 HLIP 2021).

For LMICs, the estimated preparedness burden is substantial at \$26.4 billion of the WHO / World Bank \$31.1 billion baseline estimate. The G20 HLIP, in its report to the G20 in 2025 regarding perceived tardiness in countries providing sufficient finance (G20 HLIP 2025), recommended this be addressed through all countries allocating 0.1 to 0.2% of Gross Domestic Product (GDP) for in-country PPPR spending, and a further 0.5% to 1.0% of security and defense budgets. 0.1 to 0.2% of GDP is clearly a far higher percentage of the tax base, especially in many low-taxing, low-income States, and does not include ODA-based allocations.

The G20 HLIP report provides no clear evidence of need to back its recommendations on extent and urgency of funding. The justification, discussed in detail in a January 2026 report from REPPARE (von Agris et al. 2026), relies on prior assertions of increasing outbreak frequency that ignore advances in technology to detect and record, and on highly optimistic assumptions regarding the impact of public health countermeasures that fit poorly with experience in Covid-19 and other outbreaks. The danger of such recommendations on GDP-based allocation is therefore in committing substantial funds to areas of public health irrespective of competing priorities and of evolution in need. Thus, the suggested GDP allocation coupled with already shifting funds toward PPPR pose to have high opportunity costs in relation to exiting health priorities and other known infectious disease burdens (see Figure 5).

Annual Global Health Spending: Existing vs Proposed (0.1% of Global GDP)

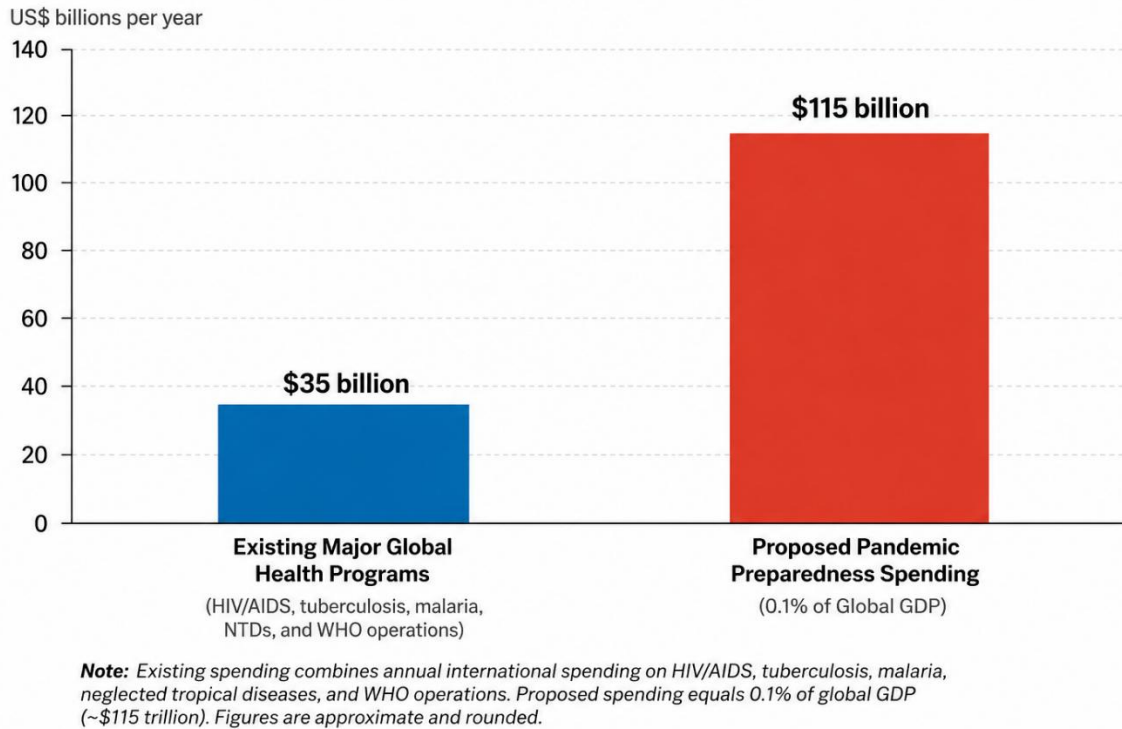


Figure 5 – Existing vs Proposed Annual Global Health Spending

Comparison between existing major global health programs annual spending and proposed pandemic preparedness annual spending. The chart highlights the massive discrepancy between the two figures, demonstrating the high cost burden of proposed pandemic preparedness spending.

These fiscal obligations emerge at a time when many health systems already struggle to finance essential services and remain heavily dependent on external assistance. Importantly, preparedness spending is frequently framed as “additional” investment rather than substitution within existing health budgets. In practice, however, health financing rarely operates through entirely separate streams. Resources directed toward pandemic preparedness inevitably compete with other health priorities for fiscal space, political attention, institutional capacity, and external financing.

Preparedness spending therefore cannot be evaluated in isolation from the health burdens it may displace.

This issue has become increasingly important in the post-Covid financing environment. Analyses by Penn and colleagues (2025) suggest that ODA for nutrition and basic health services declined substantially during and after the pandemic period, even as funding for preparedness-related initiatives increased. ODA for sanitation fell sharply during the pandemic and has struggled to recover to pre-Covid levels, while nursing assistance also declined significantly. At the same time, many LMICs experienced rising debt burdens associated both with the pandemic itself and with the policy responses adopted during the period (IHME 2025; Brown et al. 2025).

The opportunity costs of the preparedness agenda, captured by Figure 6, are therefore not abstract. Malaria continues to cause over 600,000 deaths annually (WHO 2025C), tuberculosis over one million (WHO 2025B), while maternal and child mortality remain major challenges across many lower-resource settings (WHO 2023). Investments in nutrition, sanitation, primary care infrastructure, and health-system resilience frequently generate substantial and measurable public health returns. Redirecting scarce resources toward preparedness systems designed primarily around uncertain future outbreak scenarios therefore raises difficult questions regarding prioritization and proportionality.

PANDEMIC PREPAREDNESS vs. ENDEMIC DISEASE BURDEN

The deadliest diseases receive a fraction of the funding

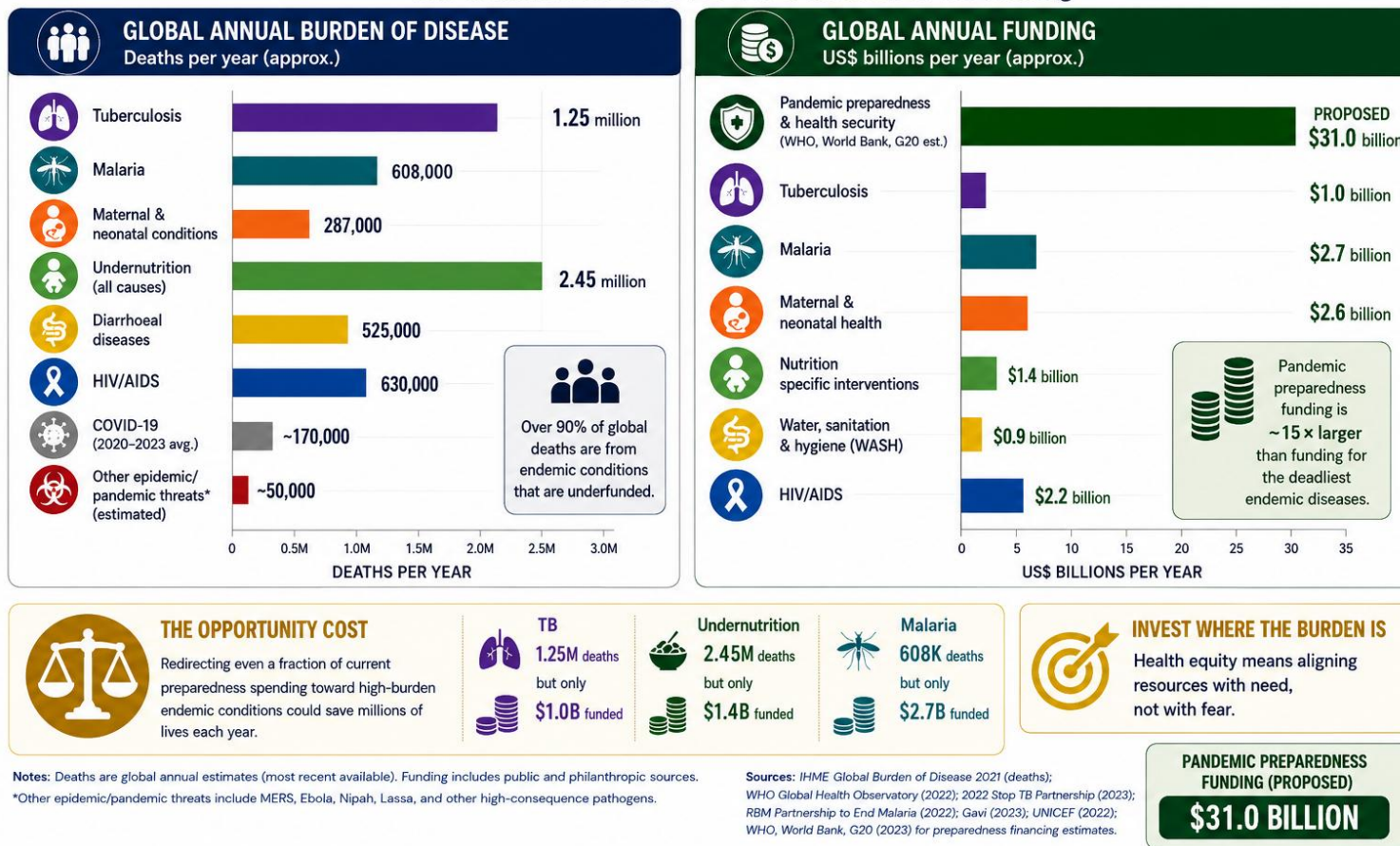


Figure 6 – Pandemic Preparedness vs Endemic Disease Burden

Comparison between projected preparedness financing commitments and ongoing endemic disease burdens. The figure highlights the tension between investments directed toward uncertain future outbreaks and the continuing mortality burden imposed by tuberculosis, malaria, maternal mortality, malnutrition, and weak primary healthcare systems.

The justification for large-scale preparedness spending rests heavily on claims regarding increasing pandemic frequency, escalating outbreak severity, and the enormous economic costs associated with future pandemics. However, these assumptions remain contested. Analyses associated with REPPARE argue that historical evidence does not clearly demonstrate a significant upward trend in severe pandemic frequency once changes in surveillance capacity, diagnostics, and disease classification are taken into account (Brown et al. 2024; Bell et al. 2025; Bell et al. 2024B). While outbreaks are undoubtedly being detected and reported more frequently than several decades ago, this does not necessarily imply a true increase in actual outbreak frequency, or consequently severe disease burden or catastrophic pandemic risk.

Similarly, many economic projections associated with pandemic preparedness rely heavily upon the Covid-19 experience. Yet, the economic consequences of Covid-19 were shaped not only by the virus itself, but also by unprecedented policy responses including lockdowns, border closures, economic shutdowns, school closures, large-scale fiscal stimulus, and extensive restrictions on movement and commerce. Critics argue that many preparedness models insufficiently distinguish between the direct burden imposed by pathogens and the indirect economic consequences resulting from specific political and policy choices.

This distinction matters because preparedness return-on-investment calculations frequently assume that large-scale preparedness spending can substantially eliminate future pandemic losses. Such assumptions are analytically difficult to sustain. Any outbreak, regardless of preparedness levels, will carry economic and social costs. Moreover, the magnitude of those costs will depend heavily on the nature of policy responses adopted by governments. If projected preparedness returns are based upon assumptions that future policy responses will mirror the most economically disruptive aspects of Covid-era interventions, then estimated benefits may become significantly inflated.

The result is a policy environment in which high-end risk projections and precautionary assumptions can produce strong institutional incentives toward ever-expanding preparedness expenditure, even where the underlying evidence remains uncertain. This does not imply that pandemic preparedness lacks value. Rather, it suggests that

preparedness policy should be evaluated against competing health priorities, opportunity costs, and realistic assessments of risk.

The question is therefore not whether preparedness matters, but whether the scale, structure, and operational logic of the current PPPR agenda are proportionate to the available evidence.

This question becomes particularly important given the emerging operational orientation of the Pandemic Agreement itself. Since Covid-19, pandemic preparedness financing has increasingly prioritized surveillance systems, genomic sequencing, diagnostics, emergency coordination structures, biomedical countermeasure development, and manufacturing readiness. While these capacities may strengthen certain dimensions of outbreak response, they do not necessarily address broader determinants of population resilience such as nutrition, sanitation, chronic disease burden, primary healthcare access, workforce stability, or generalized health-system capacity.

Indeed, one of the paradoxes of the current preparedness agenda is that highly targeted investments in future outbreak response may occur simultaneously alongside weakening support for the everyday determinants of health and infrastructure upon which resilience depends. This risks the development of a highly specialized preparedness architecture built around relatively uncertain future threats while more immediate and measurable health burdens remain insufficiently addressed.

The issue, therefore, is not preparedness versus non-preparedness. It is whether the Pandemic Agreement promotes a proportionate, evidence-based, and sustainable model of preparedness capable of balancing uncertain future risks against existing and ongoing public health needs.

5. Securitization, Risk Inflation, and Policy Momentum

Closely linked to the question of proportionality is the role of securitization in shaping the Pandemic Prevention, Preparedness and Response agenda. Following Covid-19, infectious disease outbreaks have increasingly been framed as escalating and existential threats

requiring permanent preparedness infrastructures, accelerated governance mechanisms, and exceptional levels of political and financial mobilization.

Such narratives serve important institutional and political functions. They mobilize financing, justify institutional expansion, encourage international coordination, and sustain preparedness agendas within competitive policy environments. However, the evidentiary basis for many of these claims remains more contested than current policy discourse often suggests.

Expanded surveillance capacity inevitably increases the number of detected and classified outbreaks. However, as noted earlier, increased detection does not necessarily imply corresponding increases in severe disease burden or pandemic mortality.

This distinction between increased outbreak detection and increased outbreak severity is critically important. Expanded surveillance systems may create the appearance of escalating threat even where underlying mortality trends remain stable or declining. Yet, many preparedness frameworks treat increased detection itself as evidence of rising existential risk, thereby reinforcing calls for expanded preparedness infrastructures and financing commitments.

The language surrounding pandemic preparedness increasingly reflects this securitized framing. The 2024 report of the Global Preparedness Monitoring Board (GPMB), for example, opens with the assertion that:

“The 21st century has brought an undeniable surge in global health threats. Our reality is no longer one where pandemics are rare shock events but where they pose a constant, real danger.” (GPMB 2024).

Similarly, the G20 High-Level Independent Panel argued:

“Without greatly strengthened proactive strategies, global health threats will emerge more often, spread more rapidly, take more lives, disrupt more livelihoods, and impact the world more greatly than before... countering the existential threat of deadly and costly pandemics must be the human security issue of our times. There is every likelihood that the next pandemic will come within a decade...” (G20 HLIP 2021).

WHO and World Bank preparedness documents adopt similar framing, arguing that:

“Pathogens will emerge and re-emerge with the potential to cause disease, death, and disruption of a magnitude equal to or greater than SARS-CoV-2. Outbreaks of infectious pathogens have been a defining feature of human history, and any analysis of prevailing trends strongly suggests that outbreaks of pathogens of pandemic potential are set to continue to increase in frequency for the foreseeable future.” (WHO and World Bank 2022).

From the perspective of securitization theory, such framing is highly significant because it elevates infectious disease into the realm of exceptional threat, thereby legitimizing extraordinary policy responses, accelerated governance arrangements, and long-term emergency preparedness infrastructures. In some circumstances, this may be justified. However, securitization also narrows deliberative space by making skepticism regarding policy scale, institutional expansion, or proportionality appear irresponsible or obstructive.

Some influential pandemic risk estimates, including analyses associated with the Commission on a Global Health Risk Framework and later preparedness modeling exercises, estimated average annual pandemic mortality approaching 2.5 million deaths globally by incorporating historical mortality events – including medieval plague outbreaks – into contemporary projections. Critics argue that applying mortality patterns from pre-modern societies with radically different sanitation systems, nutritional conditions, medical capacity, demographics, and population structures provides a poor basis for present-day resource allocation decisions. Medieval plague mortality occurred in contexts fundamentally unlike the modern world, yet such estimates continue to influence preparedness financing discussions and institutional narratives surrounding existential pandemic risk.

Preparedness investment models also frequently compare proposed spending against the enormous economic losses associated with Covid-19 without sufficiently distinguishing between direct pathogen-related harms and the secondary effects of policy responses such as lockdowns, economic shutdowns and stimulus packages.

This distinction is crucial because many preparedness investment models implicitly assume that future preparedness systems could substantially prevent or offset economic disruption

on the scale experienced during Covid-19. Work associated with REPPARE argues that such calculations are misleading because they both overstate likely future pandemic burden and assume unrealistically high preparedness effectiveness. Moreover, they frequently ignore the extent to which Covid-era costs were themselves shaped by policy choices whose proportionality remains contested.

The issue is therefore not merely academic. High-end threat projections increasingly shape global financing priorities, institutional mandates, surveillance expansion, emergency governance structures, and national spending obligations. Once pandemic preparedness becomes framed as an existential and permanent security challenge, strong incentives emerge for continued institutional expansion irrespective of whether underlying risk assumptions remain stable, uncertain, or overstated.

Importantly, this process does not require bad faith or deliberate exaggeration by individual actors. Institutions established to prevent catastrophic events naturally emphasize the seriousness of those events. Organizations tasked with pandemic prevention are incentivized to prioritize vigilance, preparedness, and precautions. Governments similarly benefit politically from appearing prepared against highly salient future threats. The result is a self-reinforcing preparedness ecosystem in which institutional momentum, surveillance expansion, and risk amplification may evolve simultaneously.

This dynamic also shapes resource allocation. By elevating pandemic preparedness above many existing health burdens, securitized frameworks can redirect financing toward surveillance systems, genomic sequencing, emergency coordination structures, vaccine manufacturing readiness, and pharmaceutical countermeasure pipelines while comparatively less political attention is devoted to endemic disease control, nutrition, sanitation, maternal health, or primary healthcare infrastructure. Holst and van de Pas (2023) describe this broader trend as the “biomedical securitization” of global health, in which increasingly technological and emergency-oriented approaches reshape public health priorities and financing structures. This securitization of health conceptualization helps make sense as well as problematize the extraordinary and disproportionate request to allocate 0.1 to 0.2% of Gross Domestic Product (GDP) for in-country PPPR spending

investment, which has now been circulated prior to the September 2026 UNGA meeting on pandemics (G20 HLIP 2025; von Agris et al. 2026).

For many lower-resource countries, this creates a particularly acute dilemma. The principal drivers of mortality and poor health outcomes in such settings often remain longstanding structural conditions rather than novel pandemic threats alone. Yet, securitized preparedness frameworks, outbreak surveillance and emergency response systems become the focus of international financing and political preference, rather than broader health resilience.

The preparedness agenda therefore risks creating a paradoxical situation in which highly specialized emergency infrastructures expand while support for the broader foundations of population health weakens. Official Development Assistance for nutrition, basic healthcare, and health-system strengthening has stagnated or declined in many contexts even as preparedness-related financing has increased (Penn et al. 2025). The result may be a global health architecture increasingly optimized for detecting and managing hypothetical future outbreaks while becoming comparatively less effective at addressing the everyday drivers of morbidity and mortality that continue to impose far greater aggregate burdens across much of the world.

This dynamic is reinforced by institutional incentives. Once pandemic preparedness becomes established as a permanent security priority, organizations tasked with addressing the threat acquire strong incentives toward continued expansion. Surveillance systems require continual upgrading, emergency coordination structures require maintenance, manufacturing readiness requires financing, and preparedness exercises require recurring institutional justification. Over time, preparedness risks evolving into a self-reinforcing governance ecosystem in which institutional continuity itself becomes partially dependent upon maintaining perceptions of elevated and persistent threat.

The result is a form of policy lock-in. Emergency preparedness architectures initially justified as exceptional responses to extraordinary events gradually become normalized components of routine governance. Surveillance systems expand. Emergency powers become institutionalized. Pharmaceutical manufacturing readiness becomes permanent. Public

Health and Social Measures (PHSMs) become integrated into standard response frameworks. Information management and “infodemic” control structures become embedded within governance systems. The distinction between temporary emergency measures and permanent institutional arrangements consequently becomes increasingly blurred.

The broader operational logic of the preparedness agenda can already be observed within post-Covid policy frameworks. Increasingly, the system functions according to a standardized sequence (see Figure 7):

1. Expand surveillance systems and identify emerging risks;
2. Detect and report pathogens rapidly;
3. Sequence and share genomic data globally;
4. Declare international health emergencies;
5. Implement PHSMs;
6. Coordinate information management and compliance strategies;
7. Accelerate development of biomedical countermeasures;
8. Scale manufacturing and procurement systems;
9. Deploy mass pharmaceutical response campaigns.

THE PREPAREDNESS ESCALATOR

How a detection event can trigger a self-reinforcing cycle of authority, funding and pharmaceutical dependency



ESCALATOR STAGE	KEY ACTIVITIES	INSTITUTIONS PRIMARILY INVOLVED	MONEY FLOWS (Indicative)	EMERGENCY POWERS & AUTHORITIES GAINED	PHARMACEUTICAL DEPENDENCY INCREASES
1 SURVEILLANCE EXPANSION	<ul style="list-style-type: none"> Expand sentinel sites and laboratory networks Digital reporting platforms Community & animal surveillance Risk mapping & modeling 	<ul style="list-style-type: none"> WHO World Bank CDC/NIH & other national agencies NGOs & contractors 	<ul style="list-style-type: none"> Bilateral donors Global Fund World Bank Foundations National budgets <p>\$ Billions growing annually</p>	<ul style="list-style-type: none"> Data collection mandates Reporting obligations Expanded access to health data Cross-border data sharing frameworks 	Builds infrastructure aligned with biomedical and pharmaceutical priorities
2 PATHOGEN DETECTION	<ul style="list-style-type: none"> Detection of unusual events Case reporting Signal validation 	<ul style="list-style-type: none"> National IHR Focal Points WHO (IHR core capacity) Labs & networks 	<ul style="list-style-type: none"> IHR funding Emergency funds Donor grants <p>Hundreds of millions</p>	<ul style="list-style-type: none"> Event notification requirements External review missions Early warnings 	Triggers interest from R&D, CEPI, and industry surveillance partners
3 SEQUENCING & DATA SHARING	<ul style="list-style-type: none"> Genomic sequencing Metadata & sample sharing Upload to global databases 	<ul style="list-style-type: none"> GISAIID & partners National labs WHO Academic consortia 	<ul style="list-style-type: none"> Research grants Platform contracts Public-private partnerships <p>Hundreds of millions</p>	<ul style="list-style-type: none"> Broadened data sharing expectations Waivers on privacy in emergencies 	Enables proprietary R&D, patent applications and vaccine/therapeutic design by a few actors
4 RISK ASSESSMENT & EMERGENCY DECLARATION	<ul style="list-style-type: none"> Risk assessment PHERIC or other emergency declaration Global alerts 	<ul style="list-style-type: none"> WHO Director-General IHR Emergency Committee Advisory bodies 	<ul style="list-style-type: none"> Contingency Fund for Emergencies Donor pledges <p>Up to \$1+ billion</p>	<ul style="list-style-type: none"> Activate emergency legal frameworks Mobilize international assistance Travel & trade advice 	Opens market expectations for countermeasures and procurement commitments
5 PUBLIC HEALTH & SOCIAL MEASURES (PHSMs)	<ul style="list-style-type: none"> Movement restrictions School/work closures Testing mandates Quarantine/isolation 	<ul style="list-style-type: none"> National governments WHO guidance Law enforcement agencies 	<ul style="list-style-type: none"> Economic support packages Emergency loans Donor support <p>\$ Billions</p>	<ul style="list-style-type: none"> Expanded executive powers Limitations on rights Information control measures 	Creates demand and political space for pharmaceutical solutions as the "exit strategy"
6 INFORMATION MANAGEMENT	<ul style="list-style-type: none"> Risk communication Infodemic management Narrative guidance Platform moderation 	<ul style="list-style-type: none"> WHO & UN agencies Governments Digital platforms Fact-checking partners 	<ul style="list-style-type: none"> Communication funds Platform contracts Donor grants <p>Hundreds of millions</p>	<ul style="list-style-type: none"> Control of public messaging Censorship/downranking Emergency regulations 	Shapes public acceptance of pharmaceutical and technological solutions
7 COUNTERMEASURE DEVELOPMENT	<ul style="list-style-type: none"> Vaccine, therapeutic and diagnostic R&D Platform technologies Regulatory pathways (EULs) 	<ul style="list-style-type: none"> CEPI Pharma & biotech firms Regulators (EMA, FDA, NRA's) Research networks 	<ul style="list-style-type: none"> R&D grants Advance Purchase Agreements Public subsidies <p>\$ Billions</p>	<ul style="list-style-type: none"> Emergency Use Authorizations Liability protections Regulatory flexibilities 	R&D concentrated in few firms and countries; IP monopolies strengthened
8 MANUFACTURING SCALE-UP	<ul style="list-style-type: none"> Scale manufacturing Secure supply chains Stockpiling components Technology transfer (limited) 	<ul style="list-style-type: none"> Pharma manufacturers CEPI/GAVI Governments Contract manufacturers 	<ul style="list-style-type: none"> Advance payments Subsidies Loan guarantees Donor financing <p>\$ Billions</p>	<ul style="list-style-type: none"> Procurement prioritization Export controls March-in rights (discretionary) 	Manufacturing concentration persists; limited local capacity in LMICs
9 MASS DEPLOYMENT & LONG-TERM INTEGRATION	<ul style="list-style-type: none"> Mass vaccination/prophylaxis Therapeutic distribution Digital certification Integration into routine systems 	<ul style="list-style-type: none"> Governments GAVI & partners WHO Pharma supply chains 	<ul style="list-style-type: none"> Procurement budgets Donor financing Insurance & compensation schemes <p>\$ Billions</p>	<ul style="list-style-type: none"> Mandates Vaccine passports Surveillance of uptake Long-term data collection 	Ongoing demand for boosters, therapeutics and platform updates; enduring market captured by few



THE RESULT: A system that is difficult to reverse. Each stage creates institutions, spending streams and dependencies that make the next emergency easier to declare—and the response more centralized, securitized and pharmaceuticalized.

Note: Flows are indicative orders of magnitude based on publicly available data and reports from WHO, World Bank, G20, CEPI, GAVI and donor Sources: WHO (2023); World Bank (2022, 2024); CEPI (2023); G20 (2023); They vary by country, emergency and over time. statements, UN (2023); Brown, Bate & Bell (2025).

Figure 7 – The Preparedness Escalator

(Caption continues on the next page)

The increasingly standardized operational logic of the contemporary preparedness agenda. The model emphasizes surveillance expansion, emergency declaration, pharmaceutical acceleration, and mass deployment mechanisms as sequential components of a permanent preparedness architecture.

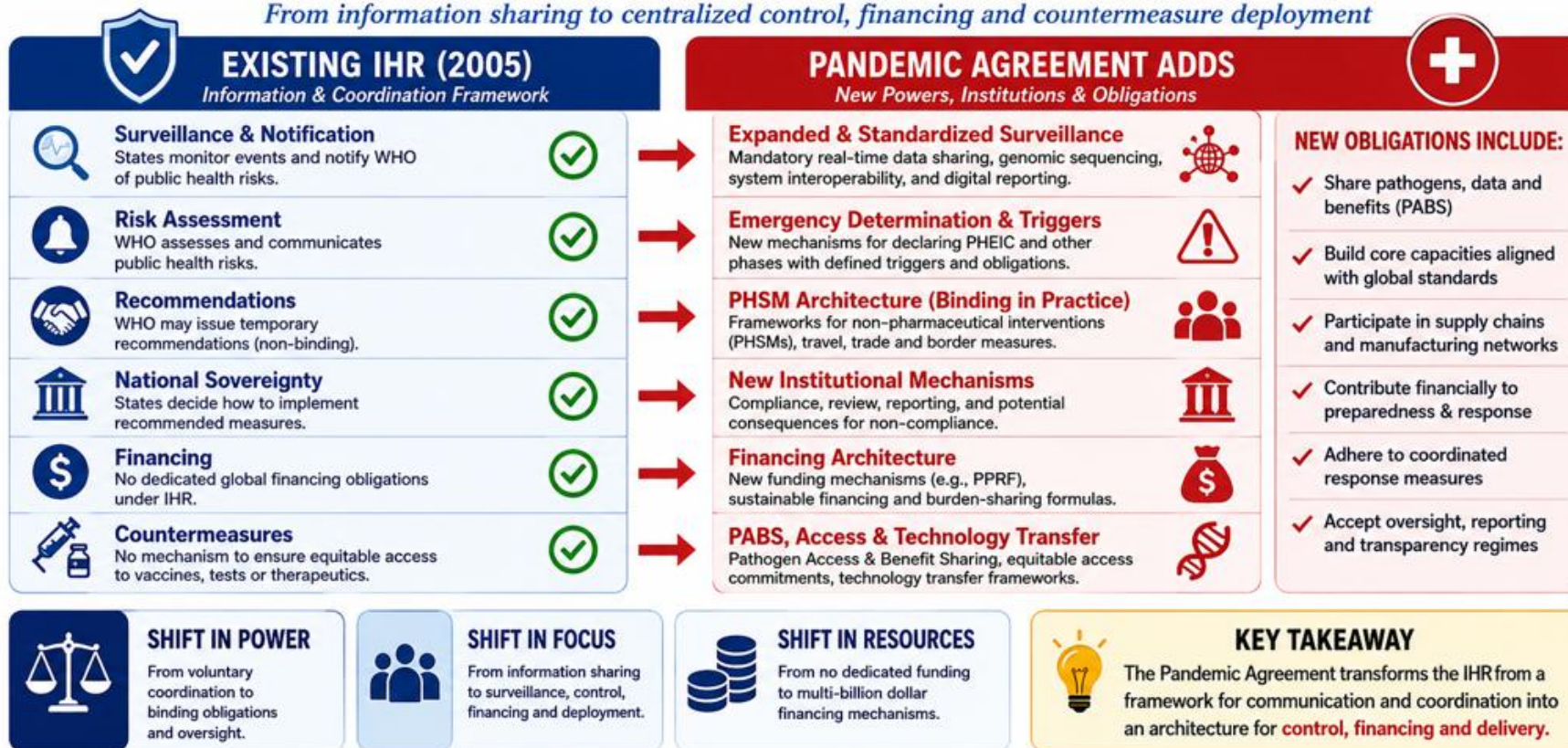
This operational logic may prove useful in some contexts. However, it also reflects a highly centralized and biomedicalized conception of preparedness that risks under-prioritizing broader determinants of resilience such as nutrition, sanitation, endemic disease management, primary healthcare, workforce stability, and decentralized local public health capacity.

As Figure 8 shows, existing International Health Regulations already provide frameworks for outbreak notification, information sharing, and emergency coordination between States. The additional value provided specifically by the Pandemic Agreement therefore remains contested, particularly given the scale of the proposed preparedness architecture and its associated financial and institutional commitments.

The issue is not whether pandemics can occur or whether preparedness matters. It is whether the current securitized framing of infectious disease risk is generating proportionate, evidence-based, and politically sustainable policy responses.

EXISTING IHR (2005) vs. PANDEMIC AGREEMENT: WHAT'S NEW?

From information sharing to centralized control, financing and countermeasure deployment



Note: This comparison highlights key additions and areas of concern. Not all elements are finalized in the current draft text.

Figure 8 – Existing IHR vs Pandemic Agreement

Comparison between the existing International Health Regulations framework and the proposed Pandemic Agreement. The figure illustrates the extent to which major coordination mechanisms already exist while highlighting the additional institutional layers proposed under the new preparedness architecture.

6. Vaccines, Technology, and System Constraints

Vaccines occupy a central position within the current pandemic preparedness paradigm. Advances in platform technologies, particularly mRNA, have demonstrated the possibility of developing countermeasures against emerging pathogens at unprecedented speed. This technological promise now sits at the heart of the PPPR agenda and increasingly shapes the operational logic of the Pandemic Agreement itself.

Much of the contemporary preparedness architecture assumes that rapid pathogen detection, accelerated countermeasure development, and large-scale pharmaceutical deployment will constitute the central operational response during future outbreaks.

Within this framework, vaccines become not merely one tool among many, but the central mechanism through which preparedness itself is operationalized. Surveillance systems, genomic sequencing infrastructure, emergency financing mechanisms, manufacturing readiness initiatives, and regulatory acceleration frameworks increasingly derive their justification from the assumption that rapid pharmaceutical response will constitute the decisive intervention during future outbreaks.

Vaccines have reduced mortality and morbidity from many infectious diseases and may play important roles during future outbreaks. The issue is whether the current preparedness architecture has become excessively concentrated around biomedical countermeasures at the expense of broader public health resilience.

Covid-19 demonstrated both the strengths and limitations of this approach (Paul et al. 2021). Vaccine development occurred at remarkable speed, illustrating what can be achieved when scientific capacity, public financing, regulatory acceleration, and industrial mobilization align. Yet, distribution remained highly unequal, protection against infection and transmission proved less durable than initially hoped, and variant evolution progressively reduced the effectiveness of formulations designed against earlier viral strains. In practice, vaccines helped reduce severe disease among many higher-risk groups, but they did not

provide the straightforward route to elimination, eradication, or durable herd immunity implied by much early pandemic rhetoric.

This distinction matters because the Pandemic Agreement and wider PPPR agenda increasingly assume that future outbreak response can be built around accelerated pharmaceutical deployment as the primary route to global health security. Such assumptions may prove appropriate in some circumstances. However, they cannot automatically be generalized across all pathogens, populations, or health systems.

Not all pathogens are equally amenable to rapid vaccine development. Not all vaccines significantly reduce transmission. Not all populations face equal risk from emerging pathogens. And not all countries possess the infrastructure, workforce capacity, financing systems, cold-chain logistics, or public trust required to sustain repeated large-scale pharmaceutical campaigns. Yet, the broader preparedness agenda increasingly assumes precisely these capacities and conditions.

SARS-CoV-2 highlighted these limitations clearly. The virus evolved rapidly, and successive variants reduced the match between original vaccine formulations and circulating strains. Protection against infection waned over time, leading to repeated booster recommendations. The long-term feasibility of repeated global booster campaigns remains highly questionable, particularly within lower-resource settings where health systems already struggle to deliver routine immunization, maternal care, malaria control, tuberculosis treatment, and basic primary healthcare services.

Moreover, despite early institutional claims (Morens et al. 2023), Covid vaccines did not ultimately provide sterilizing immunity or durable interruption of transmission. This point is important because much of the broader preparedness architecture implicitly assumes that future pharmaceutical countermeasures will rapidly suppress pathogen spread at population level. Yet, for respiratory viruses – particularly coronaviruses and influenza-like pathogens – such outcomes have historically proven difficult to achieve. The preparedness model increasingly being institutionalized through the Pandemic Agreement therefore rests, at least in part, upon technological assumptions whose broader applicability remains uncertain.

This creates an important policy concern. A preparedness architecture organized primarily around rapid pharmaceutical deployment risks concentrating resources and institutional attention around narrow technological solutions while under-prioritizing broader determinants of population resilience. Investments in nutrition, sanitation, primary healthcare, endemic disease management, workforce capacity, and general health-system resilience may in many contexts deliver greater and more sustainable improvements in public health outcomes than highly specialized preparedness systems centered on future pharmaceutical response capacity.

Covid-19 also reinforced the distinction between commodity equity and health equity. Equal access to biomedical commodities does not necessarily produce equal public health benefit across populations with differing demographic structures, epidemiological realities, and competing health burdens. The key issue is therefore not simply whether countries receive equal quantities of countermeasures, but whether they retain sufficient flexibility to prioritize interventions according to local conditions.

A preparedness system that measures equity primarily through access to pharmaceutical commodities risks inadvertently undermining broader health equity if it diverts resources, personnel, political attention, and financing away from interventions more closely aligned with local health priorities (as occurred during Covid-19). Clean water, sanitation, nutrition, maternal care, malaria control, tuberculosis treatment, routine immunization, and primary healthcare infrastructure may often contribute more to long-term population resilience than investments in pathogen-specific surveillance systems and future pharmaceutical manufacturing pipelines.

The same concern applies to current proposals surrounding regional manufacturing initiatives. Efforts to diversify manufacturing capacity, particularly to low-income States, are understandable and may carry strategic value. However, advanced pharmaceutical manufacturing requires highly specialized technical expertise, regulatory capacity, supply chains, financing mechanisms, and sustained commercial viability. If pursued primarily as symbols of autonomy rather than components of economically and epidemiologically

coherent health strategies, such initiatives risk becoming politically attractive but financially unsustainable commitments.

Importantly, manufacturing readiness itself carries substantial ongoing cost. Current preparedness proposals increasingly assume the maintenance of “warm base” manufacturing capacity capable of rapidly switching toward emergency countermeasure production during future outbreaks. Yet, maintaining idle or semi-idle pharmaceutical production infrastructure at global scale requires continuing public subsidy and institutional coordination even in the absence of major outbreaks. These costs must ultimately be weighed against competing health priorities, particularly within lower-resource settings where existing healthcare infrastructure remains underfunded.

This issue becomes especially important when considered alongside the broader securitization dynamics discussed in the previous section. Once preparedness becomes institutionalized as a permanent emergency architecture, strong incentives emerge to maintain standing pharmaceutical response capacity irrespective of whether projected outbreak risks justify the scale of continuing investment. Manufacturing readiness, surveillance expansion, stockpiling systems, emergency procurement structures, and accelerated regulatory frameworks all require ongoing financing and political justification. Over time, preparedness risks evolving into a self-reinforcing biomedical infrastructure whose continuation becomes partially dependent upon maintaining perceptions of elevated and persistent threat.

The issue is therefore not whether manufacturing capacity, technology transfer, or vaccine development should occur. Rather, it is whether such investments are being evaluated proportionately against competing health priorities and realistic assessments of future outbreak risk. The current preparedness agenda often assumes that accelerating biomedical countermeasure production necessarily represents the most efficient path toward health security. Yet this assumption itself remains insufficiently examined.

A further concern is that the operational logic emerging from the Covid response increasingly normalizes a highly centralized emergency model of public health governance (see Figure 7 above). Surveillance expansion, emergency declarations, Public Health and Social Measures,

information management strategies, accelerated pharmaceutical development, and mass deployment campaigns risk becoming institutionalized as the default architecture of pandemic response without sufficiently robust evaluation of their proportionality, effectiveness, opportunity costs, and long-term social consequences.

This concern is especially important given the absence of comprehensive retrospective evaluation of Covid-era interventions themselves. Many core assumptions underlying the current preparedness agenda – including assumptions regarding lockdown effectiveness, transmission interruption, sustained vaccine performance, and the relative balance between pharmaceutical and non-pharmaceutical interventions – remain actively debated within scientific and policy communities. Yet, institutional momentum toward embedding these approaches within permanent preparedness architectures continues to increase.

The result risks becoming a preparedness system organized disproportionately around technological acceleration and emergency response rather than around broader public health resilience. In effect, the emerging model assumes that future health security depends primarily upon detecting pathogens faster, sequencing them more rapidly, developing countermeasures more quickly, and deploying them at greater scale. While these capacities may undoubtedly carry value, they represent only one possible approach to resilience – and potentially not the most proportionate or sustainable.

None of this implies that vaccines lack value or that future outbreaks should be ignored. It means instead that preparedness should be conceived more broadly than rapid pharmaceutical response alone. Resilient health systems, decentralized decision-making, public trust, nutrition, primary healthcare capacity, endemic disease control, and flexible context-specific responses may prove more important to long-term health security than the speed with which the international system can identify pathogens and produce new biomedical countermeasures.

The Pandemic Agreement therefore requires a broader conception of preparedness itself. Preparedness should not be judged solely by the speed of surveillance, sequencing, emergency declaration, and pharmaceutical deployment. It should be evaluated according to whether populations are healthier, health systems are more resilient, decision-making

processes are more legitimate, and interventions remain proportionate to actual levels of risk and need.

7. Incentives and System Design

The Pandemic Agreement reflects a broader preparedness economy in which governments, international institutions, firms, and philanthropic actors operate through overlapping incentives surrounding financing, emergency response, and biomedical development.

Preparedness frameworks create strong incentives for private-sector participation. These include advance purchase commitments, market-shaping agreements, public research subsidies, regulatory acceleration, indemnity arrangements, liability protections, and financing mechanisms designed to reduce commercial uncertainty. Such instruments can support innovation and may be necessary where firms face uncertain demand for products developed against unpredictable future threats.

However, these mechanisms do not automatically produce equitable or proportionate public health outcomes. They may socialize part of the risk of innovation while leaving control over production, pricing, intellectual property, and distribution largely concentrated among firms and producer States. This creates a structural tension: the public may finance preparedness capacity, but access to resulting benefits may still depend on market power, purchasing capacity, and national political decisions.

This is where the distinction between access, innovation, and health equity becomes essential. Innovation incentives may increase the probability that products are developed. Access provisions may improve the probability that some countries receive those products. But neither necessarily ensures health equity if the products are poorly matched to local needs, delivered too late, priced unsustainably, or prioritized over interventions with greater expected health benefit.

The current PPPR agenda risks blurring these distinctions. It often assumes that faster product development and broader access to countermeasures will translate into better global health outcomes. In some cases, that may be true. In others, the link may be weak or

even counterproductive if biomedical interventions displace investments in primary care, nutrition, sanitation, endemic disease control, and broader health-system resilience.

These incentive structures are also embedded within State interests. Governments retain authority over procurement, export controls, regulatory approval, emergency declarations, and domestic allocation. During a future crisis, States with manufacturing capacity are likely to face overwhelming domestic pressure to prioritize their own populations. The Pandemic Agreement may express principles of equitable access, but it cannot easily override the political economy of scarcity.

International institutions face their own incentives. The PPPR agenda expands technical mandates, creates new financing mechanisms, increases demand for coordination, and reinforces the centrality of global institutions in national policy planning. Again, these incentives are not inherently improper. But they can encourage institutional expansion even where the proportionality and performance of the proposed model remain insufficiently tested.

Sparke and Williams (2024) describe aspects of this political economy as “structural cartelisation,” referring to a nested and networked condition of collusion involving “firm-firm collusion, firm-state collusion; and firm-state-philanthropy [global institutional] collusion.” The term is deliberately provocative, but it captures an important concern: pandemic preparedness can create dense interdependencies among firms, governments, philanthropies, and international agencies that may reinforce existing concentrations of power rather than democratize global health governance.

The concern is not merely that private actors profit from public health emergencies. The deeper issue is that the design of preparedness systems may align public financing, institutional authority, and private commercial incentives around a relatively narrow model of health security. This model emphasizes surveillance, rapid product development, emergency procurement, and deployment of biomedical countermeasures. It is less well suited to supporting decentralized public health capacity, locally determined priorities, and routine health-system strengthening.

The High Level Independent Panel report to the 2025 G20 meeting in South Africa (G20 HLIP 2025; von Agris et al. 2026), also forming a basis for the planned United Nations General Assembly (UNGA) meeting on pandemics in September 2026, aims to lock in funding for this model separate from the budgeting of general health services, thus further undermining the ability to ensure proportionality in financial allocations. The Panel, and working documents of the UNGA meeting, suggest an allocation of 0.1% to 02% of GDP, a considerable portion of tax income for many low-income countries, with a further allocation from defense and security budgets. This amounts to well above the prior recommendations of \$31.1 billion annually of the WHO-World Bank 2022 report (WHO and World Bank 2022) and is wildly disproportionate to other health funding (see Figure 5).

The Pandemic Agreement attempts to address some of these concerns through language on equity, access, technology transfer, capacity building, and benefit sharing. Yet, much of this language remains aspirational or dependent on future implementation. The Agreement does not fundamentally alter the distribution of power over intellectual property, manufacturing capacity, export controls, procurement, or emergency allocation. Nor does it clearly ensure that preparedness investments will be proportionate to competing public health priorities in lower-resource settings.

A better design would begin from the objective of health equity rather than commodity access. It would ask what interventions are most likely to improve population health in specific contexts, how scarce resources should be allocated across competing risks, and how international cooperation can support national decision-making rather than replace it. It would also require more transparent assessment of the trade-offs embedded within preparedness financing and more realistic acknowledgment of how States and firms behave under scarcity.

The Pandemic Agreement does not resolve these incentive problems. Instead, it risks formalizing a system in which public obligations are expanded, private and institutional incentives are strengthened, and the promised public health benefits remain uncertain, unevenly distributed, and insufficiently connected to local need.

8. The Africa Group and the Politics of Resistance

The emergence of the Africa Group and related coalitions such as the “Friends of Equity” as central actors in the Pandemic Agreement negotiations represents one of the most important political developments within the current process. Their resistance has not simply delayed agreement; it has fundamentally reshaped the negotiations by forcing unresolved structural questions back onto the agenda.

This role should not be understood as obstructionism or disinterest in health cooperation. Rather, it reflects growing skepticism regarding whether the current Agreement adequately addresses longstanding inequalities embedded within global health governance. For many lower-resource countries, the experience of Covid-19 reinforced perceptions that the international system remains structurally asymmetric: obligations are frequently universalized, while benefits remain conditional, delayed, and dependent upon the political and economic priorities of wealthier States.

The significance of this skepticism extends beyond vaccines alone. During Covid-19, many African States implemented policies strongly influenced by global guidance and the epistemic authority of major international institutions, including lockdowns, border restrictions, school closures, and mass vaccination targets. Yet, the socioeconomic consequences of these policies often fell disproportionately on younger and poorer populations already facing high burdens of endemic disease, economic precarity, and fragile health systems. In many settings, debt burdens increased substantially, educational disruption became severe, and resources were diverted away from routine health services and broader public health priorities (Brown et al. 2025; IHME 2025).

For many negotiators, the Pandemic Agreement therefore raises a deeper question: whether the post-Covid preparedness architecture risks institutionalizing a governance model that centralizes authority while insufficiently accounting for local context, demographic variation, competing health burdens, and differing national priorities.

Historical experience also shapes these concerns. The language of colonialism, dependency, and unequal extraction appears repeatedly within negotiations because many Member States interpret contemporary global health arrangements through longer histories of

economic and political asymmetry. Debates between Namibia and Germany during negotiations, for example, reflected not merely disagreement over technical treaty language, but broader tensions surrounding historical injustice, unequal bargaining power, and the distribution of benefits within international systems.

Similarly, Indonesia's earlier "viral sovereignty" dispute demonstrated that concerns regarding biological extraction and unequal benefit-sharing long predate Covid-19. The Pandemic Agreement negotiations have therefore become part of a larger debate regarding sovereignty, ownership, reciprocity, and control within global health governance.

Importantly, the Africa Group's leverage derives from the centrality of PABS itself. Without broad support from lower-resource countries, the Agreement struggles to maintain legitimacy as a framework for equitable global cooperation. Since PABS depends upon participation by countries expected to contribute pathogens, genomic data, surveillance infrastructure, and political legitimacy, resistance from those same countries creates a structural challenge that cannot easily be bypassed.

At the same time, this leverage is politically complex. The Africa Group is not a unified ideological bloc. Member States possess differing health priorities, fiscal capacities, geopolitical relationships, and strategic interests. Some countries view the Agreement as an opportunity to secure financing, manufacturing partnerships, technology transfer, or preferential access arrangements. Others remain more skeptical regarding the broader PPPR agenda itself and worry about long-term financial obligations, institutional dependence, or loss of policy autonomy.

The negotiations are further complicated by the emergence of alternative pathways for health cooperation outside the WHO framework. Bilateral and regional arrangements – particularly those involving the United States and other major powers following debates surrounding WHO reform and withdrawal – have increased the strategic options available to some countries. Even where such alternatives remain uncertain, their existence alters negotiating dynamics by weakening assumptions that the Pandemic Agreement represents the sole available route to international preparedness cooperation.

What is increasingly clear is that global health governance cannot be depoliticized. Calls to remove politics from public health often overlook the reality that decisions regarding resource allocation, emergency powers, financing priorities, technological access, trade-offs, and sovereignty are inherently political. The issue is therefore not whether politics should exist within global health governance, but whether political processes are sufficiently inclusive, transparent, proportionate, and legitimate.

From this perspective, disagreement within the Pandemic Agreement negotiations should not automatically be viewed as dysfunction. Political contestation may represent an important corrective within systems where institutional momentum, emergency framing, and asymmetries of power can otherwise narrow deliberative space. Slower negotiation may at times produce more legitimate and sustainable outcomes than rapid agreement achieved under conditions of compressed review, unequal negotiating capacity, or unresolved structural disagreement.

This point was reflected in the comments of several delegations during negotiations. Resistance was frequently framed not as opposition to cooperation itself, but as opposition to weakly defined obligations, uncertain benefits, and accelerated processes that risked institutionalizing unresolved flaws. In this sense, the current impasse may represent a form of democratic friction within global governance rather than diplomatic failure.

The political importance of the Africa Group therefore extends beyond the immediate fate of the Pandemic Agreement. Their resistance has forced broader questions onto the international agenda: how preparedness priorities are determined, who benefits from preparedness financing, how health equity should be defined, how sovereignty should operate during emergencies, and whether existing institutional arrangements adequately reflect the diversity of public health realities across the world.

Far from undermining global cooperation, these questions may be essential to rebuilding it on more credible and sustainable foundations.

9. Conclusion: From Impasse to Reconsideration

The repeated failure to conclude negotiations on the Pandemic Agreement should not be interpreted simply as a breakdown in international cooperation. Rather, the persistence of disagreement reveals unresolved structural tensions embedded within the Agreement itself and within the broader PPPR agenda that surrounds it.

At the center of these tensions lies a perception that the Agreement – and the preparedness agenda it supports – risks widening overall health inequities rather than narrowing them. Countries are being asked to divert resources from major existing health burdens and their drivers in order to address intermittent and uncertain threats of historically far lower aggregate burden. This involves increasingly concrete commitments surrounding pathogen sharing, surveillance expansion, regulatory alignment, preparedness financing, and emergency coordination. Yet the benefits promised in return – access to vaccines, therapeutics, diagnostics, technology transfer, and emergency support – remain uncertain in timing, enforceability, affordability, and distribution.

The Covid-19 experience exposed these asymmetries clearly. Policies promoted globally in the name of collective protection often imposed disproportionately severe economic and social consequences on lower-income populations and States. During periods of scarcity, mechanisms intended to promote equity repeatedly became subordinate to national political priorities. This outcome reflected enduring realities of sovereignty, manufacturing concentration, unequal purchasing power, and domestic political accountability. The Pandemic Agreement attempts to expand global coordination without fully resolving these structural realities.

At the same time, the broader preparedness framework rests upon assumptions regarding pandemic frequency, severity, and economic risk that remain contested. Significant uncertainty persists regarding the proportionality of the proposed preparedness architecture, the opportunity costs associated with large-scale preparedness spending, and the extent to which highly centralized biomedical approaches improve long-term population health outcomes relative to investments in broader health-system resilience.

The Agreement is also shaped by powerful institutional and political incentives. International organizations gain expanded mandates and financing opportunities through preparedness frameworks. Governments seek to demonstrate vigilance against future threats while positioning domestic industries favorably. Firms benefit from public financing, market guarantees, and accelerated regulatory pathways. Negotiators themselves operate within systems that frequently reward progress toward agreement more than reassessment of underlying assumptions. None of these incentives are necessarily illegitimate. However, together they create strong momentum toward institutional expansion even where important evidentiary, political, and distributive questions remain unresolved.

The role of the Africa Group and other skeptical Member States has therefore been politically significant. Their resistance has slowed a process that many delegations increasingly regard as incomplete, imbalanced, or insufficiently scrutinized. Far from representing rejection of cooperation itself, this resistance reflects demands for greater proportionality, clearer reciprocity, stronger deliberation, and more credible consideration of differing national realities and public health priorities.

The broader pandemic agenda also warrants more fundamental evaluation. Since Covid-19, preparedness policy has increasingly emphasized a model built around expanded surveillance, emergency declaration, restrictive Public Health and Social Measures, rapid vaccine development, manufacturing acceleration, and mass pharmaceutical deployment. This operational logic may prove useful in some circumstances. However, it also reflects a highly biomedicalized and centralized conception of preparedness that risks under-prioritizing broader determinants of resilience such as nutrition, primary care, endemic disease control, sanitation, workforce stability, education, local governance capacity, and economic resilience.

The danger is not simply excessive preparedness spending, but the gradual institutionalization of a narrow preparedness model whose assumptions and trade-offs remain insufficiently examined.

The present impasse therefore creates an important opportunity. Governments are no longer deciding merely whether to conclude negotiations on schedule. They are deciding whether

the Pandemic Agreement, in its current form, represents a proportionate, evidence-based, and politically sustainable model for future global health cooperation.

Three broad pathways now exist.

The first is to proceed with the Agreement largely as drafted, accepting unresolved tensions in the expectation that implementation and future negotiation will gradually address remaining concerns. This approach prioritizes continuity and institutional momentum while risking the lock-in of structural weaknesses and asymmetries.

The second is to delay and renegotiate core elements of the framework, particularly around PABS, preparedness financing, proportionality, sovereignty, and the assumptions underpinning the wider PPPR agenda. This would require greater willingness to revisit foundational questions rather than treating them as obstacles to be managed procedurally.

The third is more fundamental reconsideration: reassessing whether the current preparedness architecture itself reflects the most appropriate balance between global coordination, national autonomy, biomedical intervention, and broader public health resilience.

This paper argues that the latter two pathways offer the more credible and responsible approaches, with a leaning toward the third option. The issue is not whether international cooperation on health emergencies is necessary. It is whether the present Agreement reflects sufficiently robust evidence, realistic political assumptions, and proportionate public health priorities to justify the institutional commitments it would create.

A slower, more deliberative process may ultimately strengthen rather than weaken global cooperation. Agreements reached under conditions of unresolved structural disagreement, compressed scrutiny, and uncertain proportionality risk undermining both institutional legitimacy and long-term compliance. By contrast, reassessment grounded in transparent evidence, realistic incentive analysis, and genuine political deliberation may produce a framework better aligned with both global coordination and national public health realities.

The current pause in negotiations should therefore not be viewed solely as failure. It may instead represent the necessary political space through which a more credible, equitable, and sustainable approach to global health governance can emerge.

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