



In with the good, out with the bad – Investment standards for external funding of health?

Robert John Fryatt^{a,*}, Mark Blecher^b

^a Position: Lead, International Health, Mott MacDonald, Address: 10 Fleet Place, London EC1M, UK

^b Chief Director, Health and Social Development, Address: National Treasury, Government of South Africa, Pretoria, South Africa

ABSTRACT

In recent decades, external financing of health systems in low- and middle-income countries has helped achieve remarkable improvements across the world. However, these successes have not come without problems. There are a growing number of areas where external assistance can cause harm and even undermine the development of national health systems. Recent decades have seen a surge of knowledge on investing in health systems. We propose the setting up of investment standards for external assistance that aim to incentivize a more efficient evidence-based investment in a country's health system, led by decision-makers in country. Using a more standardized process would lead to a better use of precious external assistance resources. The long-term goal would be fully functioning health systems with all the necessary essential public health functions in all countries.

1. Background

In recent decades, external financing of health systems in low- and middle-income countries has helped achieve remarkable improvements across the world. Some of the biggest recent reductions in communicable disease and preventable maternal and child deaths have been to some degree controlled with external assistance to domestic led efforts. The all-cause mortality rate in PEPFAR recipient countries, for example, was estimated as being 20 % lower than what would have been expected without PEPFAR support [1]. Improvements in school attendance and economic growth has also been helped by these investments [2]. In countries where the US Presidents Malaria Initiative (PMI) and Global Fund invests, malaria deaths have been reduced by 26 % between 2002 and 2020 [3]. In the absence of malaria control during the same period, deaths would have increased by 84 % and malaria cases by 70 %; an estimated 11.7 million lives have been saved [4]. Related to this has been the drop in price, and related increase in access, of life-saving drugs and commodities for HIV/AIDS, TB and Malaria, in part due to the huge, combined purchasing power of international donors and national governments [5]. Global inequality in life expectancy has also declined, largely due to reductions in mortality from HIV, TB and malaria [6]. External financing for health can come from Official Development Assistance (ODA), but also from NGOs and Foundations, and together is referred to as Development Assistance for Health (DAH). Whilst it is only 0.5 % of overall global spending on health, in low-income countries, DAH was about 28 % of overall funding in 2019 [7]. It can have a major

catalytic role and is central to many disease control efforts. During the pandemic, health spending from external assistance in low income settings rose from 0.7 % of gross domestic product (GDP) in 2000 to 1.8 % in 2020; this was equivalent to \$10.80 per capita as against \$9.20 per capita spending by governments [8]. It has played a significant role in getting essential health services, especially preventative services, to those most in need.

Post-pandemic countries are reducing health spending to below pre-pandemic levels and external assistance could help reverse this latest trend [9]. In emergency and conflict environments, where health systems have collapsed, ODA funded humanitarian assistance can play an even bigger role. In countries or environments where certain groups are denied or are unable to access essential services, due to a variety of barriers such as poverty, discrimination, distance, or gender, then external assistance can have a big influence through explicit identification, prioritization and tracking of results [10]. Formal studies of the impact of external assistance on health have shown its positive impact [11] although this is largely dependent on a good policy and institutional environment.

However, these successes have not come without problems. There are a growing number of areas where external assistance can cause harm and even undermine the development of national health systems [12]. These have been extensively reviewed [13], summarised in Table 1. Probably the most important concern is that external assistance undermines national financing and decision making, reducing local accountability and resource allocations for health [14]. Countries who

* Corresponding author.

E-mail addresses: bob.fryatt@mottmac.com (R.J. Fryatt), Mark.Blecher@treasury.gov.za (M. Blecher).

Table 1
Common critiques of external financial investments to improve health.

Critique	Why is it a concern
1 Inadequate total volume of financing	Existing financial resources dedicated to health fall short of needs, and significant international resources will be required particularly to support the poorest countries.
2 Volatility and uncertainty of financing	Aid disbursement is irregular and information on future financial flows is uncertain, which is particularly detrimental when external funds involve recurring costs in the health sector such as salaries, drugs and transport.
3 Additionality of financing	External financing may displace rather than augment domestic financing for health.
4 Proportion transferred to recipient countries	The proportion of external that is transferred to or spent in developing countries is unclear and/or inadequate.
5 Priority setting	Critiques on priority setting in external center around three distinct but interrelated questions: how priorities actually get set, who should set priorities, how priorities should be set.
6 Coordination	The proliferation of actors involved in external assistance, particularly over the last decade, has exacerbated the problem of coordination among them, with the predictable consequences of system fragmentation, inefficiencies, confusion, gaps and transaction costs.
7 Accountability	The existing external financing system has weak mechanisms of accountability, particularly for strengthening the accountability of stronger actors toward weaker ones.
8 Rationale	Debates have arisen regarding what is and what should be the rationale or justification for external assistance.

Source [HYPERLINK "SPS:refid::bib13" \[13\]](#).

receive regular external assistance do not necessarily end up with higher levels of spending on health overall [15]. Governments naturally tend to adjust sectoral allocations away from areas where external assistance is high, making some critically important health services at risk when donor funding stops [16].

Past attempts on aid effectiveness in health have had only a partial or temporary impact due to factors such as power imbalances between global-health actors and actors within LMICs, inadequate policies, capacities and evidence within countries to guide more balanced investments in health systems and ill-considered national self-interests [17] Calls for more systematic cost-effective assessments of aid have yet to gain traction [18]. There have been various global efforts in recent decades to improve the effectiveness of external assistance, summarized in Table 2.

Meanwhile the global landscape for health gets ever more complicated as the global health movement expands. Calls for less disease specific earmarked funding and more broad health system development, required for SDGs and national goals to be reached, are not leading to change [19]. Recent research on Global Health Initiatives has confirmed the problems noted previously and recommend focusing on integrated service delivery platforms, and building systems through more efficient, country-led approaches [20].

Many of the priorities for external assistance for health are set at the global level – for example HIV/AIDS, TB, Malaria and, more recently, Covid-19 and pandemic preparedness, for the Global Fund, immunization for Gavi, maternal and child health for the Global Financing Facility, reproductive health and gender-based violence for UNFPA. There are less, if any, external funds available for other diseases and services, even if they are a priority for the country. The rise in NCD, for example, is often cited as neglected despite the growing burden and a strong case for investment [21]. Most external assistance donors make health investment decisions in country following consultation, but the broader parameters for investment, and levels of investment, are often set in HQs in high income cities, such as Geneva, Washington, Seattle, London and

Table 2
Initiatives aimed at improving external development assistance.

Initiative	Objective	Status
1 Sector Wide Approach (SWAp)	To provide a more coherent way to articulate and manage government-led sectoral policies and expenditure frameworks and build local institutional capacity as well as offer a means to more effective relationships between governments and donor agencies.	Continues to be used by some international donors; reviews have shown beneficial impact.
2 Paris Declaration on Aid Effectiveness (2005)Accra Agenda for Action (2008) The Busan Partnership for Effective Development Cooperation (2011)Global Partnership for Effective Development Co-operation (GPEDC) (2011)	All aimed to base development efforts on principles, commitments and actions that offer a foundation for effective co-operation in support of international development. The GPEDC provides evidence that enables tracking progress and taking action on these principles and related commitments.	Three Global Partnership Monitoring Rounds took place between 2011 and 2020 (in 2014, 2016 and 2018). Following a comprehensive reform the fourth global round is being held during 2023—2026.
3 Addis Ababa ActionAgenda (2015)	Aimed to align all financing flows and policies with the vision outlined in the 2030 Agenda for Sustainable Development.	The 2030 Agenda provides a shared global vision followed by 17 goals and 69 targets. Annual SDG reports provide an overview of the world's implementation efforts to date, highlighting areas of progress and where more action needs to be taken.
7 UHC2030's Global Compact for progress towards universal health coverage (2017)	Set up by UHC2030, a follow on to International Health Partnership Plus, the signatories to the Compact committed to work together to accelerate progress towards UHC, through building and expanding equitable, resilient and sustainable health systems.	UHC2030 continues to provide a global platform and space for multiple stakeholders to connect, work together and influence national and international commitments.

Tokyo. This influence is reinforced by the global health community which has powerful lobbies, that helps maintain high levels of external assistance.

2. Using external assistance to help build a country's health system

Improving the health and well-being of a country's population is now a well-accepted, fundamental role of government. For countries yet to reach their targets for universal health coverage, health security and health promotion, the investment needs are sometimes massive, and only likely to be achieved after many years, possibly decades, of economic growth. These factors, alongside ageing populations and increasing demands is leading to a surge of effort to find allocative and technical efficiencies [22]. These countries also must deal with a growing private health care industry, which can bring many benefits,

but may also use scarce resources, such as specialists, for better funded private services that only covers a relatively limited part of the population [23]. The expansion of for-profit services is not always in the country's best interest yet sometimes supported through development assistance funding [24]. The size of the challenges and the growing demands, means most low- and middle-income countries welcome the use of external assistance, whether it be grants, inexpensive loans or in-kind assistance.

The types of external assistance used for health vary enormously. This can range from unprogrammed investment into the health sector via government budgets [25,26] to context specific, collaboratively designed projects with non-state actors, and global public goods [27]. External assistance usually comes in the form of grants, low interest loans or technical assistance, but there are many ongoing attempts to improve impact including leveraging other public and private investments [28], different forms of results-based funding [29], co-financing agreements [30], and social impact bonds [31]. Demands for aid is, however, increasing in order to meet the SDGs and respond to climate change [32]. There are also strong calls to transform the current multilateral financial system to make it more just and fit for purpose [33].

However, the reality is that investing in health systems is a complicated process, with many inter-dependant functions, variable development paths, powerful lobbies, and essential community-based elements. This is a dynamic space, with constant innovation from new technology, digital transformation, a thriving private healthcare industry and highly specialized academic endeavour. There has also been major advances and international agreements on what are the essential functions of a health system [34]. Recent decades have seen a surge of knowledge on investing in health systems, locally from experience, and globally from peer exchange and formal research [35]. Our growing experience of external assistance on what works, and what does not, means more could now be done to use scarce resources in a more effective and efficient way.

Domestic allocation of external assistance could now be more systematic in strengthening a country's health system, focusing on improving quality of services, improving equity, and building efficiency [36]. There is now general agreement on how to maintain the health system gains through increases in domestic resource mobilization [37,38]. There are also a variety of models for country led consultation on prioritization of investments involving government and civil society, although these currently vary according to bilateral donor, private philanthropy and multi-lateral institutions, such as Global Fund, Gavi, GFF, WB, and other MDBs. Many of these mechanisms are still evolving with an increased emphasis on use of a country's existing planning, costing and budgeting systems [39,40]. Some newer funding initiatives aim to build on and use existing mechanisms [41,42]. The US government is adopting 'co-creation' for much of its development assistance during which country stakeholders shape priorities, design activities, and share ownership of investments [43].

The combined knowledge of how to mobilize and use external assistance could be further enhanced by a more efficient and systematic approach to agree priorities for strengthening health systems in LIC and LMICS. The new approach would explicitly address the power imbalance between external funders and national stakeholders by making areas of health system investment a national defined standard that should be adhered to. This would be in-line with well accepted principles of public investment in high-income countries [44]. If accompanied by effective monitoring and accountability, external assistance could be used in a way that overcomes many of the existing problems and enhances overall impact. Sustainability and transition could be facilitated by redirecting external funding to help get country systems up and running and amending incentive arrangements to avoid displacement of domestic funding.

3. External assistance investment in health - focusing on the essentials

The essential requirements of a health system are much better understood now than ever before. For example, comprehensive primary health care (PHC) is a recognized cornerstone of an effective health system but is frequently not given the priority it deserves [45]. The Essential Public Health Functions (EPHF) are evidence based and define the institutional capacities of health authorities necessary to guarantee a comprehensive response to the health needs of a population [46]. Different formulations of EPHFs have proven the test of time over the last forty years [47] and are now established in many different settings across all levels of income [48,49]. The current list in use in the Americas is provided in Table 3.

A universally agreed focus of investment on PHC and EPHFs provide a good framework for investment. This could then be complemented by agreeing specific investment priorities agreed on a country-by-country basis. External assistance could then be used to help national prioritization of all its health investments, external and domestic, in line with national or sub-national PHC/EPHF requirements and in a way that reduces the current fragmentation of systems and services.

4. External assistance investment in health - getting the process right

Recent decades have seen a major advance in understanding of how domestic finance can be raised, pooled and spent to achieve health and well-being [50,51]. An expansion of services, whether through external assistance or domestic investment, requires more health worker time, increased diagnostics, and more drugs or commodities. Experience has grown in recent years on how to use external assistance, alongside other investments, to help strengthen domestic resource mobilization [52]. An example is the WB Global Financing Facility (GFF) which focuses on the health of women, children and adolescents. This incentivises IDA allocations, decided by Ministries of Finance, towards health by co-financing with grants from a dedicated Trust Fund. This "crowding" of WB and additional domestic and external resources can help build domestic revenue for health [53]. Early reviews of the GFF suggest it has strengthened health systems through promoting health financing reforms, and addressed some health workforce constraints in rural and underserved areas [54].

There are also many countries that have successfully moved from being highly dependent on development assistance, to sustainably funding their own essential services using domestic resources [55]. These transitions, or graduations, are helped by health system

Table 3
Set of Essential Public Health Functions.

Essential Public Health Function	
1	Monitoring and evaluation of health and well-being, equity, social determinants of health, and health system performance and impact
2	Public health surveillance; control and management of health risks and emergencies
3	Promotion and management of health research and knowledge
4	Development and implementation of health policies and promotion of legislation that protects the health of the population
5	Social participation and social mobilization, inclusion of strategic actors, and transparency
6	Development of human resources for health
7	Ensuring access to and rational use of quality, safe, and effective essential medicines and other health technologies
8	Efficient and equitable health financing
9	Equitable access to comprehensive, quality health services
10	Equitable access to interventions that seek to promote health, reduce risk factors, and promote healthy behaviours
11	Management and promotion of interventions on the social determinants of health

Source [47].

investments to strengthen financial, technical, and logistical capacities as well as pre-determined financial and technical benchmarks to build domestic capacity and systems as part of the sustainable transition process [56]. Transitions away from external assistance can even be an opportunity to bring more national focus to Universal Health Coverage [57].

Enough is known now on how to effectively invest in a health system including the use of external assistance to improve domestic revenue generation, pooling and financing of services. There is also considerable experience of supporting countries to strengthen essential public functions in different contexts and of improving public financial management [58]. In-country ownership of evidence-based decisions, accountability, inclusion of both government and civil society actors, and respect to national systems and robust public financial management are well documented approaches to successful use of external assistance. All this could lead to a more standardized, systematic way to external health investment.

5. Improving external assistance performance – The case for health investment Standards?

We now have a better understanding of how external assistance can best be applied to bring a sustained, stepwise strengthening of health systems. Given the limited impact of previous approaches to improve the effectiveness of external assistance based on consensus, a more stringent approach is required. This should be evidence based, led by decision makers in a country and linked to an accountability and reporting mechanisms. Codifying our knowledge in the form of standards could guide future external assistance allocation and use, in pursuit of commonly agreed goals.

Why have investment standards? The aim would be to incentivize a more efficient evidence-based investment in a country's health system, led by decision-makers in country. The relatively small amount of global external assistance would be used to much greater effect, potentially reducing transaction costs, including for countries from improved alignment and coordination, and for donors from reduced design discussions. The focus would move to strengthening essential functions of a health system alongside domestic investments and expanding domestic financing of services. If successful, this would improve the attraction of external assistance by international donors, whether they be bilateral, multilateral, private or philanthropic. This would help differentiate from other health systems investments that are also taking place – for example investments by the private healthcare industry to achieve business goals, or investments by governments to export health workers [59].

What areas would require standards? Outside of fragile systems and humanitarian or emergency responses, where funding of direct services can often be justified, investment standards could, for example, be focused on capability (or needs), process, and accountability.

- The **capability** standards would focus on globally accepted functions, such as the EPHFs, with locally defined investment priorities. The standards would be met when investments follow a country-level exercise that identifies health system strengthening priorities in line with the latest available evidence. This exercise could guide and align both international and domestic health system investments. The assessment of existing status would be led by national institutions and be linked to national policy development and implementation, building on existing mechanisms [60]. The assessments would clarify national investment needs and would not take the place of the many other standards, such as for service quality and technology, which are routinely used in the health system.
- The **process** standards would focus on the behaviours and approaches used by international donors in a country. This could cover areas such respecting local decision making, transparency on one-off investment versus recurrent funding, accountability, stakeholder inclusion, and the level of evidence used to inform the investment.

The process for increasing EPHF capabilities would be more systematically linked to agreed sustainable sources of financing to maintain them. This whole approach could build on the growing evidence base around 'systems' thinking to assess and shape approaches to HSS [61,62].

- The **accountability** standards would focus on the consultation exercise being linked to investment priorities, and the share of external assistance going to these priorities. By making the accountability of the various parties more explicit, the required investment, and sustainable transition, would be more likely to occur. To address the crowding out of domestic funds, this exercise will also have to cover domestic funding. This could build on existing regular monitoring efforts for resource mapping and expenditure tracking [63], amended to be more driven by national needs and timetables. Using commitments on counterpart funding is challenging and will need to be accompanied by local evaluation and implementation research [64].

How might this work? A global set of capability, process and accountability standards would be agreed with representatives of national stakeholders (including Ministries of Health and Finance). The adoption of standards based on the EPHFs would need to be accompanied by a practical set of tools – for example a set of common definitions and empirical scales for assessment, all based on the latest evidence and backed up by a research and evaluation agenda. A political agreement, based on latest evidence of what works [65], or a regional declaration linked to existing commitments [66], would be needed to drive investment towards these priorities. A small secretariat consisting of representatives from the main relevant multilateral and bilateral donors would be required, at least in the early stages, to action the preparatory work. A regular assessment of capabilities and past investment could over time take the place of the multiple 'needs assessments' that currently exist and bring more explicit accountability on donor funding. The focus, over time, on essential public health functions, would help keep countries on track to reach broader goals such as for UHC and health security whilst also maintaining gains made in previous disease service specific investment. Donors and national authorities would use the results according to their own budgetary timetables. The focus on process standards would encourage best practice in terms of in-country context specific, collaborative, evidence-based design with regular reviews, feedback loops and evaluation to fine-tune investments over time. The use of accountability standards, agreed with countries and key funders, would be used to bring change over time. A global reporting of progress could build on past efforts to monitor the 'quality' of aid [67] and be used to 'name and shame' donors to reduce funding activities outside of the priorities agreed in a country. This could also be used to encourage greater domestic budget transparency and consultation to allow local civil society, parliament, and the press to hold governments to account for spending what they have committed to spending and to planning a transition away from external support.

6. Checking feasibility and overcoming the snags

As with the MDGs and SDGs, it would take many years to gain the required consensus and to put this into practice across all major investors. There will be many who will oppose an open approach to building essential public health functions. The case would need to be made to change existing global mechanisms for investing in specific diseases or specific groups; stakeholders would need to be convinced that those most vulnerable are to remain prioritized. A research agenda would likely need to accompany the change in approach to assess the link between investment and impact, and ensure that this acts as a catalyst for domestic funding and sustainability.

The political need for short term results in a few areas by many funding agencies, acts as an incentive for continuing the focus on a narrow focus on a few areas rather than the slower to set up, sustainable

solutions such as stronger workforce. Many existing donors have their own mechanisms for making the case for health investments and we know from experience these are very difficult to change. A political commitment would need to be accompanied by momentum amongst key funders before these standards became a norm that was adhered to.

The fragmented multilateral system that supports countries would need to adapt to enable a more integrated form of global support to health systems, with higher levels of support to the lowest income countries. The private health care industry is powerful and will continue to invest in health systems according to its own business needs and opportunities. The use of explicit, publicly agreed standards would help differentiate the less useful investments from those that improve public health and universal health coverage.

Many exceptions, and local flexibilities would no doubt be required, especially early on. Some lessons may be drawn from other investment standards, such as those used for foreign direct investment [68], many of which are monitored by IMF and WB, development finance standards set by the OECD [69], and attempts to standardize emergency responses [70].

A more effective use of external assistance will only bring benefits if accompanied by other efforts to overcome major health system constraints, such as inadequate attention to governance and health workforce, and to health financing systems that still incentivizes specialist services and inequities in service delivery. External assistance is only one of many mechanisms to improve global health, and other efforts would need to continue such as lobbying for healthier trade treaties [71] and for transformational reforms on economics and health [72].

7. Conclusion

External assistance can help focus efforts to achieve the health SDGs and to help develop resilient and sustainable health systems around the globe. Standardizing health systems investments so that, over time, the world has resilient, fully functioning health systems with all the essential public health functions in all countries is a long-term goal. Using a more standardized process for doing this will lead to a better use of precious external assistance resources.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We would like to thank Christoph Kurowski of the World Bank, and Kalipso Chalkidou of the Global Fund for their comments on an early draft of the paper.

Funding source

No funding was sought or provided for the completion of this paper.

References

- [1] Kates J, Nandakumar A, Gaumer G, Hariharan D, Crown W, Wexler A. Assessing PEPFAR's impact: analysis of mortality in PEPFAR Countries. *KFF Global. Health Policy* 2021.
- [2] Crown W, Kates J, Nandakumar A, Gaumer G, Hariharan D. Assessing PEPFAR's impact: analysis of economic and educational spillover effects in PEPFAR Countries. *KFF Global. Health Policy* 2022.
- [3] The Global Fund: Results Report 2022. corporate_2022resultsreport_report_en.pdf (theglobalfund.org). Accessed 8th August 2023.
- [4] th Annual Report to Congress April 2023. US President's Malaria Initiative. U.S. President's Malaria Initiative th Annual Report to Congress (d1u4sg1s9ptc4z.cloudfront.net). Accessed 8th August 2023.
- [5] Reich MP, Bery P. Expanding Global Access to ARVs: The Challenges of Prices and Patents. In: Mayer KH, Pizer HF, editors. *The AIDS Pandemic: Impact on Science and Society*. New York: Academic Press; 2005. p. 324–50.
- [6] Haacker M. Contributions of declining mortality, overall and from HIV, TB and malaria, to reduced health inequality and inequity across countries. *Health Policy Plan* 2023;czad046. <https://doi.org/10.1093/heapol/czad046>.
- [7] *Lancet* 2021;398:1317–43.
- [8] Global spending on health: Rising to the pandemic's challenges. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.
- [9] Kurowski C, Kumar A, Mieses J, Schmidt M, Silfverberg DV. *Health Financing in a Time of Global Shocks. Strong Advance: Early Retreat*. World Bank; May 2023.
- [10] Kenney C, McDade KK, Mao W, Ogbuoi O. How health aid can reach the world's poorest people. Brookings Institute. Blog, February 2, 2021 <https://www.brookings.edu/blog/future-development/2021/02/02/how-health-aid-can-reach-the-worlds-poorest-people/> Accessed 8th August 2023.
- [11] Negeri KG, Halemariam D. Effect of health development assistance on health status in sub-saharan Africa. *Risk Management and Healthcare Policy* April 2016 Apr;7(9):33–42.
- [12] Deaton A. *The great escape: health, wealth, and the origins of inequality*. Princeton, NJ: Princeton University Press; 2013.
- [13] S Moon, O Omole *Health Economics, Policy and Law* 2017;12:207–21.
- [14] Adeyi O. Global Health in Practice: Investing Amidst Pandemics, Denial Of Evidence, And Neo-dependency. In: *World Scientific Series in Health Investment and Financing, Volume 6*. World Scientific Publishing; 2022. p. 320. ISBN 9789811253751.
- [15] Patenaude BN. The relationship between development assistance for health and public health financing in 134 countries between 2000 and 2015. *Health Policy Plan* 2021 May 17;36(4):369–83.
- [16] Huffstetler HE, Bandara S, Bharali I, et al. The impacts of donor transitions on health systems in middle-income countries: a scoping review. *Health Policy Plan* 2022;37(9):1188–202.
- [17] Agyepong I, Spicer N, Ooms G, et al. Lancet Commission on synergies between universal health coverage, health security, and health promotion. *Lancet* 2023;401:1964–2012.
- [18] Chalkidou K, Culyer AJ, Glassman A. We need a NICE for global development spending. Version 1. F1000Res 2017;6:1223.
- [19] Buffardi AL. Sector-wide or disease-specific? Implications of trends in development assistance for health for the SDG era. *Health Policy Plan* April 2018;33(3):Pages 381.
- [20] Reimagining the Future of Global Health Initiatives. Witter S, Palmer N, James R et al. Reimagining the Future of Global Health Initiatives study – FGHI (futureofghis.org). Accessed 17th August 2023.
- [21] Collins TE, Nugent R, Webb D, Placella E, Evans T, Akinawo A. Time to align: development cooperation for the prevention and control of non-communicable diseases. *BMJ* 2019;366:14499.
- [22] Cylus J, Papanicolas I, Smith PC. A framework for thinking about health system efficiency. In: Cylus J, Papanicolas I, Smith PC, editors. *Health system efficiency: How to make measurement matter for policy and management, No. 46.. Copenhagen (Denmark): European Observatory on Health Systems and Policies; 2016. p. 1. Health Policy Series, Available from:.*
- [23] McPake B, Hanson K. Managing the public-private mix to achieve universal health coverage. *Lancet* 2016 Aug 6;388(10044):622–30.
- [24] Marriot A. Sick development. Oxfam briefing paper, June 2023.
- [25] David H, Peters DH, Paina L, Schleimann F. Sector-wide approaches (SWAPs) in health: what have we learned? *Health Policy Plan* 2013;28:884–90.
- [26] Woode ME, Mortimer D, Sweeney R. The impact of health sector-wide approaches on aid effectiveness and infant mortality. *J of Int Development* July 2021;33(5): 826–44.
- [27] Bendavid E, Ottersen T, Peilong L, et al. Development Assistance for Health. In: Jamison DT, Gelband H, Horton S, editors. *Disease Control Priorities: Improving Health and Reducing Poverty*. 3rd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2017 Nov 27. https://doi.org/10.1596/978-1-4648-0527-1_ch16. Chapter 16. Available from:.
- [28] Hecht R and Shah R. Recent Trends and Innovations in Development Assistance for Health. In: Jamison DT, Breman JG, Measham AR, et al., editors. *Disease Control Priorities in Developing Countries*. 2nd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2006. Chapter 13. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK11715/> Co-published by Oxford University Press, New York.
- [29] Fichera E, Anselmi L, Gwati G, Brown G, Kovacs R, Borghie J. Can Results-Based Financing improve health outcomes in resource poor settings? Evidence from Zimbabwe *Soc Sci Med* 2021 Jun;279:113959.
- [30] Gavi. Co-financing Policy. <https://www.gavi.org/programmes-impact/programmatic-policies/co-financing-policy>. Accessed 9th August 2023.
- [31] Hulse ESG, Atun R, McPake B, et al. Use of social impact bonds in financing health systems responses to non-communicable diseases: scoping review. *BMJ Glob Health* 2021;6:e004127.
- [32] United Nations Secretary-General's SDG Stimulus to Deliver Agenda 2030. UN, February 2023.
- [33] Browne K, Duma D, Cabré MM, Sanchez F, Shawoo Z. Seven Ways to Reform the Global Financial System to Help Achieve SDGs. (Blog) Stockholm Environment Institute IIDS Knowledge Hub June 2023.
- [34] World Health Organization. 21st century health challenges: can the essential public health functions make a difference? Geneva: World Health Organization; 2021.

- [35] Wickremasinghe D, Gautham M, Umar N, Berhanu D, Schellenberg J, Spicer N. "It's about the idea hitting the bull's eye": How aid effectiveness can catalyse the scale-up of health innovations. *Int J Health Policy Manag* 2018;7(8):718–27.
- [36] USAID Vision for health systems strengthening 2030. USAID, March 2021.
- [37] Eozenou PH, Tandon A, Cain JS. Domestic Resource Mobilization for increased health sector fiscal space and universal health coverage. A Health Financing System Assessment "Drill-Down". Guidance Note World Bank November 2021.
- [38] Nakhimovsky S, Baruwa E. 2018. Securing Domestic Financing for Universal Health Coverage: Lessons in process. Securing Domestic Financing for Universal Health Coverage: Lessons in Process | HFG (hfgproject.org). USAID Health Financing and Governance Project. 2018. Accessed August 8th 2023.
- [39] Results for Development. Making aid for nutrition more sustainable: 5 key lessons from our work so far. Making aid for nutrition more sustainable: 5 key lessons from our work so far | Results for Development (r4d.org) Accessed 2nd August 2023.
- [40] Global Fund. Evolution - Country Coordinating Mechanism - The Global Fund to Fight AIDS, Tuberculosis and Malaria. Accessed 1st August 2023.
- [41] The Pandemic Fund. The Pandemic Fund Announces First Round of Funding to Help Countries Build Resilience to Future Pandemics - World | ReliefWeb. Accessed 2nd August 2023.
- [42] WHO Multilateral development banks and WHO launch new investment platform to strengthen primary health care services. Accessed 2nd August 2023.
- [43] USAID. Co-creation: an interactive guide. March 2022.
- [44] Effective Public Investment Across Levels of Government. Principles for Action. OECD; 2014.
- [45] Hanson K, Brikci N, Erlangga D, Alebachew A, De Allegri PM, Balabanova D, et al. The Lancet Global Health Commission on financing primary health care: putting people at the centre. *Lancet Glob Health* 2022;10:e715–72.
- [46] Báscolo E, Houghton N, Del Riego A, Fitzgerald J, Jarboe R, 1.. Contributions of the New Framework for Essential Public Health Functions to Addressing the COVID-19 Pandemic. *Am J Public Health* 2022 Aug;112(S6):S615–20.
- [47] Paho. The Essential Public Health Functions in the Americas: A Renewal for the 21st Century. Conceptual Framework and Description. Pan American Health Organization; 2020.
- [48] Zhang Y, McDarby G, Seifeldin R, Mustafa S, Dalil S, Schmets G. Towards applying the essential public health functions for building health systems resilience: A renewed list and key enablers for operationalization. *Public Health* 20 January 2023;Volume 10–2022. <https://doi.org/10.3389/fpubh.2022.1107192>.
- [49] UK Faculty of Public Health. Functions and standards of a Public Health System. Accessed; 1st June 2023.
- [50] World Bank. High-Performance Health Financing for Universal Health Coverage (Vol. 2) : Driving Sustainable, Inclusive Growth in the 21st Century (English). Washington, D.C. 2019: World Bank Group. <http://documents.worldbank.org/curated/en/641451561043585615/Driving-Sustainable-Inclusive-Growth-in-the-21st-Century>.
- [51] Savedoff WD. Addiction to a bad idea, contributory health systems – A comment. *Soc Sci Med* March 2023;320:115762.
- [52] Domestic resource mobilization for increased health sector fiscal space and universal coverage. A Health Financing System Assessment "Drill-Down" Guidance Note. World Bank, Patrick Hoang-Vu Eozenou, Ajay Tandon, Jewelwayne Salcedo Cain. World Bank 2021.
- [53] Keller JM, Silverman R, Kaufman J, Glassman A. Prioritizing Public Spending on Health in Lower-Income Countries: The Role of the Global Financing Facility for Women, Children, and Adolescents. Washington, DC: Center for Global Development; 2021. CGD Policy Paper 246.
- [54] Seidelmann L, Koutsoumpa M, Federspiel F, Philips M. The Global Financing Facility at five: time for a change? *Sex Reprod Health Matters* 2020;28(2):1795446.
- [55] Huffstetler HE, Bandara S, Bharali I, Mcdade KK, Mao W, Guo F, et al. The impacts of donor transitions on health systems in middle-income countries: a scoping review. *Health Policy Plan* 2022;37:1188–202.
- [56] Shen AK, Farrell MM, Vandenbroucke MF, Fox E, Pablos-Mendez A. Applying lessons learned from the USAID family planning graduation experience to the GAVI graduation process. *Health Policy Plan* 2015;30(6):687–95.
- [57] Kutzin J, Sparkes S, Soucat A, Barroy H. From silos to sustainability: transition through a UHC lens. *Lancet* 2018;392(10157):1513–4.
- [58] World Bank. Following the Government Playbook? World Bank: Channelling Development Assistance for Health through Country Systems; 2021.
- [59] Kumar S. Exporting Indian healthcare workers to the world. *Health Express*, 14th July 2021. <https://www.orfonline.org/expert-speak/exporting-indian-healthcare-workers-world/>. Accessed 25th June 2023.
- [60] WHO Universal Health and Preparedness Review. Universal Health & Preparedness Review (who.int). Accessed 18th August 2023.
- [61] Vallières F, Mannan H, Kodate N, Larkan F (editors), Systems Thinking for Global Health: How can systems-thinking contribute to solving key challenges in Global Health? Oxford, 2022.
- [62] Thelen J, Sant Fruchtman C, Bilal M, Gabaake K, Iqbal S, Keakabete T, et al. Development of the Systems Thinking for Health Actions framework: a literature review and a case study. *BMJ Glob Health* 2023;8:e010191.
- [63] World Bank. Global Financing Facility Resource Mapping and Expenditure Tracking: Lessons Learned from Countries | Global Financing Facility. Accessed 2nd August 2023.
- [64] Winters MS, Streitfeld JD. Splitting the check: explaining patterns of counterpart commitments in World Bank projects. *Review of International Political Economy*. Volume 25, 2018 - Issue 6. Pages 884-908.
- [65] Kavanagh MM, Wenham C, Massard da Fonseca E, Helfer LR, Nyukuri E, Maleche A, Halabi SF, Radhakrishnan A, Waris A. Increasing compliance with international pandemic law: international relations and new global health agreements. *Lancet*. Published Online September 4, 2023.
- [66] The New Public Health Order: Africa's health security Agenda. <https://africacdc.org/news-item/the-new-public-health-order-africas-health-security-agenda/> Accessed 8th August 2023.
- [67] Center for Global Development Working Paper January 2020;524.
- [68] Institute CFA. Global Investment Performance Standards (GIPS®). CFA Institute; 2020. ISBN 978-1-942713-72-2.
- [69] OECD. Development finance standards. <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/>. Accessed 9th August 2023.
- [70] Kundu S, Sana H, Dutta R, Gerk A, Pigeolet M, Raykar NP. Call for standardised emergency preparedness and response. *Lancet* (letter). Published Online May 25, 2023 Doi: 10.1016/S0140-6736(23)01070-X.
- [71] Labonté R. Trade, investment and public health: compiling the evidence, assembling the arguments. *Glob Health* 2019;15:1.
- [72] World Health Organization. WHO Council on the Economics of Health for All. Health for all: transforming economies to deliver what matters - Final report. Geneva: World Health Organization; 2023.