# SUSTAINABLE FINANCING FOR KENYAN COMMUNITY HEALTH WORKER PROGRAMS

By

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## ABSTRACT

Community health workers (CHWs) are vital for providing healthcare access to underserved populations in sub-Saharan Africa, yet financing for CHW programs remains a challenge. This thesis explores potential financing instruments for Kenya's CHW program through an in-depth analysis of seven case studies spanning traditional grants, public loans, debt conversion, private loans, social enterprises, grant-based public-private partnerships, and results-based financing. Drawing from informant interviews and literature reviews, each model is evaluated across financial sustainability, CHW operational focus, and contextual alignment to Kenya.

The analysis reveals that while public instruments have bolstered disease-specific initiatives, overreliance on external funding poses risks to long-term sustainability. Private solutions allow for self-sustainability in the long run, but funding size and initial capital needed remain a concern. Innovative approaches combining the public and private sectors have the potential to be tailored for CHW programs while generating sustainable revenue; however, they require substantial planning and investment. Across all models, shared characteristics for scalability and impact include robust governance, domestic resource mobilization, and country ownership.



**Keywords:** Community Health Workers, Global Health, Impact Investing, Development Finance

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# INTRODUCTION

## Overview

What is the most effective approach to delivering care, disseminating health education, and collecting health data in the most remote areas in sub-Saharan Africa (SSA)? In recent years, the global health community has prominently advocated for one targeted strategy — the deployment of Community Health Workers (CHWs).

For context, the World Health Organization (WHO) defines CHWs as "members who live in the communities, are selected by the communities, are answerable to the communities for their activities, are supported by the health system but are not necessarily a part of its organization, and have shorter training than professional workers" (WHO, 1987). CHWs typically receive health intervention training and carry out functions related to healthcare delivery without extended formal professional education (Vaughan et al., 2015). As SSA faces a shortage of approximately 4.2M health workers, CHWs are filling urgent needs (UNAIDS, 2017). They are frequently regarded as a cost-efficient alternative compared to other health workers, particularly regarding salary, incentives, and training expenses. With a growing movement within the global health community, CHW programs have gradually gained recognition and transitioned from "a temporary and underfunded afterthought" to an integral component of many health systems in light of critical workforce shortages and emphasis on strengthening primary healthcare (PHC) systems, especially in low- and middle-income countries (LMICs) (Kok et al., 2014).

The role of well-trained CHWs in delivering care is undeniable. A literature review of 32 published primary studies and four reviews from between 2003 and 2015 found that adequately trained and supported CHWs deliver high health outcomes at a very low program cost in most LMICs studied, especially for maternal health (measured by illness prevention and treatment

admin), child health (under-five mortality and cost savings), TB (treatment administration), and malaria (medicine admin and testing) (Vaughan et al., 2015). Additionally, with evidence from COVID-19, CHWs have also demonstrated their ability to play a critical role in responding to current and future pandemics, whether through testing, triage, treatment administration, health education, or information dissemination (Perry et al., 2021).

However, research has indicated a massive funding gap for CHW programs. The average annual cost of a CHW program is approximately $2.62 per person served (WHO, 2017), which is very cost-effective and makes a powerful case for investment. However, considering a catchment area of 100,000+ residents, the funding needs could be considerable. Overall, the funding gap for CHW programs in SSA is estimated to range from $2B to $5.4B, currently funded primarily by governments, donors, or both (USAID, 2017; Gichaga, 2021).

Of the countries with established CHW programs, Kenya stands as a compelling case for in-depth research: Kenya has a majority rural population with low government healthcare investment and a weak formal healthcare sector. Of the 53 million population, 71% live in rural areas, with 37% living below the poverty line (World Bank, 2023). These resource-limited rural settings present an apt opportunity for CHWs to demonstrate their capabilities — CHW programs have been viewed as highly effective for delivering care to underserved populations. Additionally, there is a lack of healthcare resources in the public sector. Only 4% of the GDP in Kenya is allocated toward healthcare; it also has a 1:16,000 doctor-to-patient ratio, with 40% of doctors who graduate per year going to other countries due to the lack of growth opportunities in Kenya (Ndiso, 2018). Introduced in 2006, Kenya's CHW program has undergone multiple iterations, ultimately leading to the development of many initiatives in both public and private sectors (FAH, 2020). In each community, one CHW unit typically has ten CHWs and serves

5,000 community members, with five supervisors for triage and management communications (CHW Central, 2023).

With a highly rural population reliant on a weak formal healthcare system, Kenya should be a country where CHW programs would thrive. However, the country's CHW program is plagued by obstacles such as donor dependency, coercive volunteerism, and a significant funding gap. Hence, this thesis paper aims to understand: *What is the most effective and sustainable financing instrument for CHW program in Kenya?*

**Contribution**

Understanding sustainable financing options for CHW programs in Kenya is crucial for both global health academia and real-world practitioners. Currently, most research on *CHW program financing instruments* remains very broad, typically an overview of financing models worldwide and often in anecdotal and commentary forms. For example, the most cited paper on financing models is a case study only on CHW compensation model (Ballard et al., 2021). No current research compares the effectiveness of different financial instruments side-by-side.

On the other hand, most of the current literature on the state of *CHW programs in Kenya* are on the public government-sponsored program and their effectiveness in vertical disease prevention, with little research on the impact of different financing options (i.e. impact bonds, social enterprises) on the program's effectiveness (Njeru et al., 2021). Therefore, this thesis fills in the gap in the existing literature, aiming to understand multiple options of financing instruments suitable for scalability in Kenya.

In terms of beneficiaries, this research provides a potential investment option for global health funders and entrepreneurs, financial stability for CHWs themselves, improved health access for underserved communities, and an exemplary model that can be replicated worldwide.

Firstly, understanding effective financing models could help investors and entrepreneurs who want to build proven, scalable, and low-cost solutions maximize the impact of their work. Currently, one key challenge is that most CHW programs rely heavily on short-term or fragmented donor funding. Programs supported by this type of funding often collapse when grants run out (Qiu et al., 2021). Supporting durable CHW program structures could also help attract new funders and innovations in blended finance.

Secondly, sustainable financing would enable livable wages for CHWs themselves, allowing workforce stability and improved retention. While Kenya has mandated stipends for CHWs, there are no clear guidelines on salary, leading to high attrition as workers leave for other income opportunities. A study in Kenya found annual turnover rates of up to 77% among CHW volunteers, with insufficient earnings being a primary reason for quitting (Gichaga, 2021). Effective financing that provides livable wages would enable CHWs to commit long-term while supporting themselves and their families.

Thirdly, community members will benefit from lower CHW turnover and develop long-term relationships with CHWs who are well-compensated. Research has shown that the top motivating factor for CHWs in Kenya is monetary compensation (Mbugua et al., 2018). Specifically, the attrition rates are much higher for those not receiving monetary compensation (13%) than those who do (4%). Continuous operation and availability of services depend heavily on uninterrupted financial flows. Intermittent or short-term funding often means gaps in service delivery if more CHWs exit the workforce. This results in vulnerable populations losing access to healthcare, health education, and triage right when it is needed most. A steady stream of financing facilitates the continuity of services like maternal and child health, infectious disease testing and treatment, and PHC. For example, Ethiopia's Health Extension Program, funded

continuously by the government, contributed to a two-thirds reduction in child mortality since the inception in 2004 (UNICEF, 2021). Therefore, well-funded CHW programs are key to achieving and maintaining community health gains.

Lastly, if Kenya is able to establish a strong CHW program with effective long-term financing, this model can be replicated and adapted by other countries facing similar health worker shortages and reliance on community care. As one of the most robust CHW systems globally, lessons from Kenya could inform policies and system design across SSA and beyond.

**Current Challenges**

Despite their crucial role, why is obtaining sufficient and sustainable funding to support the program one of the biggest challenges for scaling up CHW programs? The reason for the funding gap is three-fold: long-term financing challenges, fragmented implementation, and limited traditional funding sources.

Firstly, CHW programs require long-term financing to ensure their sustainability and effectiveness. However, securing long-term financing can be challenging due to limited resources, gaps in research and policy support, and competing priorities both for the program funder (i.e. private corporation, government, faith-based organization) and within global health objectives (i.e. system improvement, vertical disease focus) (Gichaga, 2021). Secondly, regarding implementation fragmentation, CHW programs frequently involve the participation of multiple international donors and stakeholders (Exemplars in Global Health 2023). This can lead to inefficiencies and redundant efforts, posing another obstacle to obtaining sufficient and sustainable funding. Lastly, regarding limited funding from traditional sources, development assistance for CHW projects has been "small, unstable, and declining over recent years" (Perry et al., 2021). Only 2.5% of total health-related development assistance in SSA was for CHW

programs (Gichaga, 2021). In Kenya, 60%+ of funding for CHW programs comes from donors, with the majority being for vertical disease-specific programs (STD, 38.9%; malaria, 19.8%; and reproductive health, 9.3%) (FAH, 2020; Gichaga, 2021). The heavy reliance on external funding for CHW programs severely hampers financial sustainability. Traditional funders are also reluctant to fund due to limited cost data and research transparency, which adds another obstacle for long-term financing (Masis et al., 2021).

While the government suggests that stronger partnerships with external organizations are key to strengthening the workforce and reforming incentive mechanisms, this also reflects the core problem of donor dependency. For example, Mali has thirteen different financing sources for the CHW program, 88% from international donors for a package of 23 curative, preventive, and educational interventions (Saint-Firmin et al. 2021). According to an unpublished USAID letter, in the case of Mali, high dependence on external sources of funding to support CHWs across SSA and a donor-funding cut for CHWs presented a significant threat to the financial sustainability of the program. International donor assistance is often volatile and has inherent limitations such as “short-cycles”, lack of transparency, impact measurement, and many strings attached (Perry and Crigler, 2014).

Looking more broadly at other cases of CHW program funding mechanisms worldwide, the funding strategies adopted vary greatly based on the country’s political and historical context. On an overview level, Brazil’s CHW program is funded by the public sector with CHW hired by the state and paid minimum wage; Ghana’s program is volunteer-based, and hence non-salaried; Nigeria’s program is private with public sector minimum wage; Rwanda’s program employs a Performance-Based Financing Model centered on Cooperatives, where CHW volunteers receive compensation according to a performance-based and income-generating system; and South

Africa's program is a hybrid subcontracting between the public and private sector (Ballard, 2015). To elaborate on the Rwanda program, for example, while it is heavily donor-funded (87%), the government allocated significant domestic resources and set up other financing mechanisms to support the program (i.e. community-based insurance, CHW co-op societies) (FAH, 2020). Gichaga et al. suggested options such as impact bonds, results-based financing, innovative private sector engagement, and blended financing. Concepts such as the Africa Community Health Workers Bond, where UNAIDS works with impact investors like the African Development Bank to issue bonds that transform long-term governmental pledges into immediate cash reserves were proposed, but not implemented yet. Additionally, funds such as the Africa Health Investment Fund by UNAIDS, Sarona Asset Management, and the Investment Fund for Health in Africa by the European Investment Bank are working to grant investments for strengthening health systems. Therefore, considering the different funding options, there are tremendous opportunities to leverage the capital markets and explore financing instruments to build a more integrated CHW program, especially as Kenya moves forward with its Community Health Strategy and Implementation Plan 2020 – 2024.

Considering these factors, this research hypothesizes that public-private partnerships (PPP) would work best in the context of Kenya for several reasons. Firstly, with private sector involvement, these programs enable income generation by the CHWs, allowing for high worker retention and long-term financial sustainability. Additionally, Kenya's CHWs are still mainly reliant on public sector resources such as the formal healthcare sector facilities for triage purposes. Working well in coordination with the public sector would be crucial for the long-term sustainability of the programs.

## METHODOLOGY

Seven case studies are written on well-established CHW financing models to understand the research question, including traditional grants, public loans, debt conversion, private loans, social enterprise, public-private partnership (PPP), and results-based financing.

In terms of data collection, this study combines two components: key informant interviews and secondary data collection via online sources.

### Key Informant Interviews

Four subject experts were interviewed via Zoom through various checkpoints during the study phase to provide a more nuanced understanding of the space, existing instruments, resources, and current gaps. For interviews with the public health scholars, the following questions were discussed:

1. What is the current landscape of CHW program financing in SSA?
2. Which financing mechanisms have worked? Which ones have not and why?
3. What are the missing gaps within current research?

The questions were curated without specificity since many recent innovative financing methodologies were announced in the latter half of the 2010s but have no details online. These open-ended questions prompted more details than specific questions. Follow-up questions were also asked depending on the informants' answer. The seven case examples were selected based on these conversations.

During the interviews with local practitioners, the following questions were asked about each program:

1. **Financing Structure:** Could you describe how the CHW program is financed?
2. **Obstacles**: What is the most substantial obstacle the program faces?

3. **Future Outlook**: Where do you envision the program in the next five years?
4. **Impact Metrics**: What are the key impact metrics that it measures? (i.e. under-five and maternal mortality rates)
5. **Program-Specific Questions**: Delve into specific aspects based on the responses.

Additionally, online communications were held via email, WhatsApp, Messenger, and LinkedIn with additional donor program managers, CHWs, Community Health managers, and community members. The communications and interviews are conducted in an ethnographic manner to provide a nuanced understanding of CHW program financing, capturing the perspectives of academic researchers, field practitioners, and beneficiaries.

**Online Data Collection**

Following the interviews, information was gathered from current literature and online publications. The data sources for the online data collection step include: Financing Alliance for Health (FAH), Community Health Impact Coalition (CHIC), Exemplars in Global Health, CHW Central, as well as program-specific sites and previous academic literature. To standardize the evaluation process, a fact sheet containing the following information was presented with each case study:

| **1.1 Case Name** | |
|---|---|
| **Instrument Type** | **Inception** |
| **Size** | **Operator** |
| **Funding Sources** | **Financing Terms** |
| **Overview** | |
| **Operation in Kenya** | |
| **Community Health Context** | |

***Table 1: Case Fact Sheet***

Alongside the fact sheet are an in-depth analysis and metric score sheet. The analysis provides a discussion on the financing instrument as a whole, with the case study as supporting evidence. The metric score sheet is evaluated on financial sustainability, CHW focus, and contextual alignment, with the instrument's effectiveness, sustainability, and scalability assessed in all three dimensions:

| | **Score** | **Comment** |
|---|---|---|
| ***Explanation** | Score based on a scale between 1-5 | Contextual explanation of the score given based on the following questions |
| **Financial Sustainability** | #/5 | - Is this instrument self-sustaining or does it rely on external funders?<br>- How often is this funding renewed?<br>- Are the financial terms preferable for developing CHW programs? |
| **CHW Focus** | #/5 | - Does the country have a say in how the funding is allocated within CHW programs?<br>- Has there been precedents of funding dedicated to CHW programs?<br>- Does the funding passively support CHW programs or does the operator actively engage with them?<br>- Are CHW jobs created and are they fairly paid? |
| **Contextual Alignment** | #/5 | - Does this instrument fit Kenya's near-term community health policies & strategies?<br>- Does this instrument have previous cases of replicability & scalability in Kenya? |

***Table 2: Research Evaluation Criteria***

| | **1/5** | **2/5** | **3/5** | **4/5** | **5/5** |
|---|---|---|---|---|---|
| **Financial Sustainability** | The instrument relies entirely on external funders and lacks any self-sustaining mechanisms. Funding is irregular and unpredictable, leading to challenges in supporting CHW programs. The financial terms are highly unfavorable for developing CHW initiatives. | The instrument demonstrates limited financial sustainability, relying partially on external funders with irregular cycles of renewal. While there are efforts to replenish funds, they are not sufficient to ensure consistent support for CHWs. The financial terms are somewhat unfavorable for CHW program development. | The instrument displays moderate financial sustainability, with a combination of external funding and potential for self-replenishment. While there is some stability in funding renewal, it may not be sufficient to fully support CHW programs in the long term. The financial terms are moderately favorable for CHW program development. | The instrument exhibits strong financial sustainability, with minimal reliance on external funders and consistent renewal cycles. There are robust mechanisms in place for replenishing funds, ensuring stable support for CHW programs. The financial terms are highly favorable for CHW program development. | The instrument is entirely self-sustaining, without any reliance on external funders. Funding is regularly renewed through sustainable mechanisms, providing consistent and reliable support for CHW programs. The financial terms are very favorable for CHW program development. |
| **CHW Focus** | The country has minimal influence on funding allocation within CHW programs, with scarce examples of dedicated funding. The operator provides passive support, with limited engagement and inadequate compensation for CHWs, leading to challenges in retention and effectiveness. | The country has limited influence on funding allocation within CHW programs, with sporadic instances of dedicated funding. While there are some efforts by the operator to engage with CHW programs, it lacks consistency, resulting in variable levels of support and compensation for CHWs. | The country moderately influences on funding allocation, with occasional instances of dedicated funding. The operator engages actively with CHW programs, but the creation of CHW jobs and fair compensation are inconsistent across different regions or initiatives. | The country exercise significant influence on funding allocation within CHW programs, with frequent examples of dedicated funding. The operator actively engages with CHW programs, leading to the creation of CHW jobs and fair compensation, although there may be some regional disparities. | The country has full control over funding allocation within CHW programs, with consistent and substantial dedicated funding. The operator is deeply involved with CHW programs, ensuring the creation of CHW jobs and fair compensation across all regions. |
| **Contextual Alignment** | The instrument does not align with Kenya's community health policies and strategies, lacking any evidence of replicability or scalability within the country. Its implementation may conflict with existing frameworks or priorities. | The instrument has limited alignment with Kenya's community health policies and strategies, with sporadic instances of replicability and scalability. While there are some efforts to adapt the instrument to local contexts, its impact remains inconsistent. | The instrument moderately aligns with Kenya's community health policies and strategies, with some evidence of replicability and scalability. There are occasional successes in adapting the instrument to local contexts, but further efforts are needed for wider adoption. | The instrument mostly aligns with Kenya's community health policies and strategies, with frequent examples of replicability and scalability. There are consistent efforts to integrate the instrument into local systems, leading to significant impact and adoption. | The instrument perfectly aligns with Kenya's community health policies and strategies, with numerous cases of replicability and scalability. Its implementation is seamlessly integrated into local systems, demonstrating widespread adoption and substantial impact. |

***Table 3: Evaluation Score Rubric***

With quantitative and qualitative metrics combined, a final evaluation matrix puts all seven models side-by-side to evaluate the best-performing program. In synthesizing the data acquired through online research and interviews, the primary goal of the paper is to construct a comprehensive narrative, mirroring the format found in Ballard et al.'s paper but analyzing programs specifically through the lens of the Kenyan context (Ballard, 2021). At the end of the paper, overarching themes observed in the data collection and insights from individual case studies were discussed. Lastly, the paper provides recommendations on the future outlook of CHW financing. By doing so, the paper not only contributes to the understanding of the current state, but also to the discourse surrounding the evolving landscape of sustainable financing for CHW programs in the near future and beyond.

## ANALYSIS

### Quick Guide

| Section | Financing Type | Financing Instrument | Case Study |
|---|---|---|---|
| 1.1. | Public | Grant | PEPFAR |
| 1.2. | Public | Public Loans | African Development Fund Concessional Loans |
| 1.3. | Public | Debt Conversion | Debt2Health |
| 2.1. | Private | Private Loans | IFC - Goodlife Pharmacies |
| 3.1. | Blended | Social Enterprise | One Family Health |
| 3.2. | Blended | Grant-based Public Private Partnership | Africa Frontline First Catalytic Fund |
| 3.3. | Blended | Results Based Financing | Living Goods Results-Based Financing |

## 1.1 Grants

***Overview***

Development assistance for health (DAH) refers to the "financial and in-kind resources that are transferred through major international development agencies to LMICs with the primary purpose of maintaining or improving health" (Mushasha and El Bcheraoui, 2023). Estimated at $67B+ in 2021, the majority (63.6%) of DAH is grant financing, representing a significant share of health spending in low-income settings (Shi et al., 2023).

Grant financing for global health typically involves funding provided by governments, multilateral organizations, and philanthropic groups to support specific initiatives and programs to improve health outcomes worldwide with no expectation of repayment (Fund for Global Health, 2024). The U.S. government is the largest donor to global health, providing both bilateral funding (approximately 80%) and multilateral funding (KFF, 2024). Most available grant financing instruments are related to specific diseases (e.g., President's Malaria Initiative, Global Fund), as measuring outcomes for targeted diseases is more straightforward. In fiscal year 2023, total U.S. funding for global health was $12.9B, with the largest share allocated to global HIV/AIDS efforts through the President's Emergency Plan for AIDS Relief (PEPFAR). Beyond the U.S., other major donors of development assistance for global health include Japan, Germany, the UK, and multilateral organizations like the WHO (Institute for Health Metrics and Evaluation, 2024).

| **Box 1.1 President's Emergency Plan for AIDS Relief (PEPFAR)** | |
|---|---|
| **Instrument Type** Traditional Grant | **Inception** 2003 |

| | |
|---|---|
| **Size** $6.8B annual budget; No individual cap (KFF, 2023) | **Operator** U.S. Department of State's Office of the U.S. Global AIDS Coordinator and Health Diplomacy; administered by US ambassadors in field countries |
| **Funding Sources** US government budget | **Financing Terms** Unspecified |
| **Overview** PEPFAR is a U.S. Government initiative to address HIV prevention and treatment worldwide (PEPFAR, 2024). Over the last two decades, PEPFAR's program focus moved from emergency response to epidemic control. Currently, PEPFAR operates primarily in SSA, Asia, and South America. According to the official data, PEPFAR has saved 25M lives, enabled 20.5M people with HIV to start antiretroviral treatment, 71.1M people to test for HIV, and prevented 5.5M babies from being born with HIV (Department of State, 2024). | |
| **Operation in Kenya** Since its inception in 2003, PEPFAR has invested $100B+ in HIV/AIDS response. Amongst the $100B, at least $8B was dedicated to Kenya. In 2023, PEPFAR Kenya's two-year budget was $674.2M (Nkengasong, 2024; US Embassy in Kenya, 2024) | |
| **Community Health Context** Most of PEPFAR's funding is aimed at the facility level. However, a growing focus is on strengthening community-level outreach, engagement, care, tracking, and referral. Regarding its community health focus, it provides for about 43,000 healthcare work staff across Kenya, including CHWs and community health managers. CHW Funding is used for HIV prevention, testing, care and treatment, high-risk groups management (i.e. orphans, vulnerable children), community education, and CHW training (Department of State, 2024). | |

***Analysis***

Grants have proven to be impactful in addressing specific diseases through utilizing CHWs in Kenya. They have played a crucial role in controlling HIV, with measurable health outcomes due to constant campaigns and data monitoring, making improvements evident.

While disease-specific funding may bolster efforts like HIV prevention and treatment, it inadvertently diminishes the importance of other aspects of a CHW's role due to its limited time and resources. PEPFAR's funding allocations and priority countries are predetermined, leaving recipient nations unable to apply for funding to support community health initiatives proactively. Consequently, conflicting priorities and funding goals arise when the national CHW program is financially supported by multiple programs, failing to holistically support the diverse responsibilities of CHWs.

Reliance on external funding sources, susceptible to factors such as the donor country's budget constraints, shifting program priorities or political influence, poses a significant challenge for the recipient nation. For instance, PEPFAR faced scrutiny from the Republican administration due to perceived indirect support for abortion services, showing how political views can impact program’s effectiveness (Diamond, 2023). This external funding dependency is inherently unsustainable, as evidenced by the disruptions caused by scaled-back funding for CHWs, hindering the country's developmental goals (Qiu et al., 2021).

***Evaluation***

| | **Score** | **Comment** |
|---|---|---|
| **Financial** | 3/5 | Grants are sizable, but their effectiveness is heavily dependent on |

| | | |
|---|---|---|
| **Sustainability** | | external factors (i.e. donor preferences, program focus, inconsistent long-term funding commitments). |
| **CHW Focus** | 3/5 | The lack of directly measurable short-term health outcomes for CHW programs, coupled with the prioritization of disease-specific funding, makes it challenging to use dedicated grants to finance CHW initiatives. |
| **Contextual Alignment** | 5/5 | Since its independence, Kenya has had extensive experience in implementing grants, especially in healthcare. |

## 1.2 Public Loans

***Overview***

Public loans refer to the standard debt securities issued by governments or public institutions to raise capital for funding public projects, infrastructure development, or government operations. It is one of the most frequently used instruments of debt financing (Salsman, 2017). The loans are borrowed funds to be repaid at a later date. They are typically accompanied by a guarantee where the guarantor would take responsibility for the obligation if the recipient fails to pay back, thus enhancing and de-risking the loan. There are two major types of public loans for global health projects: concessional (favorable terms below market rate) are often offered by development banks such as the IDA and ADF; and non-concessional (market rate) are often offered by IBRD and AfDB.

Public debt financing offers several advantages. Firstly, governments generally have a lower risk of default compared to private counterparts in the same country, allowing them to borrow at lower rates. Secondly, public debt issuances are subject to regulatory oversight and disclosure requirements, ensuring transparency and investor protection. Lastly, countries have substantial flexibility on how the funding is used within the context of "country development" broadly, with a lot of room for negotiations depending on the country's needs.

However, public debt financing also has some potential drawbacks. Typically, in most cases, countries cannot submit an individual application; instead, the banks reach out to country governments around their development objectives and funding needs, through which they co-develop a funding package, which may include multiple financing instruments and making the process very time-consuming (Simionescu and Cifuentes-Faura, 2023). The attractiveness of public debt issuances can also be influenced by prevailing market conditions, such as interest

rates and investor sentiment. Moreover, excessive public debt can lead to higher interest payments and potential credit rating downgrades, increasing borrowing costs and limiting future access to financing (PIMCO, 2020). Therefore, governments must strike a delicate balance between utilizing public debt financing to fund essential projects and services while maintaining a sustainable debt burden.

<table>
<tr><td colspan="2">Box 1.2 African Development Fund Concessional Loans</td></tr>
<tr><td>Instrument Type Traditional Public Loan</td><td>Inception 1972</td></tr>
<tr><td>Size $1.2B annually with no individual cap</td><td>Operator African Development Bank</td></tr>
<tr><td>Funding Sources Replenishments from the African Development Bank and donor countries</td><td>Financing Terms 0% interest for ADF-only countries, 1% for blend, gap and graduating countries (Kenya); 40-year maturity for ADF-only countries, 30-year maturity for blend, gap, and graduating countries (Kenya)</td></tr>
<tr><td colspan="2">Overview The African Development Fund (ADF) is the concessional arm of the African Development Bank (AfDB). It was created to address AfDB’s two major constraints: the limited amount of resources that the Bank could provide and the terms of the loans. Countries with low GDP often cannot access traditional loans, especially for projects with long-term durations or low financial returns.<br><br>Therefore, ADF was created to provide funding and technical assistance to support sustainable economic development and social progress in ADF regional member countries. Specifically, it</td></tr>
</table>

comprises 32 contributing countries and benefits 37 countries (AfDB, 2024)). Among the 37 beneficiaries, 27 are ADF-only countries requiring specialized assistance for essential service delivery, while the remaining 10, including Kenya, possess growing economic capacities poised to establish them as new emerging markets. Since its inception, the Fund has cumulatively invested $45B, and its resources are replenished every three years by its donor countries.

**Operation in Kenya** Kenya, classified as a "Blend Country", is deemed by the ADF as "creditworthy for no-concessional financing but whose income is below the operational cut-off" (AfDB, 2024). The loans issued have:

- Maturity date at up to 30 years from signature
- Grace period of up to 5 years
- Interest rate at 1% per annum of the disbursed loan amount payable semi-annually.
- Service charge at 0.75% per annum of the disbursed loan amount payable semi-annually
- Commitment fee at a 0.5% per annum of the undisbursed loan amount occurring 120 days from signature paid semi-annually
- Repayment is an equal and consecutive semi-annual repayment

While no healthcare projects are yet financed via the African Development Fund Concessional Loans, it was used in 2014 to finance the Thwake multi-purpose water development program, which helps regulate the Athi River to address flooding, drought, sanitation, and power generation (African Energy, 2014). The total cost of the project is estimated at $730m, with around $474m provided by the Kenyan government and the remainder by ADF's concessional

| |
|---|
| loans. It was planned to finish in 2019 but due to significant delays, it is set to open in December 2024 (Andeso, 2024). |
| **Community Health Context** The ADF emphasizes poverty alleviation over healthcare, but countries still have considerable sway in financing choices. Within healthcare investments, ADF loans are primarily focused on hospital facility building but can also be deployed in CHW programs. For example, Uganda deployed a $98.8M loan intended to reduce health-related household budget expenditures and improve health worker education at Mulago Hospital in 2012. In Guinea, a $15M loan was deployed on a similar project to improve the efficacy of health care delivery by the national health system. |

***Analysis***

Public loans present a favorable financing option for CHW programs due to a few advantages. Firstly, they offer extremely low financial costs, making them an attractive and affordable option. Additionally, large amounts of financing are available through these loans, with the potential to meet each country's needs via negotiations. This process is generally predictable and transparent, providing clarity and certainty in securing the funds. Furthermore, countries have nearly full discretion over how the funding is utilized, allowing for flexibility in addressing specific community health priorities.

However, there are several significant disadvantages. One primary concern is the high variability in loan sizes, leading to uncertainty in the available funding and potential challenges in meeting program requirements. Additionally, while countries have discretion over how the financing is used, the lending institutions typically prioritize certain areas, such as poverty reduction programs, over healthcare. Within healthcare, there is often a greater emphasis on facilities (i.e. hospital infrastructure) rather than systems (i.e. CHW programs). Moreover,

countries cannot apply for these loans proactively; instead, they must engage in constant negotiations and align with other stakeholders within the country, which can be a complex and time-consuming process.

One of the most alarming disadvantages, however, is that when countries (i.e. Kenya) transition to higher income levels, they may no longer qualify for concessional loans on preferable terms (Green, 2023). This can lead to a sudden drop in external funding for health programs, which were previously heavily supported by these loans (Fryatta and Blecherb, 2023). If domestic resources are not increased proportionately to compensate, it can result in funding gaps for essential health services and programs.

***Evaluation***

| | **Score** | **Comment** |
|---|---|---|
| **Financial Sustainability** | 3/5 | While public loans have the potential to provide large-scale financing at extremely low financial costs, the variability in loan size and the potential progress reversal post-poverty graduation could be alarmingly unsustainable in the long run. |
| **CHW Focus** | 4/5 | There are many precedents of public loans used for CHW programs. Countries typically have full discretion over how funding is used. |
| **Contextual Alignment** | 3/5 | Kenya has previous experience using public loans to finance infrastructure projects. However, transition to a higher income level could make Kenya ineligible for preferable loan terms. |

## 1.3 Debt Conversion

***Overview***

Debt conversion, also known as debt swaps, redirects debt repayments into investments in developmental projects in developing countries (Renard et al., 2008). The typical process looks as follows:

1. Debt Cancellation: A creditor country (i.e. Spain) agrees to cancel a portion of the debt owed by a developing country (i.e. Ethiopia)
2. Counterparty Payment: In exchange for the debt cancellation, the recipient agrees to make a counterpart payment to a developmental organization (i.e. Global Fund)
3. The counterpart payments made by the developing country are then used by the developmental organization to finance its programs.

For example, a 50% partial cancellation entails that 50% of the loan's current value is forgiven if the beneficiary agrees to finance an agreed-upon project with the remaining "counterpart funds" (Brookings Institution, 2016). Debt conversion aligns incentives for beneficiary countries, creditors, and aid recipient organizations, making it an appealing financing mechanism for CHW programs: For beneficiaries, it allows debt reduction through cancellation, provides upfront debt relief to invest in national health initiatives, which fosters national ownership and trust in these organizations (Filipp, 2008). Creditors can benefit from the political visibility for directing the global health community towards harmonized aid. Successful debt conversion implementation ultimately enhances their credibility, potentially unlocking further funding opportunities.

| **Box 1.3 Debt2Health** | |
|---|---|
| **Instrument Type** Debt Conversion | **Inception** 2007 |
| **Size** Country-dependent, ~$5-10M | **Operator** Global Fund |
| **Funding Sources** Global Fund for administrative costs; lender country governments for the rest | **Financing Terms** Country-dependent; examples see below |

**Overview** Global Fund's Debt2Health converts debt repayments into healthcare investments with Global Fund to address TB, Malaria, HIV or resilient and sustainable systems for health (RSSH) (Global Fund, 2024). Under tailored debt swap agreements between the two countries, an implementing country agrees to invest in healthcare programs. In return, a creditor country cancels the debt owed by the implementing country.

Since 2007, ten implementing countries (Cameroon, Côte d'Ivoire, Democratic Republic of Congo, El Salvador, Egypt, Ethiopia, Jordan, Indonesia, Pakistan, and Sri Lanka) have invested more than $226M in domestic health programs through Global Fund. In return, Australia, Germany, and Spain have canceled debt in those countries. Funding use can vary, including program scale-up, monitoring and evaluation, worker retraining and capability building, and procuring diagnosis tests and materials. For example, Spain canceled $27M in debt in Cameroon; in return, Cameroon contributed $10M to Global Fund specifically for AIDS (Global Fund, 2023). This contribution enabled 30,000 people to receive antiretroviral therapy and raised the treatment coverage rate for people living with AIDS from 50% to 70%.

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| **Operation in Kenya** N/A |
| **Community Health Context** Community-level care is an eligible use of funds under existing Debt2Health guidelines. For example, Spain canceled $8.7M in debt in Ethiopia; In return, Ethiopia contributed $3.5M to Global Fund, which enabled the diagnosis and treatment of 4,800+ cases of multidrug-resistant TB, and increased access to HIV testing for 90% viral suppression among those currently receiving antiretroviral therapy (Global Fund, 2023). This contribution has helped with education, early prevention, and diagnosis at the community level and was earmarked for RSSH programs. |

***Analysis***

Debt conversion allows countries to address debt burdens while investing in critical areas such as healthcare. As discussed above, beneficiaries and creditors both have a significant incentive to participate. However, from the case study, one can see the complexity involved in the entire process. The use of converted funds must be negotiated between debtor and creditor nations, who must agree on the amount and intended purpose. In this process, both countries must determine specific projects to allocate the fund, which could be time-intensive if conflicting interests and priorities exist. Additionally, foreign creditor nations may leverage political influence over the debtor country, shaping fund allocation according to their own priorities rather than domestic healthcare needs. Lastly, for countries unable to service loans, a partial cancellation requiring counterpart funds may be more expensive than the status quo, suggesting only financially capable countries could realistically benefit (Brookings Institution, 2016).

***Evaluation***

| | **Score** | **Comment** |
|---|---|---|

| | | |
|---|---|---|
| **Financial Sustainability** | 2/5 | Debt conversion presents an opportunity to alleviate debt burdens and invest in healthcare, but it involves significant negotiations and is not practiced very frequently. |
| **CHW Focus** | 4/5 | Strong arguments can be made when CHW is included by countries as part of bids for grants, especially when funding is earmarked for RSSH. Funding to support CHWs directly requires a willing creditor country and local government officials. |
| **Contextual Alignment** | 3/5 | Kenya has experience implementing debt swaps in the sustainability sector, but not in the healthcare space (Duarte and White, 2024). |

## 2.1. Private Loans

***Overview***

Private loans play a crucial role in financing global health initiatives, particularly for organizations that do not have access to traditional funding sources or require additional resources beyond what is available through public or philanthropic channels (USAID, 2022).

There are a few key features of private loans in global health: Private lenders may offer loans ranging from a thousand to millions of USD, depending on the borrower's creditworthiness and the intended purpose of the loan (Sussman, 2019). Interest rates on private loans can also vary but are often higher than public or subsidized loans, reflecting the lender's risk assessment and profit motives. However, they usually have more flexible repayment terms, including options for deferment or interest-only payments during residency or relocation periods, followed by full principal and interest payments (Institute for Healthcare Metric and Evaluation, 2024). Private loans are generally subject to less regulatory oversight than public loans, which can lead to varying levels of protection and transparency for the recipient (National Academies Press, 2017).

| **Box 2.1 IFC - Goodlife Pharmacies** | |
|---|---|
| **Instrument Type** Private Debt Financing | **Inception** 1956 |
| **Size** $4.5M | **Operator** IFC |
| **Funding Sources** IFC Funding | **Financing Terms** Unspecified |

**Overview** Founded in 2014, Goodlife Pharmacies is a Kenya-based healthcare firm that provides trusted pharmaceuticals to 2M+ customers (Goodlife, 2024). In addition to health-related products both in physical stores and online, it also offers in-person health services (i.e. blood pressure measurement, malaria diagnosis, nutrition consultation, and BMI measurements) as well as telemedicine.

In 2015, Goodlife received funding from the IFC to open new stores across East Africa (Africa Global Funds, 2015). With the funding, Goodlifes' pharmacists and staff received in-house skill development training, responding to a growing need for skills development in Kenya's pharmaceutical sector. The loan allowed Goodlife to accelerate its growth from a small enterprise with four stores in 2015, to the region's largest pharmaceutical retail chain with more than 140 branches in East Africa. In 2018, the IFC provided an additional $2.3M for further expansion (Kangethe, 2018).

**Operation in Kenya** In Kenya, around 30% of drugs are counterfeit, with very few national chains (IFC, 2017). To address this pain point in a highly fragmented market, Goodlife provides affordable, quality healthcare products and services in 100+ stores in Kenya. Since the recent funding round, Goodlife's strategy is to target different socio-economic groups by dividing its stores into four distinct formats, each aimed at a segment of the population: Flagship stores (middle to high-income customer in high-end malls), classic stores (lower to middle-income customer in strip malls and stand-alone buildings), neighborhood stores (low-income income customer in gas stations and bus stops), and express stores ( low-income

| |
|---|
| customer in smaller layout) (Maritz, 2021). As Goodlife expands, a majority of the new stores aim to serve customers earning <$10 a day, living in underserved and lower-income areas. |
| **Community Health Context** CHWs are typically not involved with the process. However, the in-store Health Hub with health services are typically done by pharmacists. Goodlife also has a partnership with HealthX and Livia for telemedicine consultation with licensed physicians. |

***Analysis***

With significant challenges in meeting the growing demand for infrastructure, healthcare, and other essential services, there is also growing interest in investing in projects in the SSA region from private investors. Estimates suggest that investments of $25-30B will be required annually to address the needs in health and education (IFC, 2017). With organizations like the IFC, private loans are incredibly beneficial for long-term development. Typically, private loan lenders in global health also support building partnerships between businesses, financial intermediaries, policymakers, philanthropists, and other stakeholders to support the country's development goals. Their efforts aim to create an enabling environment that fosters sustainable growth, facilitates private sector involvement, and ensures that investments yield tangible results for communities.

One critical concern, however, is the highly limited opportunities suitable for private financing mechanisms. While private debt can be a valuable instrument for revenue-generating enterprises, it may not be suitable for most initiatives that do not generate direct revenue streams. The nature of no- to low-revenue generation for these programs, coupled with the operating environment with a low credit reputation, makes such private loans not extremely appealing to most private lenders, especially international investors. The consequence of not paying back the loan could also be substantial. Therefore, understanding the lending mechanism well and

searching for the right partner are crucial before implementing such strategies to fund CHW programs.

***Evaluation***

| | **Score** | **Comment** |
|---|---|---|
| **Financial Sustainability** | 4/5 | Private investors, especially those investing in SSA, often provide preferable terms, sizable checks, and impact as a part of their measure for success. |
| **CHW Focus** | 2/5 | There has been no publicly released precedent for private investment used in CHW programs, even though no explicit restrictions exist. When private investors assess potential investments, they typically prioritize long-term profitability and returns on investment. CHW programs are primarily focused on providing essential healthcare services with low to no profits, which may not align with the risk-return profiles that private debt investors typically seek. |
| **Contextual Alignment** | 5/5 | Kenya is often considered one of the strongest candidates for private investments on the continent due to its entrepreneurial environment and steady economic development. |

## 3.1. Social Enterprise

### *Overview*

In recent decades, social enterprises have emerged as an innovative model to address health challenges, particularly in underserved and resource-constrained communities. A social enterprise is defined as a business with social impact-oriented objectives (Investopedia, 2024). Therefore, unlike traditional businesses, maximizing profits is not the primary goal for social enterprises. Instead, they typically benefit community members who are economically disadvantaged or marginalized.

A Skoll Foundation analysis showcases that social enterprises typically "add new actors to an existing system" and "deploy new technologies" (Osberg and Martin, 2015). Firstly, the actors added fall into two categories: customers, who aim to "shift the power balance" and government, who "alters the economics" by becoming a more active player in the system. Secondly, these actors "substitute, create, or repurpose" the system's technologies. By leveraging digital tools and data analytics, innovative social enterprises enhance the efficiency and impact of their interventions more effectively than traditional public health systems.

In terms of financial constraints, social enterprises in global health also have the potential to achieve financial sustainability (Lessl and Bonnici, 2022). Instead of relying on constant subsidies, taxes, or charitable donors indefinitely, social enterprises allow revenue generation in the local community (Roger and Martin, 2015). Additionally, due to economies of scale, the social enterprise's costs would decrease as its beneficiaries increase, allowing the firm to reduce its external dependency as it grows over the long term.

Additionally, there is a growing emphasis on the ability of social enterprises to complement and strengthen existing public health infrastructure, rather than creating parallel

systems (Chahine, 2021). By aligning their services with the priorities of the public sector and country objectives, social enterprises can help address systemic gaps and drive more comprehensive improvements in healthcare access and outcomes.

<table>
<tr><td colspan="2">Box 3.1 One Family Health</td></tr>
<tr><td>Instrument Type Private low-profit social enterprise</td><td>Inception 2012</td></tr>
<tr><td>Size $3.5M+ (GlaxoSmithKline, 2012)</td><td>Operator One Family Health, Rwanda Ministry of Health (MoH)</td></tr>
<tr><td>Funding Sources Internal revenue, National Health Insurance, USAID</td><td>Financing Terms Interest-free loan from GSK, program revenue see below</td></tr>
<tr><td colspan="2">Overview One Family Health (OFH) is a nurse-led franchise model that is partnered with the Rwanda National Health Insurance Fund to increase access to PHC services in rural Rwanda. Since its inception, they have created 110+ nurse-run OFH clinics, served 1.6M patients, and reduced average travel time for patients from 74 to 14 minutes (van Niekerk & Chater, 2016). Nurses provide education, preventive care, and treatment to members of their communities. Nurses see around 40 a day and refer complicated cases to the local public hospital.<br><br>Regarding its funding model, OFH is a PPP. From the public sector, the government provides space and branding for the health post, and reimburses OFH nurses via national insurance. This allows OFH to provide accessible service while providing a sustainable revenue stream for the nurses. From the private sector, OFH received an interest-free loan from GSK from</td></tr>
</table>

| |
|---|
| 2013 to 2015 to kickstart the program. The loan was required to be repaid as soon as OFH started to make a positive cash flow, which the MoH could then reinvest to strengthen the healthcare system.<br><br>For individual health posts, funding comes from reimbursements by national insurance and copayments by patients. The average bills are $1.2-1.5 for insured and $2-4 for uninsured patients. To join, nurses pay a $500 initiation fee. For OFH's management overhead, its funding streams come from a 5% profit margin on drug sales, 3% for distribution, as well as 2% monthly revenue for marketing and 6% monthly for royalty fees from each health post. From the latest available data, 60%+ of OFH posts are profitable. |
| **Operation in Kenya** N/A |
| **Community Health Context** OFH recruits qualified Grade A2 college graduates with five to eight years of clinical experience. As the franchisor, OFH provides nurses with rent-free buildings in their community and low-interest loan from its partner Ecobank for renovations, essential medical equipment, and medicine stock purchases, which is repayable over 60 months. OFH's core service is conducted via an integrated mobile platform that runs across all health posts on internet-enabled Android phones. On the platform, functionalities include training (i.e. PHC protocols, financial management, medicine stock management), electronic patient records, stock ordering, monitoring, and billing. |

***Analysis***

Social enterprises have the potential to be tailored to CHW programs and become a stand-alone entity via revenue generation without strong dependency on external donors. Being a

low-profit entity enables the country-level operations to prioritize their social mission, with profits as a secondary concern.

On the beneficiary level (i.e. patients), social enterprises usually bring mostly advantages and rarely disadvantages to the community. In the OFH case, patients who typically would not be able to afford care now enjoy standardization and consistent quality across entry-level health facilities in rural areas, with very little downside. On the provider level, the franchising model incentivizes employees by providing ownership, income, and autonomy. The OFH case illustrates the positive role of entrepreneurial health models in supporting government service delivery priorities in a PPP. The partnership leverages national health insurance to finance private nurse practitioners.

However, a prominent argument against social enterprises is that they work in parallel, instead of in alignment, with the public health system, which would "take away attention and resources from the existing public health system, rather than investing in strengthening that system" (Chahine, 2021). The complexity of multi-level partnerships adds bureaucracy, leading to duplicated effort and inefficiency. For example, a third-party OFH case study indicated that OFH nurses "have 2 systems of paperwork to fill out… which causes disincentive for nurses to keep reporting" (Kalapurakkel, 2021). To mitigate this, careful planning from all stakeholders is necessary to unlock more efficiency in the process.

On the government level, it is important to acknowledge that willing and dedicated partners are difficult to find: Rwanda's healthcare system is known for being open to innovation and having a strong determination to address community health issues due to historical context (Uwishema, 2023). MoH in other countries might not be as open to such programs. Additionally,

existing national health insurance schemes or other community-based micro-insurance schemes differ in each country, and integration with the social enterprise might take significant resources.

Lastly, only strong external funders and investors can kickstart the program. The OFH example serves as a strong case for investments; however, more successful cases are needed to make more investors willing to invest in such projects. According to an analysis by Social Innovation in Health, at the current rate of scale, OFH would reach sustainable profitability 13 years after inception (van Niekerk and Chater, 2016), which is not appealing to investors who do not have conviction in the mission. Ultimately, the conflict between social impact and profit could remain an issue.

***Evaluation***

| | **Score** | **Comment** |
|---|---|---|
| **Financial Sustainability** | 4/5 | The goal of all social enterprises is to be financially sustainable. While the low-profit profile makes it difficult to attract strong external funders to kickstart the program, once started, social enterprises have the ability to be sustainable stand-alone entities in the long run. |
| **CHW Focus** | 4/5 | Social enterprises specializing in CHWs show considerable promise, although there are limited precedents (i.e. BRAC, OFH) to emulate; These revenue-generating initiatives can be customized to address the specific focus and requirements of CHWs. |

| | | |
|---|---|---|
| **Contextual Alignment** | 4/5 | While Kenya has always offered strong support for entrepreneurship and PPP, engaging multiple stakeholders could be a time- and resource-intensive task. |

## 3.2. Grant-based Public-Private Partnership

***Overview***

Grant-based public-private partnerships (PPPs) have become increasingly prominent in addressing global health challenges. These partnerships bring together governments, international organizations, private firms, and nonprofits to collaborate.

One of the key advantages of PPPs in the context of global health is their ability to mobilize substantial financial resources and technical expertise (WHO, 2023). Governments contribute policy frameworks, regulatory oversight, and public funding, while private sector partners offer innovative technologies, specialized knowledge, and additional financing (Babacan, 2012). Nonprofits and international organizations facilitate these partnerships, providing technical assistance, community engagement, and advocacy support.

However, the success of PPPs in global health is not without challenges. Ensuring transparency, accountability, and equitable access to the benefits of these partnerships can be complex, especially when navigating different organizational cultures and priorities (de Bengy Puyvallée, 2024). There are also concerns about potential conflicts of interest and the influence of private sector actors in shaping initiatives, which may prioritize profit motives over public health goals (Jensen, 2016). Another challenge lies in aligning the priorities and resource allocation of PPPs with the actual disease burden and health needs of different regions. Historically, PPPs have focused on specific diseases or technological interventions, while neglecting broader health system strengthening efforts and non-communicable diseases, which account for a significant portion of the global disease burden (Shi et al., 2023).

| **Box 3.2 Africa Frontline First Catalytic Fund (AFF-CF)** | |
|---|---|
| **Instrument Type** Grant-based Public-Private Partnership | **Inception** 2022 |
| **Size** ~$100M | **Operator** Africa Frontline First Initiative led by The Ellen Johnson Sirleaf Presidential Center for Women and Development, Last Mile Health, Community Health Impact Coalition, Financing Alliance for Health. |
| **Funding Sources** Johnson & Johnson Foundation (Pharma Foundation), Skoll Foundation (Private Foundation), Global Fund (Intergovernmental and Multilateral Organization) | **Financing Terms** In Development |
| **Overview** More than 85% of CHWs in SSA, primarily women, are not paid for their work (Skoll Foundation, 2022). To address this gap, AFF-CF aims to scale up CHW programs in eight African countries (Burkina Faso, Côte d'Ivoire, Ethiopia, Kenya, Liberia, Mali, Senegal and Zambia) with $100M+ mobilized from partners between 2024-2027 (Global Fund, 2022). In line with the African Union's New Public Health Order, this PPP supports the AU's broader target of deploying 2M CHWs by 2030. The goal of the Fund is to support the work of 220,000 CHWs who serve an estimated 146M people in SSA (Global Fund, 2024).<br>To help the target countries overcome the scaling barrier and ensuring long-term sustainability, | |

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| the Global Fund, partnering together with AFF-CF, outlined their strategic investment domains as the following:<br>1. Financing for long-term sustainability, rooted in government financial plans, which blends donor and domestic funding.<br>2. Human Resources for Health to develop and professionalize CHWs to be paid, supervised, supported and integrated into the national health workforce.<br>3. Leadership and governance to assist government leadership in developing and implementing clear policies, processes and structures for health system strengthening.<br>4. Digital tools and information systems to facilitate digital transformation across the whole community health sector.<br>5. Supply-chain to develop regular forecasting and guarantee the availability of essential tools and equipment (Global Fund, 2024). |
| **Operation in Kenya** The fund will be allocated to Kenya to identify systemic challenges facing the National CHW programs. Funding will be deployed in 2024. |
| **Community Health Context** The AFF-CF has two key objectives: to ensure that the 10 SSA countries accelerate progress and improve PHC delivered at the community level and that CHWs are monetarily compensated for their work. The Fund will combine "coordinated technical assistance and implementation funding, as well as investments to scale financing, employ digital tools, increase the availability of essential life-saving commodities, and better integrate CHWs within the overall health system" (Skoll Foundation, 2022). |

***Analysis***

From the case, one can see how PPPs can be specifically tailored to cater to the needs of

CHWs. The operators and funders involved in such initiatives have a deep understanding of CHW requirements, setting a model example for targeted investments in this area. If the impact results prove successful, it could motivate more investors to explore investing in these programs, amplifying their reach and influence.

However, identifying and addressing the root causes of prevailing challenges requires extensive planning and preparation. AFF-CF, for instance, has been in the planning phase for two years, highlighting the time and resources required to lay a solid foundation for such investment. The root cause of such a long planning phase relates to the ability to coordinate, negotiate, and find common ground among the diverse priorities of different funders. While it is highly necessary for partners to have a thorough plan, the establishment of a PPP as one of the most time- and resource-intensive instruments for financing health programs could turn many funders away (de Bengy Puyvallée, 2024). Therefore, a growing number of PPPs are taking a harmonized and innovative approach in ways to ensure governance transparency, accountability, coordination and knowledge-sharing to optimize resource allocation and address gaps in health system capacities. However, by fostering open communication, mutual understanding, and a shared vision, these obstacles can be overcome, paving the way for comprehensive and impactful solutions that transcend individual agendas.

***Evaluation***

| | **Score** | **Comment** |
|---|---|---|
| **Financial Sustainability** | 4/5 | With operators familiar with the field, they would most likely know where to best invest the fund. Their funding is dedicated to CHWs with the opportunity to replenish. |

| | | |
|---|---|---|
| **CHW Focus** | 5/5 | The examples provided by the AFF-CF demonstrate the feasibility of PPPs specifically tailored to CHW programs. |
| **Contextual Alignment** | 5/5 | Kenya's frequent implementation of PPPs in the past, facilitated by a collaborative government, indicates the country's receptiveness to such initiatives. |

## 3.3. Results-Based Debt Financing

***Overview***

Results-based financing (RBF) is an approach where a funder, often a government or development partner, transfers money, goods, or other incentives to a recipient agent conditional on achieving pre-defined, pre-agreed, and verified output or outcome targets, rather than solely based on inputs or activities (World Bank, 2019). RBF has demonstrated the ability to attract private investment in historically "non-bankable" areas (i.e. social development) by bringing together public and private sector funders and designing effective incentives for service providers to reach underserved low-income households. In recent years, RBF has been a way to help fill the large financing gap for achieving the Sustainable Development Goals in developing countries (Bergman et al., 2021). When well designed, RBFs can significantly improve desired development outcomes by creating accountability and incentivizing cost-effectiveness. RBF mechanisms can help attract more community health resources from risk-averse governments, bilateral and multilateral donors, driving progress toward universal health coverage (UHC).

In developing countries, the impact bond market has been growing slower than other markets; despite considerable interest from global development actors, there are still just 17 impact bonds contracted in low- and middle-income countries as of 2020 (Gustafsson-Wright, 2020). Of these deals, 11 are development impact bonds (DIBs), where the outcome payer is a third party, such as a donor, while the remainder is social impact bonds (SIBs), where the government plays this role. These bonds are typically small in size (under $10M). In SIBs, outcome payers pool resources and commit to paying service providers for the achievement of verified results. To finance operations, service providers raise working capital from financiers such as impact investors or philanthropists. When results are achieved, as confirmed by a

third-party evaluator, the outcomes fund disburses outcome payments to the service provider, who can repay financiers for upfront capital per those agreements.

| **Box 3.3 Living Goods Results-Based Financing** | |
|---|---|
| **Instrument Type** Results-Based Financing | **Inception** 2018 |
| **Size** $400,000 | **Operator** Living Goods, Deerfield Foundation, Government of Uganda |
| **Funding Sources** Living Goods | **Financing Terms** Not Specified |
| **Overview** With the Uganda government, Living Goods co-designed the country's first RBF mechanism specifically for community health (Living Goods, 2020). The one-year pilot took place in Kyotera and Masaka districts, supporting approximately 322 CHWs serving a catchment area of 250,000+ residents. Through this RBF, Living Goods is only paid for results that have been independently verified by Innovations for Poverty Action (IPA). IPA selects a random sample of results biweekly for verification through calls and home visits, with 50% done remotely to keep cost low. Every three months, IPA adjusts the performance reports to reflect only verified results, and payments are made to Living Goods based on predetermined prices assigned to each result. This incentivizes the cost-effective delivery of results and accurate reporting. There are no upside incentives for over-achieving targets or penalties for unverified data. | |

Under the RBF, outcome payers (Deerfield Foundation) pay for the pre-defined and verified results, and service providers (CHWs) deliver community health services (Living Goods, 2024). While this RBF is similar to an impact bond, Living Goods, instead of an investor, bears the responsibility of raising working capital to deliver results. Living Goods has unrestricted funding to use as upfront capital and is willing to take on the risks associated with performance variance.

Regarding pilot results, the overall payment for verified results ($589,941) was $143,794, which is 32% higher than the expected payment ($446,146). Some payment metrics achieved significantly higher performance than expected (i.e. in-facility antenatal care, assessments of sick children under age 5). However, there is great variance, with certain metrics not meeting the target (i.e. in-facility deliveries, postnatal care visits).

**Operation in Kenya** N/A

**Community Health Context** For this program, payment metrics were informed by key criteria related to: impact on child mortality, alignment with the government's objectives, minimization of perverse incentives, objectivity and ease of measurement, and the ability to ensure manageable control. Performance tracking is collected through real-time data via the Smart Health app, co-developed with Medic Mobile. The metrics are:

1. Number of visits CHWs make to pregnant women.
2. Number of antenatal clinic visits completed by pregnant women in facilities following CHW visits.
3. Number of women delivering at health facilities following CHW visits.

4. Number of postnatal visits by a CHW within 48 hours of birth.
5. Number of postnatal visits by a CHW between 48 hours and one week after birth.
6. Number of immunization and nutrition assessments for children under one.
7. Number of assessments for malaria, pneumonia, and diarrhea for children under five.
8. Number of follow-up visits by CHWs in person or via phone after referral to a health facility

During the pilot, Living Goods was able to improve on its overall CHW operations. For example, the process revealed CHW's initial confusion on the number of newborn visits needed, which should be 48 hours of birth for firstborn and one-week for others. Living Goods updated this in its CHW training materials in response to this confusion.

***Analysis***

RBF is a novel concept with high potential for use in global health, particularly for CHW programs. RBF ties funding to measurable outcomes and impacts, incentivizing efficient service delivery and attracting investment from diverse stakeholders. By defining clear targets and verifying their achievement, RBF could motivate investors to support social impact projects like CHW programs, which are typically less appealing in profits.

One of the key benefits of RBF is the accountability it fosters. By drawing attention to key health results and allowing flexibility for implementers to innovate and improve, RBF can reduce risk for bilateral and multilateral donors, facilitating effective financing or contracting of CHW programs by local governments. It also motivates service providers to actively track program performance and improve upon the metrics, as evidenced in the Living Goods CHW home visit example where data quality improved from 60% to 96% during the RBF pilot implementation (Living Goods, 2020). RBF also offers advantages through outcomes funds,

which streamline contracting relationships, provide a credible commitment of funds, and give implementers control over mobilizing and structuring capital in a cost-efficient manner.

The pilot demonstrated an innovative approach for contracting high-impact, cost-effective community health services that Uganda's MoH, donors, and other partners can adopt in the future. While successful, it did not scale up since it was planned to launch in March 2020. However, in general, while the enthusiasm for RBF is high, few were executed in practice. Common reasons identified include misunderstanding of the RBF model, the need for adaptations to the local context, staff turnover and loss of RBF knowledge in commissioning organizations, constrained commissioner organizational capacity, and lack of data on RBF success (Gustafsson-Wright, 2020). The market for SIBs and DIBs is currently small, with very few successful examples beyond the Living Goods pilot. Complexity in the implementation of data collection, verification, and incentive distribution is another considerable factor in scaling RBF. Identifying appropriate performance metrics for community health programs can be complex. The constant communication between outcome payers, service providers, financiers, third-party verifiers, consultants, escrow holders, and researchers is necessary but extremely complex for real-world implementation, making it one of the core reasons why RBFs are not deployed more frequently.

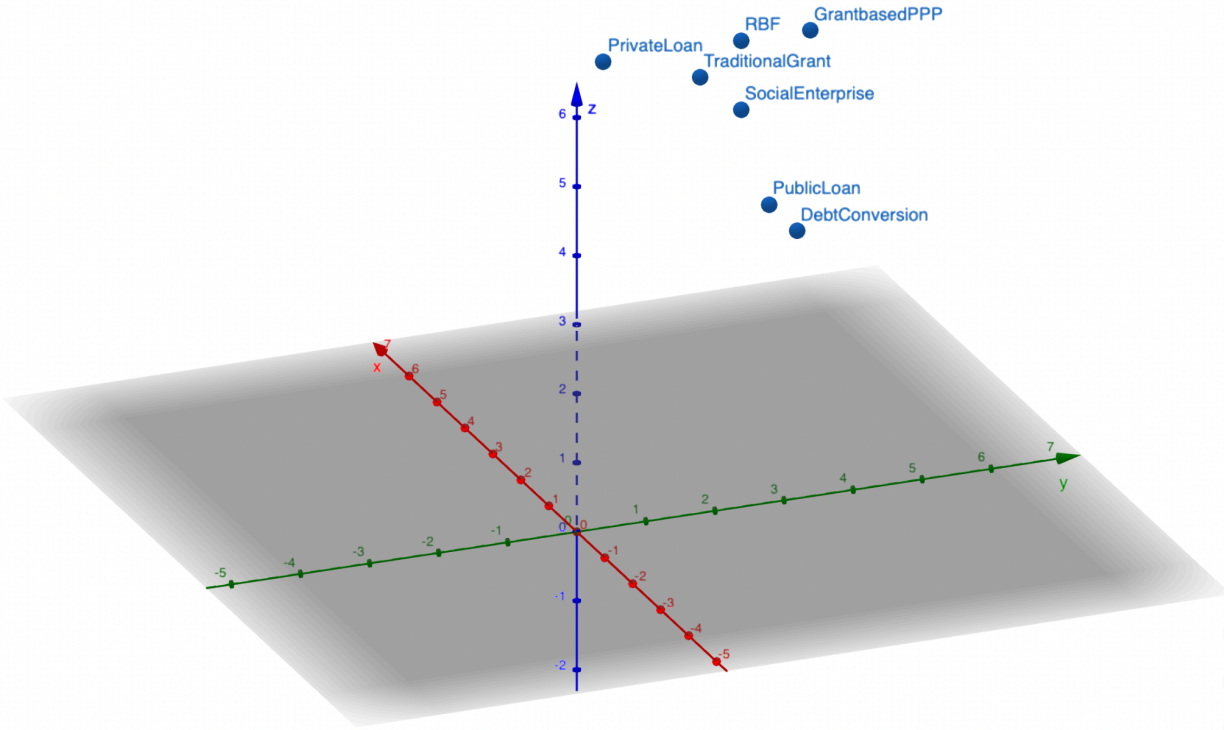
***Evaluation***

| | **Score** | **Comment** |
|---|---|---|
| **Financial Sustainability** | 4/5 | RBF offers a promising financing model for CHW programs by aligning incentives with measurable outcomes. However, one has |

| | | |
|---|---|---|
| | | to find partnerships that have the will and determination to fund these programs with the impact in mind. |
| **CHW Focus** | 4/5 | The Living Goods RBF serves as a paradigm on how RBF can be designed specifically around CHW programs. However, RBF has not been widely used for any national CHW cadres overall, as it requires significant time and resource investments for design and execution. |
| **Contextual Alignment** | 5/5 | Kenya has successfully implemented many RBF instruments. However, careful consideration and adaptation to local contexts are crucial for successful implementation. |

## DISCUSSION

Within global health, CHW programs stand out in their funding landscape with a distinctive set of financing mechanisms from the outset. For example, unlike certain healthcare opportunities in SSA, private equity investments are unlikely to be applied to CHW programs due to their no- to low-profit nature. Dedicated funds (i.e. Malaria Fund) were also not included in the study due to their ultra-siloed vertical nature, which exacerbate the inefficiency within an already highly fragmented healthcare system.




***Graph 1: Evaluation of Financing Instruments (Access 3D model)***

From the matrix, one can see that while grant-based PPP receives the highest score from the three-metric evaluation amongst the cases analyzed, the comparison reveals a stark trade-off between sustainability and scalability. On the one hand, public financing mechanisms (i.e. grants, concessional loans) offer substantial funding volumes that can support large-scale CHW

initiatives. However, these funding sources are often disease-specific, short-term, and reliant on external donors, raising concerns about long-term sustainability. Conversely, private financing models (i.e. social enterprises) demonstrate more significant potential for self-sufficiency and long-term viability, but also face challenges in securing substantial initial funding and aligning with public health priorities. Across all models examined, a few overarching themes emerge:

***Necessary Support vs Donor Dependency***

During an interview, a poignant observation from a community member encapsulates the tension between short-term aid and long-term development:

> *We need foreign aid to give us [a] head start but relying on it is not sustainable. As much as we are getting foreign aid as a country, we have to generate resources locally…otherwise we will never truly develop. This is [the] impact from colonialism. (Community member, Trans-Nzoia County, Kenya, March 2024).*

This sentiment is reflected broadly in public financing instruments, and a few significant consequences stemming from this paradox. Firstly, heavy reliance on external donors renders the effectiveness of CHW programs highly susceptible to external factors beyond the recipient's control. As discussed in section 1.1, many factors could impact consistent funding: Fluctuations in the donor country's economic climate, budget constraints, political party in power, and realignments of program priorities could all disrupt funding streams, making it unsustainable in the long run.

Secondly, these funding sources, while generous in their contributions, are often disease-specific and narrowly focused, failing to holistically support the responsibilities of CHWs and address system-wide improvements. For instance, PEPFAR has been instrumental in controlling the HIV epidemic in Kenya, but its funding is primarily directed towards HIV-related interventions, leaving other aspects of CHW work underserved. CHWs' time and resources are

ultimately zero-sum: If more time is allocated to HIV, the time allocated to other tasks such as data collection, other neglected diseases, or childcare would inevitably diminish.

Lastly, recipient countries also face an absorption issue. When a grant is issued but only 20% of the funding is deployed during the designated grant term due to protracted planning cycles, only 20% of the funding is fully "absorbed", making it difficult to apply for additional funding in the future. The lack of sustainable funding in the short term can have a primary impact of the diversion of efforts as the government seeks new funding sources. Secondarily, it can also result in poor delivery of health services at the community level due to the absence of sustained financial support.A program manager confirmed this challenge:

> *That's one of the biggest bottlenecks to performance. You'll be shocked by all the challenges… People keep saying "we don't have enough money" when they have money. It's like absorption challenges… Even some countries at such a [developed] level, they're struggling with absorption of around 20 %. Can you imagine? And they keep saying "we don't have money". For example, if Senegal had, I don't know, 10 million for community health in the previous grant, and you had a lot of challenges absorbing, it's very hard to defend 20 million for Senegal this time around (Program manager, Nairobi, Kenya, February 2024).*

Aids' intended support simultaneously fosters an unsustainable dependency. This paradoxical dynamic, therefore, points to an urgent need for a shift away from donor reliance towards a new, self-sufficient approach to finance CHW programs.

***Rapid Economic Development vs Loss of External Support***

While the concessional loans provided by development banks can catalyze program development with substantially sized financial injections, another concerning issue emerges: the progress reversal post-poverty graduation.

As Kenya, categorized as a Blended country by the ADF with a projected GDP growth rate of 6.3% in 2024, approaches the threshold for transitioning to higher income levels, it will soon face the inevitable reality of losing eligibility for preferred loan terms (Reuters, 2024).

Although this graduating status has not yet materialized for most financial products, Kenya has experienced similar situations that serve as cautionary tales: When PEPFAR reduced funding for some communities in Kenya, CHWs lost their ability to provide education or identify early cases due to the lack of outreach support, thereby undermining their authority and ability to create awareness in their community (Qiu et al., 2021). Similarly, in Nigeria, defaulter tracking, community-based testing and counseling, and service generation activities were discontinued after PEPFAR funding reduction (Banigbe, 2019).

This dynamic unveils another tension between the pursuit of rapid development and the consequential loss of critical resources, juxtaposed against the alternative of slower development. Since the dawn of independence in SSA, international development assistance partners have played an outsized role in shaping country responses to global health issues. This heavy influence has fueled arguments that development assistance has detracted from domestic efforts to invest in its own healthcare system. Instead, countries prioritize spending to align with donor objectives and short-term projects (Stierman et al., 2013). Oftentimes, this donor funding has fostered the creation of parallel health systems while siphoning off critical human resources to externally funded projects, as discussed in section 3.1.

As evidenced by the findings presented, these gaps are subsequently exposed when long-term funding sources end, leaving poorly funded health systems to adapt under severe resource constraints. With the goal of moving away from donor-reliant funding, current donors should take responsibility to ensure that any funding reductions are implemented in a way that does not further exacerbate existing vulnerabilities, especially to those who do not have the tools to personally participate in directing the global dialogues on development assistance. This responsibility must be coupled with a concerted effort domestically to increase healthcare

funding. Failure to increase domestic resources proportionately to compensate for the loss of donor financing could result in funding gaps for essential health services and programs, further jeopardizing the sustainability of CHW programs.

***Profit vs Impact from Private Financing Models***

In contrast to public financing mechanisms, private financing models, such as private loans, offer promising avenues for self-sufficiency and long-term viability. Private financing models are designed to generate sustainable revenue streams through their operations. By providing affordable healthcare products and services, particularly in underserved areas, these initiatives have the potential to become self-sustaining entities, reducing their reliance on external funding sources. Additionally, innovations thrive in private settings, as observed in the Goodlife case with its rapid product and geographic expansion since 2015.

However, one alarming challenge remains — the conflict between profit motives and public health priorities. Private sector involvement may prioritize more profitable services or regions, potentially neglecting areas or populations with the greatest health needs but limited financial resources. Additionally, implementing financial instruments requires a significant amount of resources, both in time and capital. A McKinsey report illuminated the catch-22 paradox plaguing investments in Africa — a lack of successful precedents dissuades new investors, perpetuating a cycle of underinvestment (Lakmeeharan et al., 2020). For most of these approaches to community health financing, one can observe a parallel dilemma: despite the great potential to bring healthcare access to rural populations, few investors find compelling interest in an endeavor perceived as lacking high margins. Similarly, with the low-profit nature of the initiatives, their financial sustainability struggles in low-income areas despite the promise of revenue generation. For example, Goodlife acknowledges this challenge with plans to expand

into lower-income areas, but the long-term sustainability of such efforts remains to be seen. Therefore, this dichotomy between the promising potential of private financing models to foster self-sufficiency and the inherent profit-driven paradox that could undermine their reach to the most vulnerable populations again points to the need for a delicate, holistic balance.

***Collaborative Potential vs. Coordination Complexity***

Evidenced in the case studies, most financing mechanisms heavily rely on engagement with external funders and partners, whether public entities like governments and multilateral agencies, private investors and corporations, or a combination through blended approaches. Forging these multi-stakeholder partnerships is crucial to unlocking sustainable financing flows.

However, as previously alluded to, it takes substantial resources to foster these relationships. For example, at the funder level, Debt2Health has been established for over a decade, but only facilitated a handful of deals. At the provider level, by integrating the national system, the OFH system had redundant paperwork and processes that disallow nurses from maximizing their time with the patient. At the aggregator level, AFF-CF currently remains in its planning phase with no funds deployed as of April 2024, despite completing fundraising in 2022. This two-year planning phase underscores the time and resources required to establish robust governance mechanisms and find common ground among partners with varying agendas. One program manager interviewed expressed their frustration:

> *Global Fund spent a whole year programming for this money [for AFF-CF]. What a huge transaction cost is. And there's no way a ministry can do it alone. You need all these technical people who are able to access all this money from all these donors (Program Manager, Nairobi, Kenya April 2024).*

In addition to the inefficient allocation of resources, this protracted cycle and bureaucracy have given rise to inefficiency and complexity that had additional consequences. Amongst them is the phenomenon of *pilot falloff*, where many promising programs end right after their initial

pilot phase, despite their great potential. For example, while successful in most metrics measured, OFH has recently ceased operation and been absorbed by the government. Living Good's RBF failed to expand in 2020 after the pilot, despite the intention to do so. All of these challenges point to the reality that the success of blended financing models hinges on overcoming coordination challenges, aligning diverse stakeholder priorities, and fostering transparency and accountability, which is very difficult at the current stage.

**Domestic Decision Making & Ownership**

Lastly, maintaining domestic ownership emerges as a significant consideration from all case studies. Currently, countries often lack agency in determining the allocation of funding streams, a reality that has given rise to frustrations among local stakeholders:

> *This is how it's worked as of now. It is very verticalized. But even if you put money for a specific disease, there was this problem of... Number one, you don't even have that visibility [to decide funding allocation]. Number two, even if you're there, you don't have power to say anything they decide for themselves (Public Health Officer, Trans-Nzoia County, Kenya, March 2024).*

This lack of autonomy in shaping healthcare priorities and resource allocation represents a dissonance with the principle of self-determination on the continent. Similar to the previous points, this phenomenon serves as a wake-up call for external funders to acknowledge the lasting imprint they have left on the global health landscape, shift decision-making power to local beneficiaries, recognize that their role is not to dictate but to facilitate, and lend their resources and expertise in service of locally-driven agendas. The funding solutions must be rooted in the very communities they serve, informed by the lived experiences, cultural nuances, and contextual realities that shape the healthcare landscape. Ultimately, embedding program design within national strategies and policies is not only a desirable outcome but a necessity.

# CONCLUSION

## Horizoning a Future for Sustainable Financing for Community Health

Prior to COVID-19, Kenya's economy exhibited robust growth at around 5.4% (World Bank, 2024). In 2020, the pandemic severely disrupted economic activity, leading to a contraction to 0.3% growth. Since then, the economy has recovered strongly with a 6.3% GDP growth projection in 2024, but significant challenges remain. For one, Kenya's debt level has skyrocketed to 73.26% compared to 59.08% in 2019 (O'Neil, 2024). As a result, Moody's downgraded Kenya's credit rating to a B3 in 2023 largely due to the high liquidity risk, leading to increased challenges in accessing public loans on preferable terms (Vizcaino, 2023).

Specifically in healthcare, public spending potential has been severely constrained. Healthcare spending (as % of GDP) has decreased in the past decade and flat-lined at around 4% over the past five years (WHO, 2024). In 2023-2024, healthcare received 11% of the total annual budget, which decreased from 2022-2023 and fell short of the 15% goal set by the Abuja Declaration, a pledge on public financing for healthcare in 2000 (Human Rights Watch, 2024).

With these challenges considered, the way forward lies in fostering collaborative approaches that leverage the strengths of various financing instruments while mitigating their respective weaknesses. Several potential recommendations emerge from the findings:

### *Stronger Domestic Resources Mobilization*

From the gaps identified with external funding in this research, there is an urgent need for countries to increase domestic resource mobilization. In light of the pivotal role of CHW in UHC, domestic resource mobilization will be fundamental to the financial sustainability of CHW programs. Previous research has demonstrated that for every shilling invested in community

health, Kenya would see 9.4 shillings in economic and societal benefits, such as those accrued in education, social welfare, and child protection (Kenya MoH, 2021).

To do so, Kenya must consider the issue systematically. While much advocacy has been started on this subject in recent years, Kenya must first perceive CHW programs as an investment rather than a cost. Secondly, an increased allocation from the national budget is needed, as improved health will yield increased productivity and have cascading positive effects on Kenya's economy, social well-being, and overall growth trajectory. This could involve domestic public financing mechanisms such as taxes, health levies, or reprioritization of the current healthcare agenda, which can generate sustainable funding streams while fostering a sense of national ownership and shared responsibility as the first step away from donor reliance.

***Pivot from Vertical Programs to System Improvement***

While disease-specific funding has contributed to global health progress in the past, there is a growing need to pivot away from these mechanisms towards funding health systems to propel Kenya towards UHC. Previous research suggests that an integrated (horizontal) community health program generates greater value than a disease-specific (vertical) program from the cost-effectiveness perspective (Vaughan et al., 2015). Consensus is growing among global health stakeholders regarding the pivot. For example, the Kenya Community Health Strategy 2020 – 2025 advocates for the pivot of existing financing mechanisms away from disease-centric verticals towards funding core UHC drivers such as PHC and CHW initiatives.

To do so, Kenya must reframe its perception of the CHW program as a “cross-cutting”, horizontal component that seamlessly integrates with other aspects of the healthcare system. This rethinking allows for not only improvement in funding efficiency by directing funding allocation toward one centralized system-building initiative, but also improving the efficiency of healthcare

delivery. For example, instead of three separate home visits answering to different vertical programs' mandates, CHWs could comprehensively assess multiple health conditions in one visit. By harmonizing CHW programs with existing vertical initiatives, Kenya can address resource fragmentation, elevate the quality of service delivery, cultivate a cohesive, cost-effective, and holistic healthcare strategy, and fortify a self-reliant health system.

***Scale Blended Strategies while Increasing Efficiency***

From the matrix, it is evident that the blended strategy involving multiple stakeholders unanimously scored higher across all evaluative scales due to its potential for innovation, bigger pool of resources, and collaborative synergies. However, the challenges also exist in the protracted process of identifying stakeholders, negotiation, and comprehensive planning.

Moving forward, Kenya would benefit from continued exploration and implementation of innovative financing mechanisms involving PPP. For instance, the Kenya Community Health Strategy 2020 – 2025 is exploring mechanisms such as performance-based compensation that generate complementary revenue streams for CHWs and/or community health systems, and scaling effective policy in collaboration with national and county governments.

However, increased efficiency in coordination is essential to supercharge this process. To do so, every involved stakeholder program could implement internal improvements and invest in human capital. This is crucial in the field of global health which is plagued with bureaucracy and lack of innovation. From the compensation standpoint, organizations can consider tying their compensation to efficiency metrics and setting short-term and long-term goals with rewards attached as motivating factors. From the recruiting standpoint, organizations can promote individuals based on their potential and filter candidates based on their passion for the job rather than accepting those simply seeking a stable career (Allon, 2024). Attracting and cultivating

talented young professionals is also necessary to foster entrepreneurial thinking and high productivity. By nurturing these individuals from an early stage, they are more likely to remain motivated and committed to the field over the long term, reducing the detrimental impacts of high turnover on multi-stakeholder relationship-building efforts.

Additionally, there is a pressing need for increased collaborative efforts facilitating constant communication between stakeholders to prevent the need for renegotiating relationships every time a new initiative takes place. By equipping organizations (i.e., MoH, Global Fund) with highly motivated and retained personnel who are adept at stakeholder engagement, the various stakeholders can collectively enhance efficiency and streamline tailored collaborative processes on a case-by-case basis.

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Enshrined in Kenya's Constitution (2010) is the promise of quality healthcare for all citizens, a commitment reaffirmed by the Astana Declaration (2018), which highlighted the crucial role of community health services in advancing UHC. Since then, Kenya has adopted PHC as the flagship project for delivering on this promise as detailed in Kenya's Vision 2030 and Kenya Health Act (2017). Despite such emphasis, financing CHW programs for PHC has remained a challenge for decades. While advocacy efforts have propelled progress towards guaranteed salary for CHWs, systematically financing these programs to support long-term sustainability remains an enduring gap.

This research has investigated the various financing instruments available to support such programs, and the analysis underscores the intricate interplay between sustainability and scalability: Public financing instruments, characterized by their generous contributions, often lack long-term viability due to their vertical nature and reliance on external donors. Conversely,

private financing models offer innovative solutions but face challenges in securing initial funding and aligning with public health priorities. Blended mechanisms, while mobilizing the greatest pool of resources, have increased bureaucracy and inefficiencies involved. Additionally, while this research assessed multiple financing mechanisms applicable to CHW programs, data collection remains an issue. Many programs did not have a well-established infrastructure for data collection. Further research is needed to include more comprehensive data that assess the program's effectiveness by understanding detailed funding allocation towards community health and decision-making process via transparency from key stakeholders.

As the global health community horizons the future, this research indicates that changing stakeholder mindset is crucial. It is evident that a one-size-fits-all approach is insufficient, and context-specific innovation is needed to address the financing gap. For decades, the global health community has seen the short-term funding cycle as the status quo. But as more programs move towards self-reliance, many interlinked processes must change as well: funders should keep long-term sustainability in mind, system improvement should be prioritized over vertical programs, domestic resources for health must keep up pace with economic development, and bureaucratic structures should make way for innovation in a field that has historically lacked so. To address such multifaceted challenges, a collective commitment to these objectives is needed as a catalyst for transformative change within sustainable CHW program financing and implementation.

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