

Sustainability in global health: a low ceiling, a star in the sky, or the mountaintop?

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INTRODUCTION

Sustainability has long been a central but rarely studied concept in global health. It points to an endgame for initiatives and actors seeking to improve health outcomes and reduce health inequities both across and within countries.^{1–7} It suggests that disadvantaged countries and communities should ultimately become self-sufficient and be able to address their health challenges with limited outside support. Sustainability in global health should not be confused with the concept of environmental and economic sustainability as defined by the United Nations Brundtland Commission and the Sustainable Development Goals (although there is some overlap between the two).^{8,9}

Despite the apparent simplicity of this concept, the framing of sustainability has evolved substantially over time. At its core, sustainability in global health faces at least three major conceptual challenges:

- ▶ **Reach and scope:** many health challenges cross national and geographical borders and are too large and complex to be addressed in isolation.
- ▶ **Time and resources:** the amount of time and resources needed to achieve sustainability is often much longer than that committed by most global health initiatives.
- ▶ **Power and incentives:** deeply rooted power structures of the global health ecosystem and the behaviour of outside actors often undermine the pursuit of self-sufficiency by disadvantaged countries and communities.

Earlier framings of the concept have sought to address these challenges by either reducing sustainability to a false constraint or elevating it to a vague aspiration. In the first case, claims of resource scarcity served as a justification for the lack of ambition. In the second

case, the vagueness of the aspiration served as a justification for the lack of accountability. Both framings do not distinguish between the sustainability of health outcomes and the sustainability of health initiatives, actors and existing power structures.³ They also prioritise preventing outcomes from reverting to an old baseline over ensuring the continuous improvement of these outcomes. In addition, both framings place the responsibility of achieving sustainability primarily on the actors with the least amount of power. Lastly, they also greatly underestimate the role of historical and current societal injustices in creating and sustaining the existing power structures and associated social determinants of health.^{4 7 10–12}

In this article, we first describe the origins of each of these two framings of sustainability and explore their intersections with the power structures of the global health ecosystem. We then propose a new framing of the concept of sustainability in global health.

THE POSTDECLARATION YEARS: SUSTAINABILITY AS A LOW CEILING

The exact origin of reducing sustainability to a constraint—or a metaphorical low ceiling—is unclear. It appears that such a framing was first deployed in global health in the aftermath (and as a response to) the Declaration of Alma Ata in 1978.⁷ The Declaration embraced the ideals that health is a fundamental human right and that ‘developed countries’ have a moral duty to assist ‘developing countries’.¹³ These ideals contrasted with the prevailing geopolitical application of hypercapitalist economic principles in the development and health sectors.^{4 7 14–16} These principles emphasised market-based solutions to balance the supply and demand of goods and services (including life-saving health services) and

professed that government should avoid interfering through excessive regulation of the private sector. The same principles also opposed major redistributions of resources, which would have been necessary to pursue the Declaration's ideals. Through structural adjustment lending, the World Bank and the International Monetary Fund explicitly required 'developing countries' to minimise the public deficit by cutting government expenditures for health, education and other social infrastructures.^{4 7 15-18} The assumption (yet unproven) was that these cuts, trade liberalisation, support of the private sector and decreased taxation would catalyse economic growth, and therefore, lead to stronger health systems and improved health outcomes.^{4 15 16 19}

With sustainability framed as a constraint, most initiatives implemented shortly after the Declaration addressed only a small set of diseases and interventions and prioritised prevention over treatment.^{4 7 14 17 18 20} UNICEF's recommended package of child health services, GOBI (growth monitoring, oral rehydration solution, breast feeding and immunisation), exemplifies this approach.^{4 7 14 17 18 21} In the ensuing years, as the HIV/AIDS pandemic grew unchecked, there was minimal effort to address the emergence of drug-resistant malaria and tuberculosis. Non-communicable diseases (NCDs) were almost entirely neglected. By the mid-1990s, the health budgets of most low-income countries rarely

exceeded US\$10 per person/year (average high-income countries were already spending over US\$2000 per person/year).^{4 7 10 22 23} These countries were resigned to making the best (or most cost-effective) use of scant resources.

The historical and societal injustices, power structures and policies that drove such scarcity in the first place were not seriously challenged.^{7 10-12} There was an implicit acceptance of the low ceiling. The excessive burden was placed on ordinary people and especially those most vulnerable, who were expected to seek care and adhere to treatment when very little of both were available. In many countries, people were also required to pay fees at the point of care regardless of their ability to do so, and display unrealistic levels of resilience when faced with poverty, hunger, and other types of hardship (making the adoption of health-promoting practices almost impossible).^{14 7 24-29} The major impact on health of social determinants was either underappreciated or disregarded.^{30 31}

With sustainability framed as a constraint (figure 1A), initiatives that cost more than a low and predefined (by donors) amount of money would be 'unsustainable', that is, too expensive for donors to sustain spending. And they would lead to 'unsustainable' improvements in health outcomes and reductions in health inequities; that is, too expensive for disadvantaged countries and communities to sustain on their own. As a result, the initiatives

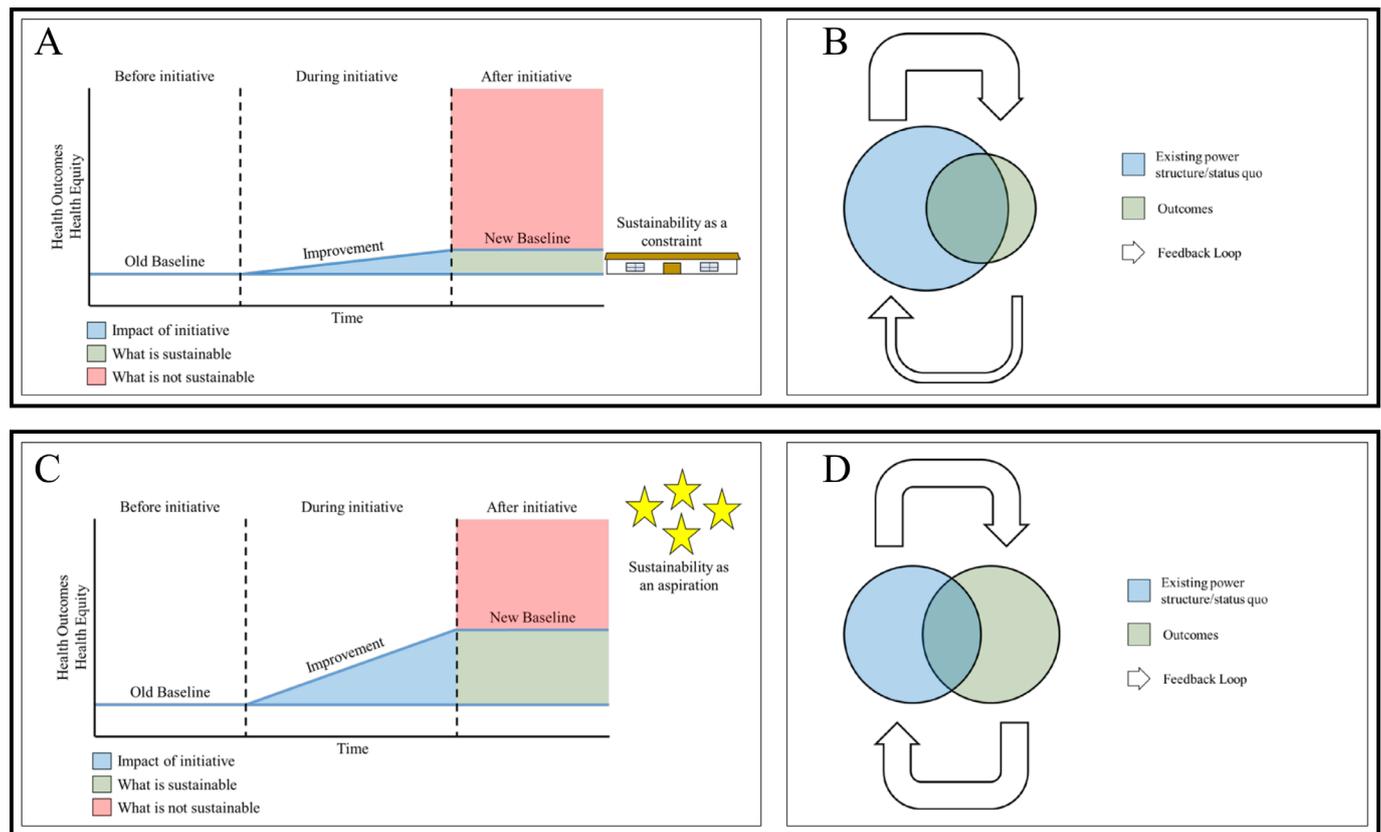


Figure 1 Previous framings of sustainability: (A) Sustainability as a constraint; (B) overlap and feedback loops between outcomes and existing power structures/status quo with a constraint framing; (C) sustainability as an aspiration and (D) Overlap and feedback loops between outcomes and existing power structures/status quo with an aspiration framing.

implemented were of limited reach and scope, and the improvements they generated were at best small and incremental, failing to address the burden of diseases at anywhere near the necessary scale. Between the late 1970s and late 1990s, there were moderate decreases in neonatal and under-5 mortality and a mild decrease in maternal mortality.^{32–34} Unfortunately, millions of people continued to die annually from preventable and treatable diseases while life expectancy in sub-Saharan Africa plateaued or declined as the HIV/AIDS pandemic took hold of the region.^{35 36}

After initiatives ended, many disadvantaged countries and communities did not have resources to maintain (let alone, continue to improve) even modest gains on their own.⁴ Instead, they continued to depend on outside actors. In addition, there was an insidious overlap between the need to sustain health outcomes and the pressure to sustain initiatives and actors, often regardless of their effectiveness.³ Actors with more power were able to advocate for their own sustainability and the initiatives that they favoured more successfully than actors with less power. As a result, governments, non-governmental organizations (NGOs), academic institutions and donors from high-income countries (as well as heavily Westernised multilateral organisations) continued to exert outsized influence and impose their views on corresponding actors from disadvantaged countries and communities.^{10–12} In other words, ‘sustainability’ often became synonymous with the maintenance of the status quo.

The feedback loop between health outcomes and the initiatives and actors within the global health ecosystem contributed to the problem (figure 1b). Actors with more power determined the outcomes to pursue and selected the metrics to measure success.^{37–39} These outcomes were rarely used to hold these actors accountable and encourage necessary changes in practices. They were often used to set priorities and guide (if not enforce) reforms in disadvantaged countries and communities with limited capacity to select, track and analyse their own metrics.^{37–39}

THE GOLDEN AGE OF GLOBAL HEALTH: SUSTAINABILITY AS AN ASPIRATION

The framing of the concept of sustainability in global health has evolved substantially since the late 1990s. Over the past 20 years, the ideals that health is a fundamental human right and that high-income countries have both a moral duty and long-term interest in assisting low-income and middle-income countries have made an encouraging comeback. We now know that the economic consequences of a lack of health services (due to labour productivity, orphaned children and effects on educational attainment) were likely so significant as to be greater than their costs in economic terms alone.⁴⁰ The HIV/AIDS pandemic and the Millennium Development Goals (which included health targets for maternal health, child health, HIV, tuberculosis and malaria) catalysed

the implementation of initiatives of much greater reach and scope than those implemented just a decade earlier.^{41–45} The Global Fund to Fight AIDS, Tuberculosis and Malaria, the President’s Emergency Plan for AIDS Relief, GAVI, the Vaccine Alliance and the Bill & Melinda Gates Foundation have been able to marshal and deploy considerably more funding than before.^{23 46–48}

In this new era (known as the golden age of global health), sustainability became an aspiration, an ambitious but poorly defined goal—a metaphorical star in the sky (figure 1C). With this framing, there has often been a profound mismatch between the aspirational rhetoric adopted by many powerful actors within the global health ecosystem and their actual priorities, incentives and behaviour. When it was not in open conflict with the pursuit of sustainability, this behaviour in many cases has prevented progress from occurring at a greater scale and speed. It is also important to note how the earlier framing of sustainability as a constraint has persisted together with the new framing of sustainability as an aspiration.

The conservative and fragmented approaches of the post Alma Ata Declaration years gave way to more holistic and integrated approaches that acknowledged the importance of both prevention and treatment, especially of infectious diseases such as HIV and tuberculosis as well as malaria and other neglected tropical diseases. Development assistance for health increased from approximately US\$7 billion in the late 1990s to almost US\$40 billion by the early 2010s.^{23 46} Between 1995 and 2014, average per capita health spending increased to over US\$900/year in upper middle-income countries, over US\$250 in lower-middle-income countries, and approximately US\$120/year in low-income countries.⁴⁶ Tens of millions of people received antiretroviral drugs, and treatment for multidrug-resistant tuberculosis has become widely available in most countries.^{49 50} While many initiatives have remained ‘vertical’ in that they address a specific set of diseases, considerable efforts have been made to leverage their resources to strengthen health systems more broadly (or ‘diagonally’).⁵¹ A fairer and more realistic assessment of peoples’ and communities’ agency, vulnerability and resilience has led to a renewed appreciation of the importance of social, economic, legal, political and environmental determinants of health.^{45 52–58}

Despite these achievements, significant challenges remain. Misguided free market principles continue to overly influence global health.^{59 60} There are growing attempts at balancing the market through corporate social responsibility, private philanthropy, public–private partnerships, social entrepreneurship and legislation.^{53 60 61} New intellectual property laws, voluntary licensing agreements and pooled funding for research and development as well as procurement, utilisation of generic medications and development of frugal technologies have made (or have the potential to make) certain health technologies (like antiretroviral drugs) more readily available to disadvantaged countries and communities.^{49 50 53 54 62–64}

However, limited access to life-saving health technologies has continued to thwart many initiatives globally.

While there has been a significant (but still insufficient) redistribution of resources from foreign to national actors, redistribution of other sources of power has proved more difficult. Some donors have often opted to channel funding primarily through international NGOs and academic institutions rather than their counterparts from disadvantaged countries and communities.^{48 65 66} The same donors have also driven most of the agenda by choosing what priorities to address (often favouring disease (especially infectious)-specific initiatives over health system strengthening ones), prescribing how funding should be spent, and determining the timeline for the implementation of most initiatives.^{48 65 66} The result has been a persistent mismatch between the actual burden of diseases and the allocation of funding, which has hampered the pursuit of self-sufficiency in disadvantaged countries and communities.⁶⁷

The current average per capita health expenditure for low-income countries is barely enough to provide a very basic level of universal health coverage, but not nearly enough to achieve all of the remaining health targets within the third Sustainable Development Goal.^{46 68 69} Simultaneously, there has been no systematic plan to replace development assistance for health with government health expenditure in supported countries, especially in those transitioning from low-income to middle-income status.^{69 70} As a result, out-of-pocket health expenditure has increased substantially in these countries and will continue to do so shortly.⁴⁶

Despite the acknowledgement of the role that historical and current injustices (colonialism, excessive debt obligations, corruption and commercial exploitation) played in creating the current state of affairs, the previous power structures remained.¹⁰⁻¹² Instead, a misapplication of the idea of ‘win-win’ solutions (the belief that meaningful societal change can always occur without major disruptions of the status quo) has become ubiquitous, especially as it pertains to many problematic public-private partnerships.⁷¹⁻⁷⁴

With these persistent governance issues, progress, although substantial, has been uneven. Morbidity and mortality from HIV, tuberculosis and malaria have decreased. However, these diseases are not yet under control and maintaining previous gains has proven to be challenging.^{6 49 75} Neonatal disorders remain the greatest burden of disease globally, measured by disability-adjusted life-years. Despite significant improvements, low-income and middle-income countries still bear 94% of the burden of maternal mortality.^{75 76} Little has been done to prevent and treat NCDs, surgical conditions, cancer and mental illnesses.⁷⁷⁻⁸² The global health ecosystem has proved to be increasingly vulnerable to a novel epidemic and pandemic diseases.^{83 84} While the Ebola epidemic in West Africa was ultimately contained, the current COVID-19 pandemic has gravely damaged the health systems of countries worldwide. Lastly, the global health ecosystem

has only the most nascent of strategies to combat the negative impact of climate change and environmental degradation.^{57 58}

With sustainability framed as an aspiration (figure 1C) and without a roadmap to achieve it, it remains unclear how exactly, when or whether actors providing outside support should ‘work themselves out of a job’ and coordinate the transition with disadvantaged countries and communities without compromising health outcomes.^{70 85} Some overlap between the need to sustain health outcomes and the pressure to maintain the existing power structures (figure 1D) has persisted.³ Additionally, process indicators of sustainability (documenting, for example, the development of new policies and procedures by global health actors) have taken precedence of quality indicators (measuring the extent to which these new policies and procedures have resulted in high-quality implementation and scale-up of new practices).⁸⁶ The feedback loop between health outcomes and actors has remained skewed in favour of actors with the most power³⁹ who continue to determine most of the outcomes to pursue and select most of the metrics for measuring success.

THE CRITICAL ROLE PLAYED BY THE EXISTING POWER STRUCTURES AND DETERMINANTS OF HEALTH WITHIN THE GLOBAL HEALTH ECOSYSTEM

Power in global health comes from formal authority, operational or regulatory autonomy, knowledge and skills, political capital and influence, and access to resources. The paradox is that actors with limited power (such as ordinary people, health professionals and governments from disadvantaged countries and communities) have historically been held disproportionately accountable for failures for which other actors and determinants of health associated with the entire global health ecosystem are also responsible.^{26 29 31 52-55 57}

Multilateral organisations, donors, international NGOs and academic institutions in high-income countries have rarely been held accountable to the same degree, have often faced minimal consequences for their underperformance, have frequently failed to learn from their mistakes and generally have been able to participate in global health initiatives on their terms and squarely within their organisational comfort zone.⁸⁷⁻⁸⁹ The term ‘capacity building’ too often reinforces the assumption that actors from disadvantaged countries and communities are primarily responsible for poor health outcomes. Very rarely has the poor capacity of actors from high-income countries been truly questioned. In reality, the optimal performance of the global health ecosystem requires that all actors continuously improve their practices. But the more power an actor holds, the greater the impact of these improvements is likely to be.

The most important determinants of health are upstream factors, for which powerful actors operating outside of the health sector are responsible. For example,

on average, social and economic development (measured by the Socio-Demographic Index) accounts for more than 50% of the increases observed between 2000 and 2019 in health-adjusted life expectancy in countries across all income levels.⁴⁵ Between 2030 and 2050, climate change is expected to cause approximately 250 000 additional deaths per year.⁹⁰ More than 820 million people lack access to enough food to meet daily caloric requirements (while at least twice as many consume hypercaloric and processed food), and more than 800 000 people die every year because of unsafe drinking water and poor sanitation.^{78 91} Enacting policies to reduce greenhouse emissions, reduce poverty and economic inequality, increase schooling, increase food security, and improve water and sanitation all require that powerful actors play their role. Although never reckoned with in the framing of sustainability as a constraint, and rarely properly addressed in the framing of sustainability as an aspiration, the health consequences of inaction by such social, commercial, political and environmental actors is unsustainable.

THE WAY FORWARD: SUSTAINABILITY AS A MOUNTAINTOP

Rather than a false constraint or vague aspiration, sustainability can instead be framed as a metaphorical mountaintop: a destination that, though distant and daunting, is attainable through continuous and deliberate effort as well as pragmatic changes in strategy and approaches informed by the mistakes made and the lessons learnt along the way. The following characteristics apply to this reframing of the concept of sustainability in global health:

- ▶ **Tangible:** sustainability should be seen as a tangible goal for initiatives implemented in disadvantaged countries and communities, especially those supported by outside actors (figure 2A).
- ▶ **Outcomes focused:** sustainability of outcomes should take precedence over maintenance of the status quo of activities (figure 2B). Outside actors should remain engaged only if: (A) certain health challenges are of such scale and complexity that they require ongoing

cooperation across countries and communities; (B) until actors at the national and community level become self-sufficient or (C) if these actors opt to continue working with outside actors on new initiatives as they achieve operational and financial independence on previous ones.

- ▶ **Dynamic:** applied to outcomes, the idea of sustainability should be dynamic rather than static. What ought to be sustained are continuous improvements in health outcomes and reductions in health inequities, especially when support from outside actors decreases. Process indicators and quality indicators of sustainability should be captured and analysed.
- ▶ **Adequately timed and resourced:** the amount of time and resources available to disadvantaged countries and communities should be determined primarily by what they need to become self-sufficient, not by artificial limits that are externally imposed. This determination should occur very early on, during the planning phase of most global health initiatives.
- ▶ **Integrated across the global health ecosystem:** since the global health ecosystem's outcomes depend on the sum of all activities by all actors, the achievement of sustainability requires a 'total ecosystem' response and not a series of disjointed and possibly conflicting initiatives.
- ▶ **Equitable:** the existing power structures and status quo should change if they fail to deliver the necessary outcomes for people in disadvantaged countries and communities

Achieving sustainability will require deep, strategic and structural changes across the global health ecosystem. It will necessarily involve the redistribution of power and significant and often uncomfortable changes in practices by most actors. As power is redistributed, actors who relinquish some control will incur additional risks. Those who acquire it will increase their accountability, and ideally use power better than those from whom they acquired it.

The practical application of this reframing of the concept of sustainability may require donors to: (A) increase overall

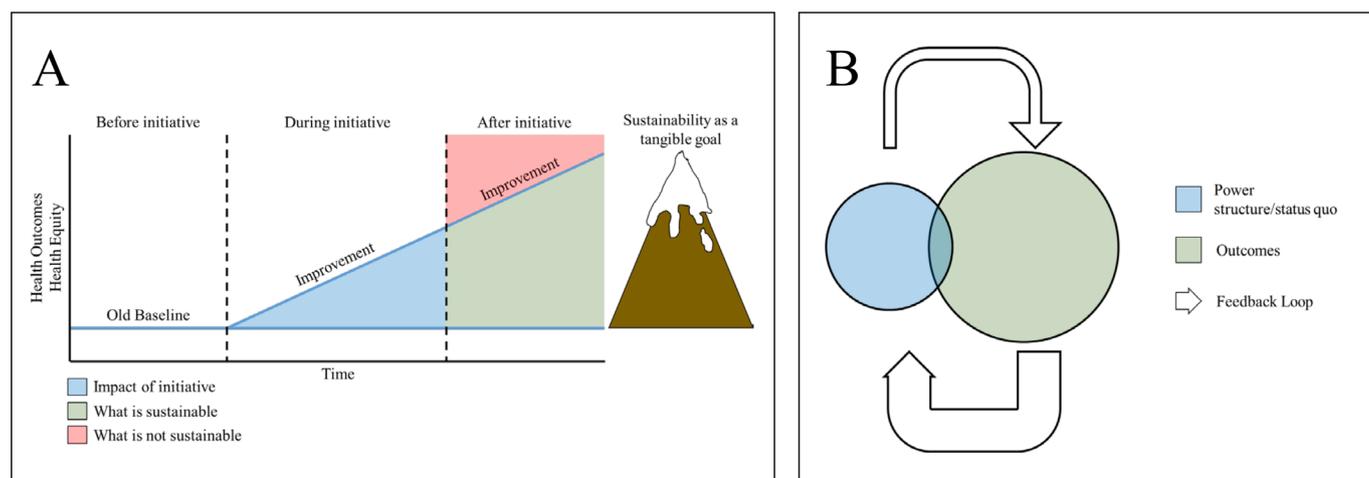


Figure 2 Sustainability as tangible goal (A) overlap and feedback loops between outcomes and actors (B).

funding; (B) support health system strengthening and primary healthcare initiatives that advance universal health coverage as much as disease-specific initiatives; (C) be more reliable and accountable by committing to longer-term time frames and different funding mechanisms; (D) remove unnecessary funding restrictions and when possible (E) channel funds through national governments, local NGOs, and national academic institutions rather than international implementing partners. Simultaneously: (A) international NGOs might opt to invest in local leadership and determine their objectives by following the leads of national governments and local communities; and (B) academic institutions might embrace social accountability by adopting more incentives and promotion policies that reward real-world impact.

To increase transparency and accountability, national governments would need to make routine reports publicly available, outlining both successes and setbacks. The same governments might have to: (A) develop and execute national strategic plans to improve health outcomes and reduce health inequities holistically (through a combination of health interventions and interventions that target social, commercial, political and environmental determinants of health); (B) pass laws and enforce policies that hold actors from the health sector as well as other development sectors accountable for their contribution to these plans; (C) and mobilise enough financial, human, and technological resources to achieve universal health coverage and tackle the most pressing health priorities of their populations.

To improve their effectiveness, the WHO and other multilateral institutions can: (A) increase their operating budgets and spending flexibility; (B) decrease their dependency on a small number of powerful donors; (C) undergo structural reforms to reduce balkanisation strengthen synergies among their programmatic units; (D) prioritise evidence-based interventions of political considerations and ideologies.

None of these practices are new. They have been discussed and negotiated for years. Yet, they have not occurred at the necessary scale to tackle the world's most pressing health priorities. One of the main challenges is that the most powerful actors within the global health ecosystem are accountable primarily to their own internal metrics and most proximate constituencies and rarely assess the impact of their current practices on those of other actors and on the ecosystem's overall performance.

If commonly adopted, a new framework for sustainability could serve to enhance alignment within the global health ecosystem, democratise accountability, address complex and multifaceted health challenges, and ultimately further improve health outcomes and reduce health inequities.

CONCLUSIONS

Despite a lack of consensus on its meaning or how to achieve it, the concept of sustainability has a profound

and often counterproductive influence on priority setting, policy-making and implementation in global health. A shared, specific and transformative framing of sustainability can serve as a framework to enhance alignment within the global health ecosystem, democratise accountability, redistribute power, support the current movement to decolonise global health and pursue redistributive justice, eliminate false dichotomies, tackle complex and multifaceted health challenges, improve health outcomes, and reduce health inequities globally.

In this article, we propose a framing of sustainability as a tangible goal. First, what ought to be sustained are improvements in health outcomes and reductions in health inequities, not initiatives and actors that fail to deliver. Second, these outcomes should continue to improve in disadvantaged countries and communities after support from outside actors decreases, not remain stuck at a new baseline. Third, the achievement of sustainability requires all of the ecosystem response rather than the expectation of significant sacrifices by some actors (often squeezed at the bottom of the existing power structures) and business as usual (plus or minus small tweaks) for everyone else.

This framework raises new questions: Who should determine the ideal speed of improvements in health outcomes and reductions in health inequities? Who should pick the performance metrics of those in the global health ecosystem? Who should monitor progress at the community, national and global levels? Who should hold underperforming actors accountable and what tools should be used to enforce (or at least nudge) the necessary changes in practices? Answering these questions is important. Part of the answer should involve ensuring that disadvantaged countries and communities acquire much greater authority, autonomy, empowerment, competencies, political capital and resources. It will require the willingness of governments, NGOs, academic institutions and donors from high-income countries and communities to relinquish some control and incur additional risks. It will also involve strengthening current platforms of accountability at the local, national and global levels.

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