Reimagining the Future of Global Health Initiatives

Country Case Study Summary

Senegal

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Acronyms and abbreviations

AFD	French Agency for Development
CCM	Country Coordinating Mechanism
CEPI	Coalition for Epidemic Preparedness Innovations
CSO	Civil Society Organization
DAH	Development Assistance for Health
ECOWAS	Economic Community of West African States
GDP	Gross Domestic Product
GHI	Global Health Initiatives
FIND	Foundation for Innovative New Diagnostics
GFATM	Global Fund for AIDS, TB and Malaria
GFF	Global Financing Facility
HSS	Health System Strengthening
MSAS	*Ministère de la santé et des affaires sociales* (Ministry of Health in Senegal)
NCD	Non Communicable diseases
OOP	Out-of-Pocket
UHC	Universal Health Coverage
TB	Tuberculosis

1. Introduction

1.1. Political and Social Context

Senegal is considered one of the politically stable countries of West Africa. Since gaining independence in 1960, its institutions have gradually been consolidated, resulting in a democratic and pluralistic political system. Senegal is secular, democratic, and socialist (1) and after 40 years of Socialist Party power, the election of A. Wade (2000-2012) of the Senegalese Democratic Party (PDS), marked a political "alternation". In 2008, the current President, Macky Sall, founded his own party, the Alliance for the Republic and he is currently finishing his second term. The next election will take place in 2024 and is the subject of inevitable tensions.

Senegal has 17 million inhabitants, and a particularly young population (2). Around 55% of the population lives in rural areas, compared with 45% in urban areas and the population is predominantly Muslim (96.1%). The economy is based mostly on the industrial and service sectors but less than 20% of the population are employed (3). Most of the population is active in the agriculture sector, which contributes little to Gross Domestic Product (GDP). The informal sector accounts for about 95% of Senegal's labour force. Senegal is characterized by substantial social inequalities, whose origins date back to 'the pre-colonial social order, colonial experience and the rise of political and religious elites before and after independence (4). Between 2005 and 2011, poverty declined slightly from 48.3% to 46.7%, while the absolute number of poor continued to increase (Appendix 1). Since 2014, Senegal has adopted a new development model to accelerate its progress toward emerging market status. The *Plan Sénégal Émergent* (PSE) focuses on creating wealth and jobs, strengthening governance and developing strategic sectors that have a significant impact on improving population well-being, particularly through the protection of vulnerable groups and guaranteeing access to essential services (5).

1.2. Health system financing

In 2020, Senegal only allocated 6.5% of its general budget to the health sector (6) compared to 11.9% in 2002 (2). Senegal's health system is marked by several notable features. One prominent aspect is the longstanding insufficiency of public funding, with development assistance for health (DAH) contributing nearly as much as the government (20% and 23% respectively). Additionally over half of health expenditure (51%) (7), is covered by households, resulting in high levels of out-of-pocket (OOP) expenditure per capita. There is a significant fragmentation of health financing instruments (8,9) (Appendix 2, Figure 1 and 2). Households in Senegal have very little financial protection (10). Since 2019, 82.9% of households are not covered by medical insurance (private or public) or the healthcare fees exemption program (3).

Based on the latest available national health accounts in 2016 (7), 42% of health expenditure was on non-communicable diseases (NCDs) and 19% on infectious diseases. By 2019, less than 5% of the population was affiliated with community-based health insurance despite subsidized membership and being at the heart of health financing policy for over a decade (11,12).

1.3. Global Health Initiatives in Senegal

Senegal receives material, technical, and financial support from all six initiatives included in the scope of this study: Gavi (the vaccine alliance), Global Financing Facility (GFF), Foundation for Innovative New Diagnostics (FIND), UNITAID, The Global Fund for AIDS, TB and Malaria (GFATM), and the Coalition for Epidemic Preparedness Innovations (CEPI).

Table 1 Global Health Initiatives involvement in Senegal

GHI	Partnership start date	Field of action	Budget (USD)
Gavi	2000	New vaccines Health System Strengthening	22 M in 2019
GFATM	2004	HIV, TB & Malaria; HSS medicines, support to CSOs	70 M for 3 years
Unitaid	2012	Diagnostic test production and implementation, Access to affordable, high-quality tests and treatments	7,9 M (current projects)
GFF	2016	Reducing maternal, neonatal, infant, adolescent and child mortality	10 M for 4 years
CEPI	2022	Local vaccine production	15 M for 3 years
FIND	unclear	Research and development for diagnostics	unclear

- Senegal joined the GFATM partnership in 2003. The GFATM is a unique international public-private partnership dedicated to raising and distributing additional resources to fight HIV/AIDS, tuberculosis (TB) and malaria. It is one of the oldest partners in Senegal and of the six GHIs under consideration, it is the partner that invests the most in the country.
- Senegal joined the GFF in 2016. It developed an investment file for reducing maternal, neonatal, and child mortality (7). The overall budget for the investment package is $200 billion for the period 2018-2022. The GFF is only providing part of this (i.e.,10 million for four years).
- Unitaid has supported the implementation of diagnostics and access to affordable, high-quality tests and treatments since 2012, mostly for projects relating to HIV and co-infections. Funds are granted to consortia involving Non-Governmental Organisations (NGOs), research and national programs. Unitaid, for example, has financed a project to roll out HIV self-testing in three countries, including Senegal, with funding of USD 15 million. More recently, the Tools for integrated management of childhood illness[1] project was funded to support the Ministry of Health in strengthening the integrated management of illnesses in children under the age of five, including the integration of the pulse oximeter tool into the health system and policies.

[1] https://www.path.org/resources/improving-access-tools-detect-severe-illness/

- Gavi has been present in Senegal since 2000 and resources allocated by Gavi have steadily increased, reaching $22 million in 2019. Gavi currently provides two types of support: health system strengthening and support for new vaccines (including Meningococcal, Pentavalent and HPV). This vaccine support covers around 65% of needs, with the government covering "traditional vaccines" and co-financing the introduction of new vaccines.
- Senegal joined CEPI in 2022, with the signing of a million-dollar investment agreement involving the *Institut Pasteur de Dakar* (IPD). The partnership intends to advance equitable access to vaccines by expanding IPD's capacity to produce routine immunisation vaccines across multiple technologies, and reserve capacity to rapidly supply vaccines to Global South countries during disease outbreaks.
- FIND is another new partner. They support the local diagnostic test production (13). In Senegal, this initiative is working primarily with the IPD to boost innovation in diagnostics. There is little publicly available information on this partnership.

2. Methods

This case study involved three phases: i) a desk review of publicly available GHI documents, health financing and burden of disease trends, ii) semi-structured interviews with key informants, and iii) sub-regional virtual consultations with regional key informants.

2.1. Desk review

Multiple sources of data were reviewed to gain insight into the six GHIs in Senegal over the past 20 years. The document review included 52 documents published between 2001 and 2021 by the Ministry of Health, cooperation agencies and GHIs themselves. The review encompassed an examination of the interventions carried out by the six GHIs in Senegal, focusing on the modalities of implementation including the nature of activities and their geographical distribution. This comprehensive analysis provided insights into how GHIs operate within the Senegalese context. The review aimed to gather perspectives on governance, priority setting, and weaknesses associated with their interventions in the country (Appendix 3). Documents were identified using keyword searches on Google Scholar through on-site consultation at the Ministry of Health.

2.2. Key informant interviews

In-depth interviews were conducted with 25 key informants using a semi-structured topic guide which was adapted from the global-level topic guide (Appendix 4). The study engaged a diverse range of actors to ensure comprehensive and varied perspectives. The participants included nine government policy makers, eight representatives from Civil Society Organizations (CSOs) and six Technical and Financial Partners (TFPs). Additionally, one academic and one private sector representative were among the key informants. The majority of the participants were men, as indicated in Table 2. The GHIs that were most actively involved in the discussions were the GFF, Gavi, and the Global Fund. Due to limited or no in-country presence, interviews could not be conducted with some GHI representatives. GFATM's Country Coordinating Mechanism (CCM) has a local presence but despite having obtained ethics approval and ensuring data anonymization, all CCM members approached for interviews or to share information/documents declined to participate. The interviews were conducted by the case study lead, a trained qualitative

researcher, both in-person and remotely. Interviews varied in duration from 45 minutes to 1.5 hours. Detailed notes were taken during the interviews, and audio-recordings were made for reference. Partial transcription in the form of anonymized summary sheets was carried out.

As the research study was framed by a Political Economy Analysis (PEA) of the GHI ecosystem, interviews were analysed using a thematic grid of the PEA framework. Interview data were coded according to the five main themes: experience in implementing a GHI; challenges and weaknesses in implementation; lessons learned and actions to capitalize on; the environment and reforms to be made for the future; and concrete recommendations. All the data were analyzed by subsets based on GHI and stakeholder categories.

The study project obtained ethics and administrative authorization from the National Ethics Committee for Health Research in Senegal (CNERS: n° 00000179 MSAS/CNERS/SP). Informed consent was obtained from respondents while ensuring data privacy and confidentiality. Data identifiers were removed to anonymize the data and to protect respondent identities.

Table 2 Overview of the key informant interviews

Type of informant	Number	Gender	GHI concerned
Civil Society Organization	8	4 Female; 4 Male	GFATM, GFF, Unitaid,
Government policy makers	9	2 Female; 7 Male	GFATM, GFF, Gavi, Unitaid, CEPI
Technical and financial partners	6	1 Female; 5 Male	Gavi, GFATM, GFF
Academic	1	1 Male	Gavi, FIND
Private Sector	1	1 Male	CEPI, FIND
TOTAL	25	7 female, 18 male	

3. Context: national burden of disease and health financing trends

3.1. Burden of disease

In Senegal, there has been a notable shift in the leading causes of mortality over the past decade, with an increasing burden of NCDs. One significant example is diabetes mellitus, which rose from being the twelfth to the eighth leading cause of death between 2009 and 2019 and experienced the most significant increase in mortality during this period. On the other hand, mortality associated with HIV decreased from being the tenth to the fourteenth leading cause of death during the same period. Malaria continues to be a significant burden, remaining the fourth leading cause of death in the country (Appendix 5, Figure 3).

Whilst malnutrition remains the top cause of death and disability, it is essential to note two increasingly important public health problems: air pollution and water sanitation (Appendix 5, Figure 4).

The WHO estimates that in 2021 the incidence of TB will reach 113 per 1000 people (decrease over the years), malaria 59 per 1000 people at risk (decrease over the years) (14), and HIV prevalence will remain very low, especially in comparison to other West African countries (2).

3.2. Health financing

According to the WHO Global Health Observatory (15), Senegal's Universal Health Coverage (UHC) Service Coverage Index improved from 45 to 50, in the period between 2015 and 2021. WHO data also show that 56% of women completed four antenatal visits in 2019 compared to 50% in 2011. In Senegal, health financing indicators reveal that individuals spent an average of $82.48 per person on health expenditures in 2020, which accounted for 5.25% of the country's GDP. Government spending, however, constituted only 32.35% of total health expenditure, equivalent to 1.03% of GDP. This highlights the significant reliance on OOP spending, which can have negative implications such as limited access to healthcare for the most vulnerable populations. It is worth noting that the distribution of health expenditure between government spending and OOP has remained relatively unchanged since the 1990s.

The following table shows some key health financing indicators and their evolution.

Table 3 Key health financing indicators from 2005 to 2020

Indicator	2020	2015	2010	2005
Current health expenditure (CHE) as percentage of gross domestic product (GDP) (%)	5.5	4.38	4.3	3.67
Current health expenditure (CHE) per capita in US$	76.78	54.2	51.82	36.86

Domestic general government health expenditure (GGHE-D) as percentage of Current Health Expenditure (CHE) (%)	33.42	24.63	28.84	43.41
Domestic general government health expenditure (GGHE-D) as percentage of General Government Expenditure (GGE) (%)	6.48	4.7	5.35	8.54

Source: https://www.who.int/data/gho

According to the last available national health account data from 2016 (7), international aid (DAH) accounted for two thirds of the spending on HIV and malaria in Senegal, while less than one third was spent on TB. As a result, the direct financial burden on patients was approximately 8% for HIV and malaria, but as high as 25% for TB. The government's contribution to HIV-related spending was 16%, 19% for malaria, and 42% for TB.

Regarding priority maternal and child health investments under the Global Financing Facility (GFF), the government of Senegal contributed 30% of the funding by the end of 2021. The top five international funders were the World Bank (27.5%), USAID (19.3%), Gavi (13.0%), the French Development Agency (AFD) (12.3%), and the Global Fund (10.4%). In 2021, the government's investment was almost double (1.8%) that of the combined funding from the World Bank and the Inter-American Development Bank (IDB). The GFF estimates a disbursement rate of 80% for 2020. It is important to note that more recent national health accounts were not accessible to the study team as they had not yet been published (16).

3.3. The contribution of Global Health Initiatives in Senegal

While there is a lack of complete and up-to-date publicly available disaggregated data on the expenditure and activities of GHIs in Senegal, there have been documented contributions of GHIs in the country over the past 20 years.

GFATM

With nearly US$300 million invested since 2004, including US$185 million invested between 2018 and 2023[2], GFATM's support has enabled Senegal to make significant progress in the fight against the three diseases (TB, malaria and HIV). In Senegal, of all GF funding since 2018, 14% was explicitly dedicated to projects to strengthen the health system (17).

The Global Fund has four core grants which are currently active in Senegal, with funding totalling €70 million for the 2021-2023 period. As of 2021, 81% of people living with HIV knew their HIV status, 79% of people who knew their HIV status were receiving lifesaving antiretroviral therapy (up from 25% in 2010), and 69% of people on treatment had a suppressed viral load (more than double the 2015 result). Efforts to end TB as a public health threat are also showing progress, with the treatment success rate remaining above 90% for more than a decade and the mortality rate falling by 43% between 2002 and 2019. Senegal has continued to scale up malaria control efforts such as integrated community case management, seasonal malaria chemoprevention,

[2] https://data.theglobalfund.org/location/SEN/budgets/time-cycle

vector control interventions and disease surveillance. Population coverage of mosquito nets reached 76% in 2020, and despite annual fluctuations over the last decade, new malaria cases fell by 64% between 2002 and 2020.

An investment of $76 million is planned for the period 2023-2025, of which 41% is for HIV, 41% for malaria and 18% for TB. This investment will make it possible to achieve the ambitious goal of reducing the number of AIDS-related deaths by 82% in the coming years. To optimize the sustainability and integration of grants, and streamline Global Fund investments, Senegal has developed a shared services approach to managing TB, malaria and health systems strengthening activities.

Global Financing Facility

The GFF has an estimated budget of EUR 756 million from 2018 to 2022. The overall budget for the investment package is $200 billion for the period 2018-2022, with GFF providing part of this. The World Bank is the financial partner. Partners funding Senegal's ID include France (AFD), Gavi, the GFATM, JICA, UNICEF, the World Bank, USAID and various United Nations agencies. The GFF is also providing co-financing of $10 million to the World Bank's Maternal, Child and Adolescent Health Investment Project to improve the use of essential health and nutrition services.

Gavi

Gavi disbursed $152 million from 2001 to 2019, with a net increase in commitments over the period: more than $22 million was spent in 2019 compared to $2 million in 2004. In the context of Senegal, requests for Gavi grants are drawn up every year for new vaccines, and every five years for health systems strengthening (capacity building for healthcare staff, equipment for facilities, purchase of refrigerators for storage, installation of cold chains, etc.) Gavi announces the amount available in advance, and the country then works on a proposal in compliance with the guidelines. Gavi determines which expenses are eligible and which are not, and Senegal manages its own funds. The Ministry's financial department receives the funds from Gavi, and the Expanded Program on Immunization (EPI) then makes a call for funds to the State. This facilitates the financing circuit. Unicef and WHO receive funding from Gavi to support the EPI by providing technical assistance. In accordance with current eligibility procedures - GAVI must withdraw from countries with a GDP/capita of over US$1,600, and therefore are expected to leave Senegal in 2024. GAVI's withdrawal will result in a major funding gap (18) that will need to be filled by government and other stakeholders to sustain the efforts and achievements in child immunization.

Unitaid

According to information provided on Unitaid's website, the organization has invested nearly $8 million in ongoing projects in Senegal, with 96% of these projects focused on HIV and co-infections, despite Senegal having a relatively low prevalence of HIV. The funding for these projects is channeled through NGOs or foundations such as the Clinton Health Access Initiative (CHAI) and Path.

CEPI

The IPD is set to receive up to US$15 million from CEPI in grant funding over a period of three years. There is also an option to extend the partnership’s scope and funding with the potential to reach a total of up to US$50 million over 10 years. CEPI’s investment will complement the contributions of other major funders for MADIBA (Manufacturing in Africa for Disease

Immunization and Building Autonomy), including the European Union, European Investment Bank, AFD, the Islamic Development Bank, the International Finance Corporation, the U.S. International Development Finance Corporation, the Government of Germany and the Government of Senegal.

FIND

To the best of our knowledge, there is little publicly available information about FIND's operations in Senegal. However, FIND and Unitaid invested US$2 million to support advocacy for COVID-19 test-and-treat approaches in low- and middle-income countries, including Senegal (19).

Table 4 Global Health Initiative Investments in Senegal

GHI	Investment
Global Fund	· Two grants totaling EUR 24 million for 2021-23 · Two additional grants for EUR 46 million · Projections: $76 million for 2023-25, 41% for HIV, 41% for malaria, and 18% for TB
GFF	· EUR 756 million from 2018 to 2022 · $10 million to the World Bank's Maternal, Child and Adolescent Health Investment Project
Unitaid	· $ 4.9M Completed projects · $ 7.9M Current projects
Gavi	· $152 million disbursed from 2001 to 2019 · More than $22 million spent in 2019 (compared to $2 million in 2004)
CEPI	· US$15 million in grant funding over three years · Funding to a total of up to US$50 million over 10 years
FIND	· Expenditure has been about US$ 2 million/year · FIND and Unitaid have invested in local manufacturing of affordable rapid diagnostic tests for COVID-19 and other viruses with Institut Pasteur de Dakar (Diatropix initiative)[3] · support to digital health and surveillance system with deputized staff · support to local diagnostics manufacturing

In our analysis, we encountered methodological challenges when comparing the national mortality burden with the financial commitments of GHIs. Despite the relatively low HIV

[3] https://unitaid.org/news-blog/find-unitaid-technology-transfer-covid-19/#en ; https://www.pasteur.sn/en/news/actualite-covid/launch-rapid-diagnostic-test-production-platform-institut-pasteur-dakar#:~:text=In%20order%20to%20improve%20access,economic%20model%20that%20makes%20them

incidence rate of 0.4%, the GFATM has allocated a substantial amount of $31.8 million for the period 2023-2025. Similarly, for TB, with an incidence rate of 140 per 100,000, the investment stands at $12.94 million for the same period. As for malaria, with a prevalence of 49 cases per 1,000 people at risk, the allocated funding amounts to $31.04 million for the same period.

4. Added value of the GHIs to-date in Senegal

The study revealed a range of perspectives and opinions on the future of GHIs in Senegal. While most key informants acknowledged the valuable contributions and benefits of GHIs for the country, there was significant criticism regarding their operational aspects. Their role was generally seen as useful in the short term, but there were concerns about functionality. There was a desire for independence from GHIs, but at the same time, there was scepticism about the government's capacity to assume full ownership of health commodities, service provision and financing. This scepticism stemmed from the government's historically low contribution and the prevailing political economy of the country.

4.1. The achievements of each of the GHIs

The interview data highlighted several areas where GHIs were perceived to have added value and demonstrated comparative advantage in Senegal. These areas included reduction of the HIV burden, the response to the COVID-19 pandemic, and the local production of vaccines and diagnostic tests.

There was consensus among key informants that GHIs have made significant contributions to the reduction of HIV in Senegal. Key informants identified several factors that have contributed to this success, including a multi-sectoral approach, high-level investments coordinated through the Prime Minister's office, targeted interventions based on low and specific prevalence rates (0.4% HIV prevalence), engagement of civil society, establishment of coordination bodies such as Country Coordinating Mechanisms (CCMs), effective governance instruments, recognized expertise, and capacity building of healthcare staff and laboratory infrastructure. However, there were limited lessons learned from the fight against the COVID-19 pandemic.

Senegal's COVID-19 response was supported by good preparation, adaptability and responsiveness on the part of healthcare stakeholders, as well as the commitment of political and religious authorities. Donors such as GFATM and Unitaid played a crucial role in enabling the reallocation of resources for the pandemic response, but there were challenges of stakeholder coordination and a lack of inter-sectoral collaboration during implementation (20). The response was described as being implemented in a political and directive manner, which was occasionally coercive, without sufficient consideration of local contexts, prior knowledge, and the involvement of civil society and community actors (21).

Stakeholders involved in local vaccine and diagnostic test production projects which have received support from FIND and CEPI view these initiatives as a promising experiment. These projects are characterized as small-scale initiatives that prioritize agility and proximity.

A key informant who works with them defined it as a "*start-up model, which bypasses administrative length and constraints*". However, since this experience is still new and only involves a limited number of actors, we currently lack sufficient hindsight to fully analyze the model.

4.2. Role of GHIs related to progress towards UHC and strengthening health systems

Health system strengthening (HSS) emerged as a significant concern among the stakeholders interviewed, who expressed the view that the GHIs have not made a sufficient contribution in this area. While the GHIs have allocated 10% of the total GFATM funding towards health system strengthening, there is need for further progress. These efforts primarily involve procuring equipment, providing training in new areas such as sentinel surveillance and new diagnostics, and undertaking infrastructure rehabilitation or construction. The activities of the GFF are particularly noteworthy as they focus on both supply (such as infrastructure development and rehabilitation) and demand (strategic purchasing for free care for children, collaborations with community-based health insurance, etc.) for strengthening the health system. Comprehensive evaluations in the future will yield reliable data to assess the effectiveness of these initiatives.

A paradox has been observed regarding the mobility of healthcare staff, particularly those who are highly trained and knowledgeable about GHIs. These individuals are sometimes recruited by the GHIs and assume roles as experts responsible for monitoring grant implementation, either in-country or at the GHI headquarters. This recruitment practice is seen as having an impact on the country's health system, as it leads to a loss or depletion of skilled personnel who were initially trained as part of health system strengthening efforts supported by the GHIs.

Regarding UHC, bilateral cooperation actors have provided budgetary support for policy development and ongoing reforms in Senegal. However, key informants expressed concerns about the current approach of GHIs, which they believe is insufficient to achieve the Sustainable Development Goals (SDGs), including UHC. The level of funding allocated to UHC is often inadequate in relation to actual needs, and it primarily takes the form of technical support. There is a strong call to change approaches and paradigms by addressing unmet health needs. GHIs can assist countries in gradually implementing UHC by targeting and providing care for the most vulnerable groups, gradually expanding coverage to the entire population. Some stakeholders recommended making membership in ‘mutual’ insurance companies mandatory to achieve UHC.

5. Challenges with the current global health system

The challenges with the current global health system are multifaceted and have been extensively discussed in the existing literature (22-25). Based on the insights from key informants, we have compiled a non-exhaustive list of these challenges which can be categorized into four main themes. It is important to note that these themes represent the perspectives of the key informants and may not encompass all possible challenges due to the methodological limitations described above.

Challenges are summarized in Table 5.

5.1 Programmatic and health system

Fragmentation of GHIs: Global health initiatives are proliferating, with new organizations such as CEPI and FIND having emerged in Senegal in recent years. Each initiative focuses on a specific field, such as sexual and reproductive health and rights (SRHR), HIV, or innovation, and operates with its own programs, governance structures, mechanisms, and approaches. One key informant, a representative from a Civil Society Organization (CSO), remarked that "*the mechanisms are fragmented, but the public health problems they tackle are not*."

The fragmented nature of these initiatives poses challenges in terms of coordination and integration with national programmes. For instance, a pregnant woman living with HIV may require healthcare services related to maternal and child health which are covered by the GFF program, as well as the management of her HIV infection, which falls under the Global Fund program. However, communication and coordination between the GHIs in Senegal is limited. This fragmentation also hampers the seamless integration of different programs within the national health system. For instance, certain diseases like cervical cancer, which are monitored by the Disease Control Department, may not be included in the programs supported by the GFF. To ensure a comprehensive national health system, these interdependent programmes need to be integrated.

Furthermore, the fragmentation of GHIs creates challenges for stakeholders including local authority managers, healthcare professionals, community health workers, and the general public. It leads to confusion about the roles and responsibilities and funding sources of the different GHIs, and makes it difficult for local organizations to access funding, develop action plans and be accountable. The stakeholders interviewed agreed that it is challenging to have a comprehensive understanding of the overall landscape of GHIs in Senegal, which hampers effective coordination and program harmonization. It is worth noting that this challenge of fragmentation is not unique to Senegal but was highlighted by all informants.

HSS : Stakeholders expressed disappointment over the insufficient investment and impact of GHIs on health system strengthening (HSS), despite recent efforts. Although the Global Fund dedicates 10% of its investment to HSS, stakeholders feel that the overall impact on the health system in Senegal remains limited. In fact, only 14% of GFATM funding since 2018 has been explicitly allocated to projects aimed at strengthening the health system (17).

A particular concern is the way investments are made in specific diseases without adequately benefiting the broader healthcare system. For example, significant investments have been made in reference laboratories, but these investments have been disease-specific, such as financing HIV laboratories. Instead, these investments should aim to enable the diagnosis of multiple diseases, enhancing the overall capacity of the health system. There is a need for a more sustainable approach that goes beyond funding individual activities and focuses on building long-term capacity in diagnostic support, health information systems, logistics, infrastructure, drug supply, and human resources.
The challenge lies in ensuring sustainable investments that address the core elements of a strong health system. It requires a comprehensive approach that goes beyond disease-specific interventions and prioritizes the long-term strengthening of critical components of the health system.

5.2 Financing

Cumbersome procedures: Access to funding is hindered by complex and cumbersome procedures that vary among different GHIs, demanding significant time and human resources. A CSO expert we spoke with aptly expressed the challenges, stating, "*stakeholders spend a lot more time looking at how to comply with GFATM directives and how to avoid ineligible expenditure, than on achieving results in the field. The focus is much more on satisfying Geneva than the communities*."

The process of applying for GFATM funding, for instance, requires the engagement of dedicated consultants, further adding to the bureaucratic burden. Unfortunately, this burden persists even after funding is secured. As one technical and financial partner explained, "*It leaves no time for coordination, reflection, or proper program evaluation. Time spent in bureaucracy is time lost in implementation.*"

Over-funding for certain sectors: Certain health sectors in Senegal suffer from imbalances in funding, with some being over-funded while others are under-funded. Despite low prevalence, HIV programmes continue to receive substantial funding, whereas NCDs, which are more prevalent (Appendix 6), lack sufficient resources. This disproportionate investment leads to a lack of necessary support for priority diseases and hampers the continuity and sustainability of financing.

5.3 Performance indicators and accountability mechanisms

The majority of stakeholders expressed concerns over the effectiveness of GHI-funded programs, stating that significant financial resources are being invested with seemingly little impact. They pointed out the weaknesses in monitoring mechanisms and information systems as key issues. One stakeholder remarked that it was challenging to obtain quality data on programmes, highlighting the difficulty in obtaining reliable and accurate information. Furthermore, there is a mismatch between the indicators demanded by donors and those of the national system, leading to the use of unsustainable data collection tools and the need to establish parallel systems for data collection.

Many stakeholders also emphasized the use of inappropriate tools and methods, describing the application of business and private sector approaches to public health as problematic. They stressed the need for a system that ensures financial accountability while also facilitating faster funding for field actions and delivering more sustainable and impactful results.

Another major concern raised by stakeholders was the weak capacity for performance accountability. While it is recognized as crucial to monitor the use of public funds, stakeholders described a lack of capacity and time-consuming procedures that hinder the delivery of targets. This results in weak transparency and accountability in achieving desired outcomes.

5.4 Governance, coordination, and alignment

Coordination bodies and platforms are not fully functional: Several coordination bodies and platforms have been established to facilitate collaboration among various stakeholders and promote a multi-sectoral approach. For instance, the MoH has a HSS platform aimed at bringing together partners who support the ministry's HSS efforts and enhancing consultation and coordination with different MoH departments. However, it has been reported that this platform, along with others, does not function effectively.

Maintaining local expertise in the civil service is challenging: One concern raised by stakeholders is the frequent rotation and movement of staff, particularly the movement of experts from the civil service to working as consultants with the GHIs. This phenomenon has resulted in a decrease in the number of experts within the civil service and an increase in the presence of experts in GHIs. This movement can create challenges in terms of expertise and capacity within the civil service and may impact the overall functioning and effectiveness of the health system.

Stakeholders in the country express a sense of limited involvement in shaping the priorities of GHIs' aid programs. They feel that decisions about programmatic solutions are made without sufficient input from local communities and stakeholders in the South, where the problems and affected populations are concentrated. One of the reasons behind this disconnect is the perceived detachment of GHI staff from the local realities and the perspectives of CSOs. Global governance actors are seen as disconnected from the ground-level realities and needs of the communities they aim to serve. "*Rich countries define the priorities and give the directives to the poorest*" (CSO).

Furthermore, stakeholders point out the challenges arising from the weak capacity of governments to effectively articulate their priorities and negotiate with GHIs. The perceived power imbalance between governments and GHIs can hinder decision-making processes and limit the influence of local stakeholders in shaping aid programs. This imbalance of power often leads to decisions being made without adequate consideration of the context and needs at the local level.

In Senegal and other Francophone countries in West Africa, there is a significant language challenge when engaging with GHIs. English is the main language of communication, which creates a barrier and sense of inequality for French-speaking countries. French-speaking stakeholders can face difficulties in accessing and participating in discussions, negotiations, and decision-making processes within the GHIs due to this language barrier.

Table 5 Key challenges with the current global health system from the viewpoint of key informants in Senegal

Thematic area	Key challenges
Programmatic and health system	Fragmentation of initiatives; program verticalization Implementation gap (Delays in implementation of interventions) Health System Strengthening Alignment with the country's priorities
Financing	Cumbersome procedures Multiplicity of windows, interlocutors, and methods Funding sprinkled on activities instead of building sustainability Over funding for certain sectors
Performance indicators and accountability mechanisms	Discrepancy between resources invested and impact Weak monitoring mechanisms Weak information system Weak capacity for performance accountability
Governance, coordination, and alignment	Experts leave the civil service to become consultants in a GHI ("brain drain" Coordination bodies and platforms that don't work ("lethargy") Disconnection of global governance actors from the real world and CSO "Rich countries define the priorities and give the directives to the poorest". Language barriers (Almost exclusive use of English)

6. Proposals for change

This section provides an overview of the suggestions from key informants regarding the future development of GHIs and the broader global health system in Senegal. Key informants provided valuable insights and recommendations for improving the effectiveness and impact of these initiatives in addressing the country's health challenges. All the stakeholders we engaged with expressed a strong desire for change. There is a collective questioning of the current operating methods of GHIs. However, the specific positions of stakeholders regarding the status quo or the possibility of change vary depending on the nature and specifics of the proposed changes

6.1 Programmatic and health system priorities

There was general consensus among key informants on several key points.

Firstly, there is a need to de-verticalize disease programs and promote the development of cross-functional programs that integrate various health priorities. Secondly, strengthening healthcare systems was highlighted as a crucial priority. GHIs should prioritize investment in HSS to ensure the effectiveness of de-verticalization efforts. It was suggested that GHIs should have a common commitment to HSS and allocate a significant percentage of resources (more than 10%) to HSS in each proposal.

The importance of addressing broader global health issues beyond individual diseases was also emphasised. This includes considering factors such as environmental health, climate change, hygiene, education, political instability, security, and geopolitical challenges. Currently, there is a need for more attention and investment in these areas, particularly in West Africa.

Finally, it was acknowledged that investments in disease control are essential, but peripheral health issues such as access to water and education were seen as equally important to address. In a country like Senegal, where basic sanitation services are not universally accessible (3), investments should take into account the broader determinants of health.

An additional point raised by key informants pertains to the need for program formulation designed in collaboration with and for affected communities, whilst still aligning with the country's priorities. It was noted that the directives of GHIs are not always well adapted to the specific priorities and socio-cultural contexts of the country. For instance, in Senegal, cultural barriers and increasing religious conservatism pose challenges in working with key populations, even though these populations are often targeted by HIV programs funded by the Global Fund. An example is the prioritization of Men who have Sex with Men (MSM) in global HIV policies, while homosexuality is criminalized in Senegal (27). Therefore, programming decisions should take into account the sensitive context and adopt a human rights-based approach.

A minority of key informants made recommendations related to research promotion and financing. These recommendations emphasize the importance of generating quality data on program implementation, and conducting impact analyses and more detailed assessments to enhance evidence-based interventions funded by GHIs.

The rising burden of NCDs was identified as a concern, with additional resources needed for NCD prevention and care. Two proposed approaches were mentioned: expanding the priorities of the Global Fund to include NCDs (not suggested by those directly working with the Global Fund) and leveraging GHI resources to allocate domestic funding towards NCDs.

Other recommendations focused on supporting specific programs such as local vaccine production and the One Health approach. These programs are relatively new in Senegal compared to established programs for vaccinations and HIV. Stakeholders involved in One Health programs expressed a willingness to support and strengthen these initiatives, while those involved in local vaccine production highlighted the importance of consolidating and ensuring their sustainability. However, it should be noted that these recommendations were only mentioned by key informants working within the programmes, suggesting a potential normative discourse surrounding these specific initiatives.

6.1. Financing

There was consensus among the key informants regarding the need for increased commitment from governments to enhance healthcare funding and promote effective management of domestic resources. It was emphasized that the country should take a more proactive role in overseeing the utilization of funds. One proposal involved establishing regional funds under the auspices of the African Union or leveraging sub-regional economic bodies such as ECOWAS (Economic Community of West African States). Several participants recommended the creation of local or regional mechanisms to efficiently absorb and manage funds. While fewer in number, some participants suggested the importance of capacity-building efforts to effectively receive and manage financing. Additionally, the idea of establishing an emergency mechanism was put forth, which would involve defining emergency conditions and reallocating resources accordingly.

One financing option that the government could consider to increase health funding and improve local resource management is leveraging mining revenues. A single year's mining revenues can represent a significant source of funding for initiatives such as free healthcare. For instance, in 2019, official sources reported that mining revenues contributed 127.14 billion CFA francs to the national budget. Comparatively, the cost of free healthcare initiatives, including services like caesarean sections, dialysis, care for the elderly, and paediatric care, totalled 52.9 billion CFA francs between 2015 and 2020. This indicates that 40% of the mining revenues received in 2019 could have covered the entire cost of these initiatives for five years. This example highlights the significant potential of the mining sector in financing UHC and healthcare more broadly (28).

The stakeholders emphasized that it is crucial for the allocated funds to reach those in need. They emphasized the importance of recruiting human resources to serve the population rather than perpetuating bureaucracy, and they advocated for an increase in local expertise rather than relying heavily on external consultants. Representatives of CSOs expressed concerns about the growing size of global fund teams while subsidies to countries are diminishing. They called for funding applications that span over five years, allowing for longer-term planning rather than the current three-year cycles.
There is a lack of consensus regarding the pooling of resources. Some participants suggested the idea of a single funding basket encompassing all global health initiatives to finance a more

ambitious health plan. However, others raised doubts about the feasibility of such an approach. Alternatively, some participants proposed the idea of a single basket solely for implementation partners.

6.2. Performance indicators and accountability mechanisms

There was broad consensus among the participants regarding the need to implement leaner operating mechanisms that offer greater flexibility and agility in procedures. This would allow for more efficient and effective implementation of programs. The other recommendations, although not subject to debate, were mentioned by specific informants.

Governmental policymakers and implementation partners emphasized the importance of aligning GHI procedures with the country's standard procedures. For instance, some indicators used by Unitaid and the GFATM differ from those used in the national system. Aligning these indicators would facilitate better coordination and harmonization of efforts.

Efficiency indicators were highlighted by some stakeholders as a means to achieve program objectives. They emphasized the importance of monitoring the efficiency of interventions and making data-driven decisions to improve outcomes.

The stakeholders also raised concerns about the reliability of data and highlighted the need to strengthen data analysis and its incorporation into policy decisions. They stressed the importance of using evidence-based approaches to ensure effective program implementation.

Representatives of CSOs called for greater transparency and accountability by involving communities in the process. They suggested providing separate support to communities for monitoring and accountability work, which CSOs could undertake. They also proposed the establishment of an independent observatory, separate from existing governance structures and owned by civil society. This observatory would aim to identify and highlight any issues or malfunctions in programs funded by GHIs. It could be based on community-based monitoring, which is supported by the GFATM (29), and involve collaboration with multiple CSOs. A CSO representative emphasized the need for independent stakeholders who are willing to voice concerns and hold both the global fund and the government accountable: "*We need independent stakeholders who aren't afraid to go against the global fund or the government, who will put their finger there where it hurts.*" Key informants suggested that the observatory could be hosted by one of the member organizations and receive dedicated funds to support its accountability work.

6.3. Governance, coordination, and alignment

There is a broad consensus among stakeholders regarding the need for multi-sectorality in the governance, coordination, and alignment of all GHIs. They suggest building on the experience gained in the fight against HIV by promoting a holistic approach to health that considers its relationship with other sectors such as education and human rights. It is important

to involve non-governmental stakeholders and the private sector, and civil society representatives emphasize the need for their greater involvement in governance bodies.

Another widely agreed-upon recommendation is to empower the country by granting more leadership and autonomy in intervention choices, priorities, and the use of funds. The goal is to develop local expertise and move towards sovereignty. Key informants express the desire to shift away from the logic of "recipient countries" implementing programs designed elsewhere, advocating for global health to be driven from the South. *"Global health must be thought out from the South" (CSO).* This requires decentralizing decision-making mechanisms and placing decision-making authority with local stakeholders such as ministries and civil society. The aim is to create a critical mass of stakeholders capable of developing responses to various health challenges, including HIV, maternal health, and climate change.

In Senegal, where political involvement plays a crucial role, informants highlight the need for political support at the highest level, specifically from the primary ministry, to facilitate program coordination. "*Nothing can happen if politicians aren't involved. Everything depends on political discussions*" (Technical partner)

Improving the functionality of multiple committees and platforms is another recommendation that enjoys consensus. Rather than increasing the number of bodies, the focus is on reforming existing ones by ensuring the right people are involved, addressing power dynamics and members' interests. The coordination platform for HSS, for example, is suggested to be located at the prime minister's office to enhance its functionality.

Some informants propose a shared management approach for GHIs in the country, suggesting the establishment of an overall monitoring committee or a single interface that serves as a bridge between the country and GHIs.

The language barrier relating to the dominant use of English did not lead to specific recommendations other than the need for translation of tools and meetings. The GFATM has recently highlighted this problem and recommends a ‘more ambitious translation policy’ to increase the impact of its publications and investments in French-speaking countries in West and Central Africa (30).

7. Conclusion

This case study provides an overview of GHIs in Senegal based on the perspectives of key informants and publicly available information regarding their past and current contributions in the country. The recommendations put forth in this study pertain to the future evolution of these GHIs. In Senegal, GHIs have played a significant role in improving health outcomes, particularly in addressing HIV, TB, malaria, and epidemic preparedness. However, there are numerous challenges that need to be addressed. These challenges call for a reassessment of the operational procedures of GHIs, including streamlining bureaucratic processes, granting more decision-making power to recipient countries, fostering equitable North/South partnerships, and enhancing visibility and coordination among different GHIs. It is important to view GHIs as temporary initiatives rather than permanent structures, and to gradually develop transition plans accordingly. The effectiveness of GHIs also relies heavily on the effectiveness of the government and its commitment to prioritizing health in the future. Further discussions will be held to delve into these topics and present the findings of this report to key stakeholders in Dakar. Additionally, this rapid consultation process in Senegal highlights potential areas for further in-depth research, such as understanding the challenges and opportunities in transitioning to sustainable domestic health financing, identifying the conditions necessary for alternative health financing beyond GHIs, exploring the decolonization of global health, examining the feasibility and value of establishing a GHI civil society observatory in Senegal, analyzing power dynamics in strengthening the coordination of a single national GHI platform, and enhancing coordination at regional and local levels.

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10. Appendices

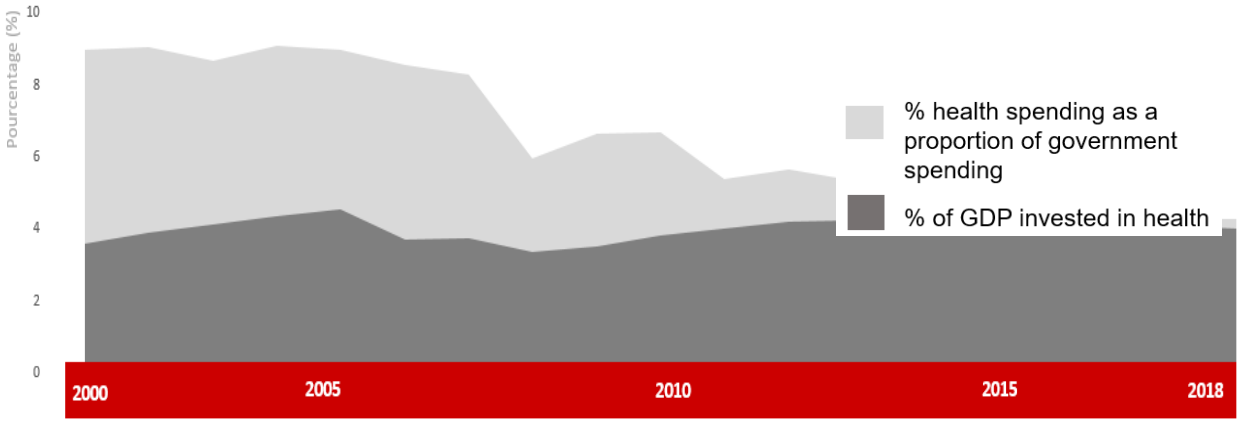
1. Key information about the population in Senegal

Demographics	Values
Population (2021)	16.9 million
Median age (2021°	18 years
Life expectancy (2020)	68
Human Capital Index (2020)	0.4
Unemployment (% of total labour force) (2021)	3.7%
Population using at least basic sanitation services	57%
Poverty line (2015)	46.7%
GDP per capita (2022)	$1598.70 current USD
Educational attainment (years) (2019)	3.4

Sources: World Bank, WHO and IHME

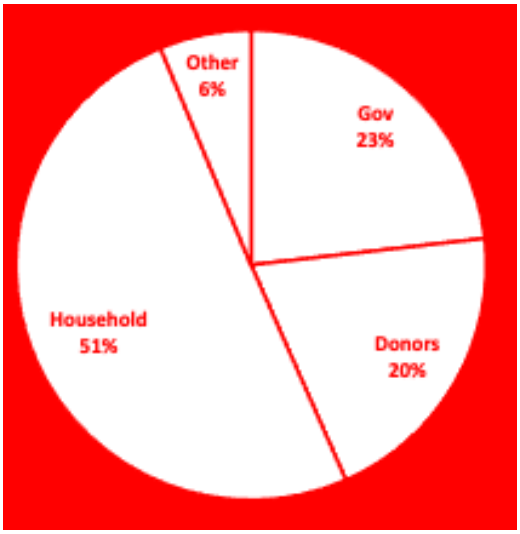
2. Health financing

Figure 1. Evolution of Senegal's health spending between 2000 and 2018



Source: Unissahel: https://www.unissahel.org/.

Figure 2. Health Financing: distribution in 2016,



Source: WHO, 2023, Mladovsky 2020; Paul et al 2020, MOH 2020

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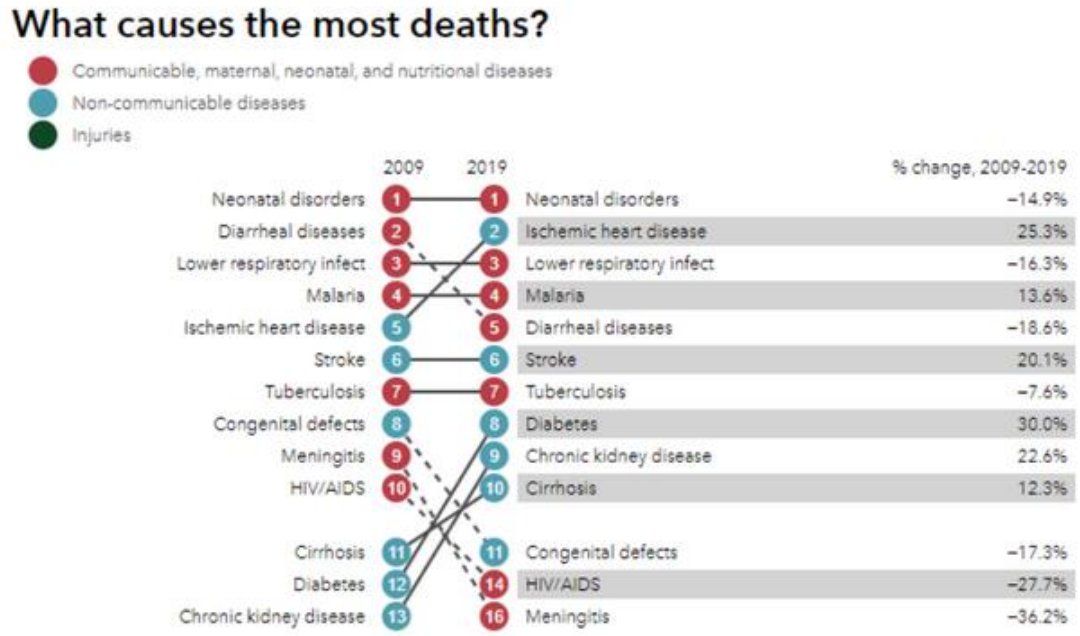
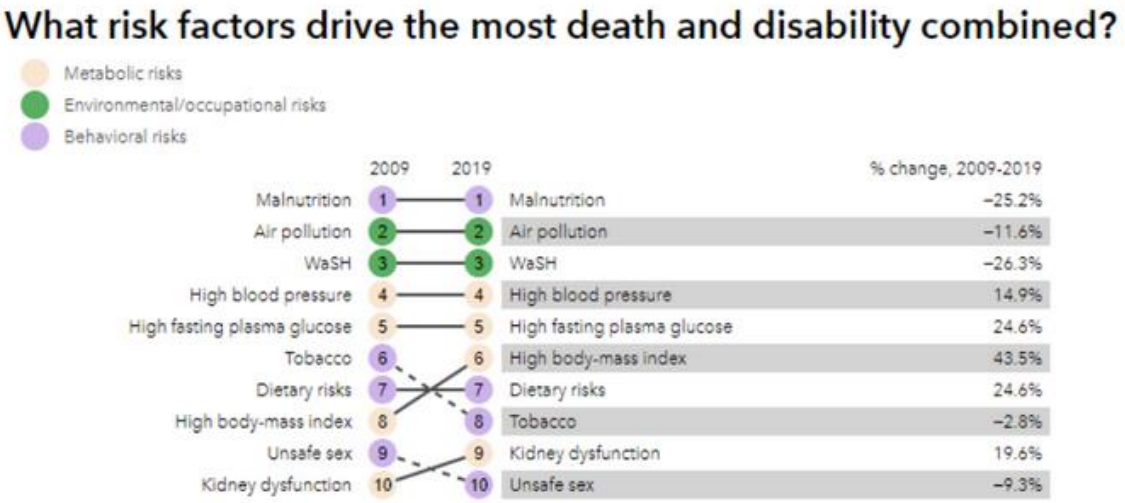
6. Burden of disease

Figure 3. Top causes of mortality in 2019 and percent change 2009-2019, all ages combined



Source: https://www.healthdata.org/senegal

Figure 4. Top risk factors in 2019 for death and disability combined and percent change 2009-2019, all ages combined



Source: https://www.healthdata.org/senegal