SUSTAINABLE AND GENDER EQUITABLE CAPACITY BUILDING FOR HEALTH FINANCING IN AFRICA

Contents

Acronyms

AERC	African Economic Research Consortium
AfDB	African Development Bank
AfHEA	African Health Economics Association
AHFF	Annual Health Financing Forum
ALM	African Leadership Meeting
AU	African Union
BMGF	Bill and Melinda Gates Foundation
CABRI	Collaborative Africa Budget Reform Initiative
CARTA	Consortium for Advanced Research Training in Africa
CBA	Central Budget Authority
CDC	Center for Disease Control and Prevention
CHAI	Clinton Health Access Initiative
CSO	Civil society organization
EVIPNet	Evidence-informed Policy Network
GFP	Gender Focal Point
GIF	Gender Integration Framework
GRB	Gender Responsive Budgeting
HEFA	Health Economics and Financing Analysis
HEP	Health Economics and Policy
HEPNet	Health Economics Policy Network
HEU/HEPU	Health Economics Unit/Health Economics and Policy Unit
HTA	Health Technology Assessment
ICT	Information and Communication Technology
IMF	International Monetary Fund
LMIC	Low and middle-income country
M&E	Monitoring and evaluation
MDA	Ministries, Departments, and Agencies
MOF	Ministry of Finance
MOH	Ministry of Health
MPH	Master of Public Health
NTGDP	National Treasury Graduate Development Programme
ODI	Overseas Development Institute
PFM	Public Financial Management
PHC	Primary Health Care
PSA	Public Service Agency
REC	Regional Economic Communities
RHFH	Regional Health Financing Hubs
RSSB	Rwanda Social Security Board
SSA	Sub-Saharan Africa
STEM	Science, Technology, Engineering, and Mathematics
UCT	University of Cape Town
UHC	Universal Health Coverage
UN	United Nations
WHO	World Health Organization

1 Executive Summary

Governments in sub-Saharan Africa face significant challenges in raising resources for health and allocating them for health sector priorities. A complex set of institutional and individual capacities is needed to perform these functions. Capacities in this report are defined broadly as skills within a team required to perform a given function, ranging from formal university education and methodological knowledge to practical job skills and ability to navigate organizational processes. This assessment set out to explore the landscape of health financing capacities needed; the major gaps in capacity that currently exist; the universities, training institutions, and programs in the region that supply these skills; and opportunities to address gaps and invest in structures and institutions that will ensure sustainability of these efforts into the future. Governments, educators, and development partners across 9 countries (Burkina Faso, Eswatini, Ethiopia, Kenya, Malawi, Nigeria, Rwanda, South Africa, and Zimbabwe) contributed, along with regional institutions and other global and regional stakeholders.

The assessment centered around three learning questions. **The first learning question focused on government and policymakers**: what skills are needed to perform raise and allocate functions and where the largest gaps are. The most critical capacity gaps were reported around the broad categories of data analytics, communication, management, and public financial management. Each of these areas are explored with specific skills identified. Many of the gaps identified are found to be increasingly acute at sub-national levels, a particular challenge for countries with high levels of financial decentralization. Challenges in hiring and developing individuals' skills are often related to institutional arrangements and government bureaucratic processes. Efforts to build capacity sustainably should seek to resolve both institutional barriers and individual-level gaps.

Challenges to building out government teams with the necessary skillsets were identified, spanning recruitment, retention, and career growth and progression. One clear challenge is around government pay scales and benefits, particularly for highly specialized professions. However, bureaucratic systems and other institutional processes seem to play a similarly significant role. Inflexible rules of central authorities that oversee much recruitment can act as a critical barrier to targeting particular skillsets and profiles. Frequent rotation of skilled staff, particularly Ministry of Finance economists, prevents them from building expertise on the health sector and hinders institutional learning within the health sector about finance functions.

Staff retention is another major barrier to long term capacity strengthening. Attrition tends to be high in technical positions in government and this was reflected in the findings, albeit inconsistently. Career progression in jobs related to raising and allocating resources for health tend to be linked to years of service rather than performance, degree of training, or development of new skills. Mentoring and on-the-job skills growth were important themes, both as a boon to career growth when they exist and as a significant impediment when they do not.

Gender equity in government remains a substantial challenge. Structures and policies are found to exist in all countries, however there is underrepresentation of women in technical positions and leadership positions. Women made up between 29 and 42 percent of staff in government units involved in raising and allocating of resources. Gender based discrimination is perceived to be a driver of this inequality, although men and women often see this differently. Although affirmative action policies exist to address gender and other inequities, operational guidelines are often absent and have not led to a

rebalancing of gender participation in the workforce. Efforts to actively mainstream gender considerations have been insufficient, and gender equity training has been largely absent among those surveyed.

The second learning question focused on the sources of skills, education, and training in the region, where they come from currently and how the overall landscape is changing. Raising and allocating resources for health are complex concepts, involve multiple processes, and do not clearly map to a single methodological discipline. Therefore, capacity needs are met through a combination of university undergraduate and graduate training, in-service interventions including short courses, and supplementary capacity provided through internships, secondments, and fellowships, sometimes with associated mentoring and training. These myriad sources of capacity may be necessary, but to succeed they require coordination and implementation with long term sustainability in mind. Overall, supply of skilled candidates, educated in the region, is considered to be insufficient. Many initiatives exist to grow the supply and there has been some progress, for example in the field of health economics, however the resources to do this at scale are significant and the time horizon for much external funding does not accommodate the building of sustainable training systems.

Academic institutions and think tanks play an additional role in the generation of evidence and provision of expertise to governments, which can augment policymaking capacity indirectly. Historically, global north universities have played an important role and they continue to do so, however the role of academic institutions in the region is growing and momentum is shifting towards production of these skills domestically and regionally. Universities have created units to respond to government demand for research into a range of health financing topics, often with support from external partners. For this to succeed, demand for such evidence may need to be nurtured and resources made available for governments to commission research according to their priorities, and a virtuous cycle generated for a flow of expertise from universities to policymakers, as well as topics and financial resources in the other direction. Finally, there are several regional institutions, initiatives, and networks—including the African Union Africa Leadership Meeting, Africa Center for Disease Control and Prevention, and Africa Health Economics and Policy Association—with the mandates and skills to support domestic and regional efforts towards sustainably building governments' capacity to raise and allocate resources for health.

The third learning question sought potential opportunities for action and investment from key stakeholders across the region to sustainably strengthen these capacities, grouped by the main themes that emerged from the assessment. Opportunities to address the specific capacity gaps found in Ministries of Finance and other relevant Ministries, Departments, and Agencies include revision of bureaucratic barriers to hiring and retention and policies around staff rotation; creation of targeted training for specific skills; establishment of mentoring and networking systems; and improving collaboration with gender-equity focused departments and focal persons to operationalize pro-equity policies. On the educational side, there are opportunities to support ongoing and new university initiatives and programs focusing on health economics and other relevant skills; prioritize female authorship and scholarships in these fields; and support formal structures that attempt to span university and government such as Health Economics and Policy Units. Finally, the regional institutions and networks that are leading efforts to sustainably grow health financing capacity have unique positioning to support efforts on both the government and educational sides. Catalytic investments in their initiatives may prove fruitful.

This work exists in a dynamic context of many initiatives at country and regional level, in a time when Ministries of Finance across sub-Saharan Africa are managing widespread fiscal and monetary challenges. This has led to strong competition for resources within governments and increases the importance of policymaking functions of raising and allocating resources. This assessment takes a timely look at these functions, the gaps that exist in skills and gender equity and draws upon inputs from interested stakeholders, from experts, and from the literature to suggest opportunities to address the challenges found. Through improving understanding of the landscape, this report aims to equip governments and other stakeholders to sustainably strengthen capacity to raise and allocate resources for health.

2 Background

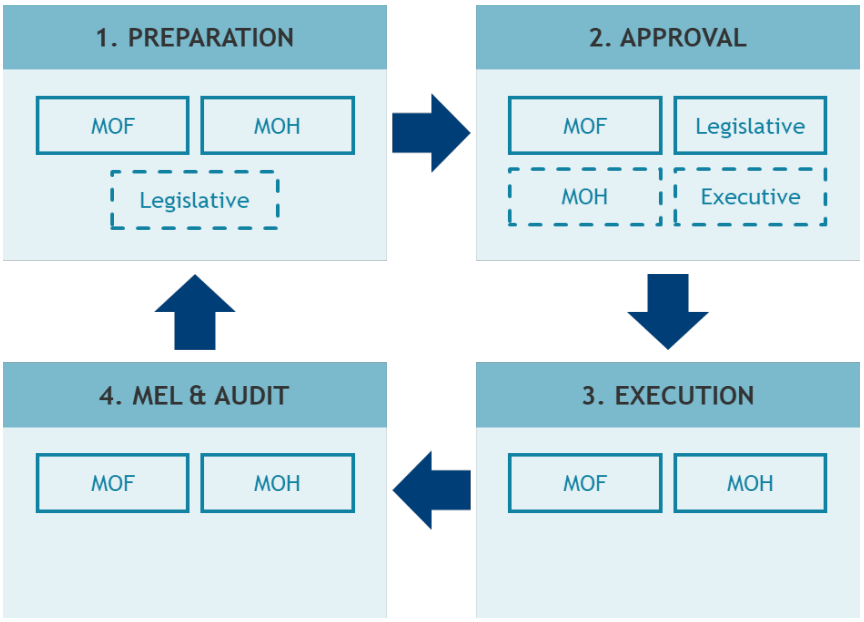
To meet the targeted health outcomes outlined in the Sustainable Development Goals, it is imperative that low and middle-income country (LMIC) governments are staffed with capable workforces. In these contexts of limited resources, the skills required to raise resources and allocate them to achieve social goals are especially important. To date, there has been a lack of visibility of capacity in key health financing skills concerned with raising and allocating resources to health, the degree of gender representation and women's leadership within these functions, and the contributing factors and main barriers to rectifying these gaps in capacity and gender equity in the Sub-Saharan Africa (SSA) region. This assessment serves to begin filling this knowledge gap and aims to help direct efforts to strengthen capacity by identifying opportunities for support, intervention, and reform.

Raising and allocating funds for health are technical and political processes involving actors from several different branches of government. To varying degrees across countries in SSA, these processes also involve donors and external assistance. A 2020 report from the Collaborative Africa Budget Reform Initiative (CABRI) found that the most common institutional set-up in SSA for the domestic budgeting process involved a central budget authority (CBA) which sets the total budget envelope (ceiling) for healthcare, often with the influence of the legislative branch (parliament), while the Ministry of Health (MOH) proposes the best way to spend the allocation.[1] Donor funds may be raised and allocated through the Ministry of Finance (MOF), the MOH, or without direct government involvement. This role distribution was also found to be generally representative in this study's focus countries.

2.1 Processes for raising and allocating resources

The CBA is one part of a larger government finance system also managing functions including forecasting, tax policy and collection, regulation, managing state-owned enterprises, and public procurement. This wider system of government finance functions is often aggregated under the MOF. In some instances, there are elements of the executive branch of government that also play an important role. Typically, the budgeting process laid out at national level is mirrored at subnational level through subnational finance, health, and legislature agents, but the decision-making power wielded at subnational level varies greatly by country. A standard schematic of the budget cycle is illustrated in Figure 1 below, which also includes the key processes of execution against budgets as well as monitoring, evaluation, and learning (MEL), and auditing of spending. While the institutional structures and naming of actors of this system differ across the countries studied for this report—as they do across the world—the key functions present are consistent.

Figure 1: Annual budget cycle and key actors in study countries



Source: Consultations and document review

The status of gender equity within the functions of raising and allocating revenues largely depends on the gender 'machinery,' referring to gender mainstreaming capacity and the status of gender integration at the intersections of Ministries of Gender and Ministries of Finance, Health, and Public Administration. Countries surveyed have a focal point structure of Gender Desk Officers (Nigeria), Directorates (Ethiopia) or gender focal points (GFPs) (Malawi, Zimbabwe, Eswatini and South Africa) across sectors, including in Ministries of Finance, Public Administration, and Health. These GFPs are responsible for operationalizing gender equality commitments in their Ministries with support of, and in coordination with, the lead Ministry of Women's Affairs or Gender.

Women make up 70 percent of frontline health care workers but hold only 25 percent of leadership positions in global health.[2] Key organizational level barriers to address include harmful gender stereotypes and unequal power relations based on patriarchal social relations which permeate health and financing public sectors resulting in increased female attrition, unequal career opportunities, and gender-related pay gaps.[3] A male-biased workplace results in limited networks, mentors, and other professional development opportunities for women, and male-biased metrics for success that disadvantage women to access promotions and recruitment.[4] This gender-biased system has often been described as the 'leaky pipeline' whereby less girls and women enter, stay, succeed, and graduate from the science field in general,[5] and advance in their careers in health institutions in particular.[6,7]

Wider societal cultural norms are an equally important explanatory factor. For example, research in South Africa showed that one in six women think that men make better political leaders and should be elected instead of women.[8] Women typically face the dual burden of domestic and professional roles, and women in the professional workforce may be required to work twice as hard to prove themselves in science-oriented spaces typically due to gender-biases.[9] These uneven gendered norms and attitudes often push women into care-giving roles and men to more privileged decision-making roles and are embedded in global, regional, and local systems of gender-based discrimination and role expectations that undermine women's equal status and opportunities.

2.2 Goals of this assessment

The purpose of this assessment is to engage government ministries, departments, and agencies (MDAs), regional and local organizations, universities, and training institutions to:

(1) assess the gaps in skills and capacity for health financing, with a focus on raising and allocating resources for health, and the meaningful participation and leadership of women in health financing decision making and technical positions;

(2) assess the pipelines of staff and training systems to fill these gaps; and

(3) begin to identify levers for change and opportunities to support the development of a fit for purpose and gender sensitive workforce for health financing.

These integrate a gender-based analysis to explore to what extent healthcare and health financing systems promote women's leadership, gender parity, and gender mainstreaming. Ultimately, this will inform recommendations around potential opportunities for governments and regional organizations to pursue and for future investment by external funders to contribute towards a sustainable pool and career path for health financing talent and knowledge in the region.

2.3 About CHAI

This assessment was developed by the Health Financing program at the Clinton Health Access Initiative (CHAI) with support from the Bill and Melinda Gates Foundation (BMGF). CHAI is a non-governmental organization providing technical assistance to governments with a focus on building systems and expertise for evidence-based decision making and management. CHAI was founded in 2002 with a commitment to address the greatest needs for the most vulnerable, set apart by a conviction that the way to achieve large-scale, sustainable impact is to support governments to lead change independently.

CHAI is a decentralized organization with a strong presence in 27 countries in sub-Saharan Africa and health financing programs in 10. Through these programs, CHAI's Health Financing Group has developed strong relationships with policymakers, technical bodies, local and regional organizations, universities, and research institutions. Across the nine countries included in this assessment, CHAI relied upon these collaborations as well as its long-standing and trusted relationships of CHAI's technical advisors with governments in Africa, including Ministries of Health, Ministries of Finance, Ministries of Gender and Social Development, and government insurance agencies. In conducting this assessment, CHAI has built upon its experience working to advance gender equity through our working supporting governments in health financing, workforce development, and sexual and reproductive health. This assessment has leveraged existing staff in focus countries, and co-funding from the Swedish Government team for SRHR to expand the impact of this work, as it has implications for sustainability of our work in health financing and systems strengthening beyond CHAI's engagement.

3 Methodology

This study has sought to assess health financing-relevant government and training institutions in a select number of SSA countries to describe the current landscape of the status quo, capacity challenges, and investment opportunities. Nine countries were included in this study: Burkina Faso, Eswatini, Ethiopia, Kenya, Malawi, Nigeria, Rwanda, South Africa, and Zimbabwe. Information was primarily gathered through desk reviews and key informant interviews, supplemented by gender-focused surveys and staffing data.

This landscape assessment's scope included government functions of raising and allocating resources with a focus on MOFs and the interaction between MOHs, MOFs, and relevant line Ministry gender focal points and Ministries responsible for gender and excluded purchasing functions and arrangements. In many countries this distinction is not well defined, for example when a range of financing functions are handled by the same teams or individuals. However, findings do not extend to allocation for service delivery or purchasing.

3.1 Landscape Assessment Plan

Based on desk reviews and country office knowledge and as a first step toward in-country key informant interviews (consultations), each CHAI country team identified a list of key stakeholders with relevant 'raise' and 'allocate' roles within their country context, who were contacted and introduced to the study. Stakeholders then selected respondents from their organization to participate in consultations. The individuals selected were typically senior staff in management positions, but the primary selection criterion was their qualification in providing the insight requested for the study.

Gender surveys offered a chance for stakeholders to offer insight on gender-related challenges anonymously. The surveys included several statements to which respondents assigned a value between 1 and 5. The statements were designed to elicit personal views on existing policies, structures, capabilities, norms, and leadership commitment within each organization and their impact on equal representation and opportunity for all. All staff in relevant offices were invited to participate and surveys were distributed either digitally or physically based on organizational preference. Focal persons provided staffing data disaggregated by gender and by seniority. In addition, a limited number of key informant interviews with women leaders and role models in health financing were conducted in Nigeria and Malawi. These individuals were selected by participating organizations and bring more in-depth perspectives and experiences on enablers and barriers to women succeeding health financing.

This assessment integrates gender-based analysis, informed by InterAction's Gender Integration Framework (GIF) and theory of change. The GIF helps to identify to what extent organizations are internally gender blind to gender responsive, such as in mechanisms to promote equitable and fair hiring, retention, and career advancement. In addition, the GIF helps interconnect internal capacity, accountability, and workplace culture to the level of gender sensitivity and responsiveness in the services health financing actors provide. Four inter-related components help identify strengths, opportunities, challenges, and gaps:

1. **Political Will**: Ways in which leaders use their position of power to communicate and demonstrate their support, leadership, enthusiasm for, and commitment to working toward gender equality in the organization and ecosystem.

2. **Technical Capacity**: Level of ability, qualifications, and skills individuals in an organization and ecosystem need to carry out the practical aspects of gender equality and inclusion integration for enhanced program quality, and level of institutionalization of gender equitable organizational processes.
3. **Accountability:** Mechanisms by which an organization and the ecosystem determines the extent to which it is 'walking the walk' in terms of integrating gender equality in organizational structures and services provided.
4. **Organizational Culture:** Norms, customs, beliefs, and codes of behavior in an organization and the ecosystem that support or undermine gender equality and inclusion; how people relate; what are seen as acceptable ideas; how people are 'expected to behave'; and what behaviors are rewarded.[10]

3.2 Data

A total of 196 consultations were conducted with 35 respondents from Ministries of Finance, 9 from Insurance Agencies, 68 from Ministries of Health, 43 from Academic institutions, and 41 from other stakeholders, which among others included Ministries of Gender, Development Partners, and Legislature. 31 percent of respondents were women. Government respondents include those at national as well as sub-national level. Table 1 contains a breakdown of respondents' education, tenure, and gender. Consultations were conducted primarily in person, but sometimes virtually, using a structured interview guide. The interview guides had five sections: respondent details, capacity assessment, sourcing & hiring, training & retention, and gender equity. Respondents allocated a maximum of one hour to each consultation. In addition to in-country consultations, 8 consultations were conducted with key regional stakeholders.

3.3 Limitations

This assessment was limited by the time and resources available to explore a complex, regional landscape of health financing capacity. It relied upon CHAI country team's relationships and the willingness of key informants to participate. Therefore, the participation rate and completeness of triangulating quantitative data varied across countries. Some governments or specific departments chose to participate less than others, particularly in gender surveys. Consultations did not always allow for an in-depth exploration of every question in an assessment with such a wide scope. Such gaps were offset by information gathered from secondary sources. Data availability around staffing from existing government sources was inconsistent. This work was not designed as a formal research study but as a landscape assessment, and therefore there is no attempt to infer statistical generalizability. It aims to inform future programmatic areas of focus and potential investments in capacity for governments and their partners.

Findings

The findings from the synthesis of consultations, literature review, gender surveys, and staffing data analyses are divided into three subsections according to the learning questions.

1. **Assessment of capacity and capacity gaps in government systems** describes the capacity that is available and missing in government along the dimensions of staffing mix, skillsets, and capabilities, as well as regional contextual situations and challenges around recruitment, training, retention, and career progression. Gender representation overall and in leadership position is described, and the gender perspective is investigated from multiple angles including family-friendly and affirmative action policy landscapes, gender mainstreaming capacity and attitudes, gender quotas, and enablers to women's career progression.
2. **Assessment of capacity and gender equity in academic** institutions and training systems describes educational and training systems and challenges identified along the two dimensions of training programs and research generation for policymaking. Both dimensions are investigated with a gender lens, including describing gender representation in faculties and student bodies, gender-specific barriers, and examples of previous successful gender mainstreaming initiatives in this space. These systems include universities, research units, national schools of governments, development partners, and other regional and global institutions, linked through networks, partnerships, and internships. Channels of skill growth include university programs, learning on the job, in-service training, and short courses.
3. **Opportunities for intervention and investment** outlines opportunities to strengthen and invest in capacity to raise and allocate resources in the region, and improve gender equity within these functions. These are grouped into 10 thematic areas, each involving one or more central stakeholders: governments, academic institutions, regional bodies, and development partners.

4 Assessment of capacity and capacity gaps in government systems

Findings with respect to government focus primarily on Ministries of Finance, Insurance Agencies, and Ministries of Health, and are divided into three areas: (1) Gaps in skillsets and capacity, (2) Gender representation and equity, and (3) Challenges to building and sustaining government capacity in health financing, with a focus on raising and allocating resources. Within this third category, findings are further broken down into categories of recruitment, in-service and pre-service training, retention, and career progression of existing staff, with a concentration on gender equity across these challenges.

4.1 Gaps in skillsets and capacity

To identify capacity needs it is first necessary to specify the skillsets and capacities in scope. A wide variety of individual skills arose during consultations and the literature review. These were grouped into three broad areas to provide coherence and place them in the context of government processes for raising and allocating resources:

- **Analysis**: Analysis capacity including forecasting, costing, and absorbing available evidence; as well as monitoring and evaluation capacity (including gender-based analysis), to better align health budgets to health policy and prioritization of the most vulnerable health needs
- **Communication and coordination**: Ability to communicate, coordinate, and formulate clear arguments and negotiate
- **Public financial management**: Understanding and adherence to public financial management (PFM) principles

There is a high degree of interdependence between many skillsets across these categories, however the distinction is useful to draw out some important themes.

Critical to each of these areas are institutional enablers, including a permitting human resource structure, sufficient technology and infrastructure, and political will to strengthen key gaps. Cross-cutting these capacity needs is attention to addressing gender differences and inequalities. These capacity needs serve as the starting point against which the capacity baseline and gaps are assessed.

4.1.1 Defining the capacities required by Ministries of Finance

Recent global issues including COVID-19, trade disruption, and inflation have exacerbated the difficulties of ensuring sufficient financing for universal health coverage (UHC) in SSA countries. It has become even more important that governments have the capacity to not only come up with funding but also ensure that funding is allocated efficiently and spent effectively.

MOFs are made up of several semi-independent but also interdependent functions including setting economic policy, collecting tax revenue, leading the budget process, running state-owned enterprises, and procurement. Furthermore, the roles and responsibilities of MOFs vary across countries and are strongly influenced by formal and informal institutional factors, economic contexts, and political contexts.[11] It follows, therefore, that research into the capacity and capability of MOFs can have varying relevance to health financing depending on the function studied and the context within which

the MOF operates. Nonetheless, there are relevant lessons to be found from research. An Overseas Development Institute (ODI) study from 2016 summarized MOF's key capabilities into four categories: (1) Analytical capability, (2) Delivery capability, (3) Coordinative capability, and (4) Regulatory capability.[12]

There is much overlap between these capabilities and the functions for which they are needed. For instance, the capability of MOFs to deliver a complete budget relies heavily on their ability to analyze and absorb sectoral evidence and to coordinate actors to set fiscal policy, while execution of budgets depends on regulation of spending ministries' adherence to financial frameworks. The number of staff required is naturally dependent on the roles and responsibilities of an MOF, the size of the country, and a range of contextual factors such as institutional frameworks and the degree of digitization. A 2016 International Monetary Fund (IMF) study found that when accounting for differences in countries' population size, there is an inverse relationship between income status and MOF staff size.[13] The IMF study advocates for MOFs to 'modernize' by moving from a so-called 'traditional model' to an 'emerging model.' The study defines a traditional MOF as segmented, hierarchical, introspective, and process oriented, while an emergent MOF is integrative, transparent, inter-ministerial, communicative, and policy oriented. The paper subsequently outlines several principles to guide a transition to an emergent MOF. Key guiding principles relevant to health financing include devolving transactional functions to line ministries, focusing on core policy and regulatory functions, and exercising a strong role in shaping sectoral policy, including for health. However, gaps in foundational capabilities in developing countries such as human resource management can act as barriers to modernization.

The ODI study found the staff profile in the budget department's sector desks to be a clear indicator of sectoral analysis capabilities.[14] MOFs that are primarily focused on maintaining delivery capability in sectoral spending (e.g., producing calendars and reports, regulation, and generally "getting things done") have staff profiles geared toward accounting, legal, or administrative training, whereas those focused on analytical capability are to a greater extent staffed by economists, sector specialists or public policy generalists.[15] Another study looked at the profile of officers in MOF budget departments from five countries of varying income levels. The study found that Slovenia, Netherlands, and Myanmar typically hired individuals with economics and public administration/accounting backgrounds, while the UK and Malaysia recruited staff with a wide range of backgrounds and only have a minority of budget officers with economics and accounting backgrounds. This difference in academic background is mirrored by a difference in preference between these countries for developing sector-*generalist* budget officers (UK) and sector-*specialist* budget officers (Slovenia and Myanmar).[16]

4.1.2 Identified gaps in government systems

Analysis capacity

Among government and regional stakeholders consulted as part of this study, skills falling under the umbrella of 'data analytics' were the most commonly identified key capacity gap. The need to invest in information and communication technology (ICT) was almost as frequently cited as a key priority, indicating the complementary need for infrastructure to provide the data that would enable capacity growth. The benefits of improved data analytics capacity derive from empowering governments to inform policies in line with their context and to domesticate data sources to inform financing policies. Other benefits raised were better-informed budget negotiations, strengthened business cases for investment in health, improved resource allocation decisions, and higher budget execution rates.

Several specific analytical skill gaps were raised within this category, including forecasting, costing, cost-effectiveness analysis, MEL of policy objective achievement, resource tracking, health economics, economic evaluation and efficiency analysis, big data management, economic modelling, and actuarial analysis. Other skills mentioned during consultations included demographic projection, solvency and sustainability modelling, exploratory data analysis, data management, and behavioral economics.

The gaps in capacity to carry out relevant analytical functions are in part related to methodological knowledge gaps, but also gaps in technical ability to apply theoretical knowledge. A desire to strengthen skills in Excel was frequently mentioned, as well as in statistical software like Eviews and Stata. According to respondents, strengthened capacity in this area would empower staff to better employ evidence in their roles, for example by making budgeting and resource mobilization more data-driven and by producing and maintaining health expenditure dashboards.

Institutional arrangements differ across the region and can impact capacity gaps. In Malawi, for example, it was reported by the MOF that infrastructure projects tended to be overestimated by the MOH, thereby crowding out resources from core activities. A 'buildings department' in the Ministry of Transport is responsible for supporting line ministries with this task but is thinly stretched. Previously all Malawian ministries had infrastructure units—some, like the Ministry of Education still do—but the unit in MOH was removed to save costs. A respondent from the MOF believes it would be beneficial to reinstate these units.

Case study: In Rwanda, a focus on institutional capacity

Rwanda's Social Security Board (RSSB) is a division of the Ministry of Finance and Economic Planning (MINECOFIN) that manages registration and collection of pensions and social security contributions and the provision of benefits. RSSB has worked with partners such as CHAI to identify pressing institutional capacity gaps across the organization that affect operational performance and present barriers to designing and implementing key reforms.

Key individual capacity gaps identified include:

- **People/skillsets**: Deficiencies in technical expertise and capacity across health economics, data science, actuarial analysis, epidemiology, research, and reporting; supporting tools like Microsoft Excel and PowerPoint; and leadership, communications, and management. Staff generally lacked data prowess, often not understanding the utility of data and how to pull data to answer relevant questions.
- **Systems**: Outdated systems and infrastructure which could not process large volumes of data; paper-based data collection tools; limited interoperability of data systems; lack of centralized database.
- **Tools and processes**: Lack of codified processes and frameworks for systematic decision-making; lack of automated tools to use data for decision-making and performance management.
- **Enablers**: Beyond RSSB leadership, there was a lack of organizational culture around evidence-based decision-making and understanding among staff of each person's role in data-driven decision-making. The organization also lacked clear systems for accountability.
- **Institutional arrangements**: RSSB has historically been a division of MINECOFIN, which has limited RSSB's autonomy in recruitment (issuing job descriptions and dictating

needed skillsets in new hires; introducing more complexity into interview processes); setting competitive salaries to attract candidates; promoting skilled, high-performing staff; and implementing efforts to improve retention. The institutional arrangements have also limited the number of staff directly responsible for data management, which have hindered data use across the organization.

RSSB's approach to resolving these capacity challenges draws upon multiple types of support to both build skills internally and harness external expertise. These range from mentorship and short courses for individual staff; to partnerships with academic institutions to provide trainings, technical input to decision-making processes, and commissioning of specific research; to secondments and technical assistance from development partners; to internship programs with local universities.

In parallel, RSSB has also outlined the future capacity needs of the organization and the right organizational structure to address these needs. RSSB has recently achieved organizational autonomy and is now a state-owned enterprise separate from MINECFOIN, loosening restrictions posed by the civil service structure and presenting an opportunity to improve HR recruitment and structures. This has allowed for a corresponding organizational restructuring more aligned to RSSB's long-term vision and capacity needs (still ongoing).

This process has highlighted that capacity challenges are not restricted to the skillsets of individuals, but also stem from institutional level barriers in the organization's structure, systems and processes, equipment and infrastructure, and culture. This case study highlights the potential multi-dimensionality of addressing a commonly cited capability gap like "data analytics". The significance of these institutional challenges and their linkages with individual skills gaps suggest that the strategy to build capacity must take a sustainable, institution-wide perspective, as RSSB has to date.

Communication, management, and advocacy capacity

The next thematic area included the capacities to communicate and advocate around key functions and processes, as well as to manage these government processes. In the context of raising and allocating resources for health, these were often expressed in terms of the MOF-MOH relationship. The need for MOH teams to better learn to "speak the language" of the MOF emerged from both MOF and MOH respondents. This is explored in terms of individual skills in communication and management, and the systems that staff operate in.

Specific capacity gaps around communication and advocacy included report, speech, and proposal writing; public speaking; partner coordination and engagement; and advocacy skills. Stronger practical knowledge in putting together and delivering PowerPoint presentations and advocating using both clinical and economic evidence was raised as having meaningful impact on final budget allocations. Even when strong evidence and analysis exist, these communication flaws hinder use of this information to inform resource allocation. Several MOF sources raised the issue that clinically trained MOH staff can be uncomfortable or unaccustomed to discussing life-saving interventions in terms of costs. Conversely, MOH respondents reported a need for improved understanding of technical disease programs among planning and finance officers. This could also be taken as a gap in collaborative capacity across roles with different expertise.

Another common gap across several countries was project management and skills related to business administration. For example, the identification and sponsorship of poor and vulnerable households for the Kenyan 'UHC initiative' was described as a multi-stakeholder project that lacked sufficient coordination and harmonization across MDAs and between the national and subnational levels, with insufficient project management capacity identified as the core issue by a respondent. Another respondent with the MOF complained of a lack of capacity in planning across line ministries:

> *"At the beginning of the fiscal year, ministries are relaxed, but then scramble to spend resources at the end of the fiscal year. This puts big pressure on the MOF. People generally don't stick to plans and come in with many requests for funding or reallocations at the end of the fiscal year. The issue is poor planning in MDAs – across all ministries."*
> *-Malawi MOF respondent*

Country-specific institutional contexts may complement or act as a barrier to capacity building efforts. For example, MOF respondents from several countries voiced that the MOH involves them too late in the process of MOH's strategy and policy development, planning and monitoring and that the MOH is slow to respond to questions for clarification or justification of proposed budgets. Technical working groups to establish well managed communication challenges have been established in some countries, but not in all. The lack of formal communication platforms between actors in the budget process appear to be particularly pronounced at subnational level based on this study's findings.

Capacity gaps in communication, management and advocacy may be different for women and men. Women's socialization to have a lower social position than men may result in some women lacking self-assuredness and confidence as a result of self-doubt or self-silencing to affect their confidence and ability to communicate and advocate their ideas.[17] This highlights the need for a gender responsive capacity building approach.

PFM capacity

Capacity gaps and issues around PFM and program-based budgeting were also common and reflect skill gaps as well as more institutional challenges. There has been much development in SSA around PFM in recent years including reforms to implement medium-term budgeting, program-based budgeting, and integrated financial management information systems,[18] and some countries may have yet to adapt their ways of working and skills mix to match these reforms. The low level of ownership of the program budget and the low level of capacity in PFM of the actors responsible for implementing the program budget were the main shortcomings identified by respondents.

Specific skill gaps identified included advanced budgeting and planning, evaluation of historical budget performance, formulation of performance indicators, budgeting monitoring, accounting frameworks, and an awareness of and adherence to the wider PFM framework and the responsibilities it assigns. A lack of understanding of these frameworks, in particular legal aspects, was cited in several consultations.

> *"Expertise in economics and finance is great. But you also need people who have legal expertise as well as an understanding of how to navigate the governance structures of the health systems in the country."*
> *-Africa CDC*

In general, for all types of skills and across focus countries, most respondents stated that there are no disparities in capacity levels and skills between female and male officials. The same observations were shared by respondents from regional entities consulted.

> *"I don't think there are gender disparities in health financing capacity. I have met amazing female health economists who are as equally competent as men. But that said, the health financing departments in the governments that I have worked with, tend to be dominated by men."*
> *-African Development Bank (AfDB)*

The shortcomings in PFM capacity reportedly lead to delays in the commitment of expenditures and a feeling that the procedures and stages of budget execution are lengthy, with poor technical quality. Some of the drivers of capacity gaps include a reliance on junior staff, primarily administrative clerks or accounts officers who are learning on the job. An MOF respondent pointed to high turnover of their counterparts at MOH, which leads to a frequent and repeated need for PFM-related trainings and orientations to be provided to the MOH. Many of these challenges are particularly acute at subnational level.

The subnational perspective

The recurring theme across most countries, especially those with decentralized systems such as Nigeria, Kenya, South Africa and Ethiopia, is that the health financing capacity gaps are more pronounced at sub-national levels. Moreover, there is greater variation in staffing and routines at subnational level, and larger contextual challenges than at national level, resulting in differing and suboptimal healthcare financing. In Ethiopia, regional spending on health in 2015 ranged from 6 percent to 16 percent of total government expenditure,[19] Kenyan allocation of county budgets toward health in 2018/19 ranged from 17 percent to 38 percent,[20] and Nigerian state health budgets in 2021 ranged from less than 3 percent to over 17 percent.[21]

Varying capacity, institutional processes, and infrastructure are contributing factors. In Ethiopia, the capacity of the regional health bureau and having a health 'champion' in the regional legislature were mentioned as two significant determinants of funding allocations. In South Africa, the general perception offered through consultations was that provincial capacity to raise revenues is weak and inconsistent and rely on national allocation mechanisms of Equitable Share and Conditional Grants. Research studying the budget process in Kenya found that budget ceilings were determined using estimated input requirements in two counties, while the other two used historical allocations but with different calculation bases.[22] A lack of qualified staff at both MOF and MOH at county level has led to fragmented financial planning and allocation processes, poor financial and management reporting systems, and procurement difficulties contributing to an inability to spend budgets.[23] Similar variation in allocation to subnational units based on their technical capacity emerged across many countries.

4.2 Gender representation and equity in government

The status quo of gender representation in relevant MDAs was explored through a combination of consultations, disaggregated staffing data collected where available, and supplementary gender surveys. Most of the countries in the assessment have implemented relevant gender sensitive affirmative action policies related to recruitment and retaining staff, however global and regional data

indicate that there exists clear gender segregation by occupation and decision-making power.[24] Review of data collected through this study confirmed this inequity in part, but also offered some positive findings.

Comprehensive, disaggregated data was secured for government MDAs from Nigeria, Kenya, and Ethiopia, while partial data was obtained in Malawi, South Africa, and Eswatini. The representation of women on aggregate in these MDAs was **29 percent** in Malawi, despite the country having a 40 percent minimum gender parity target,[25] **33 percent** in Kenya, and **39 percent** in both Ethiopia and Nigeria, indicating that women are underrepresented in government health financing in general. When looking only at senior (management) positions, however, there are divergent findings. In Ethiopia, women make up **21 percent** of management—far below their share of overall staff—while in both Nigeria (**42 percent**) and Kenya (**36 percent**), women make up a larger share of management than their share of overall staff. While these findings cannot be generalized, they do suggest that within this sub-sector of government, there may be a more gender equitable system of career progression in these two countries. One study in Kenya discusses how positive discrimination policies in favor of women have contributed to improvements in women's career progression in the healthcare system.[26] However, this study, supported by a study in Nigeria,[27] also explains that underlying gender biases and role expectations still undermine women's equal career progression in the health sector. The lower proportion of women in management in Ethiopia may be due to remaining barriers to women's career progression in the country, despite the country having implemented affirmative action legislation.[28] Table 2 in the Annex presents actual staff numbers at government offices from which data could be secured.

Gender surveys provided valuable additional qualitative context as the social context varies significantly by country. Findings from Ethiopian government staff, for example, found that organizational culture was considered a significantly more negative influence on gender equity than political will, accountability, and technical capacity. This may indicate that the perceived main problems are around norms, customs, and codes of behavior in these organizations that undermine gender equality. Results indicated varying levels of capacity in the ability to apply a gender lens to health financing, although in general self-reported knowledge, skills, and attitudes to carry out their work with gender awareness were quite high. Reported participation in gender trainings or knowledge of persons responsible for gender mainstreaming were very low. However, Nigerian and South African respondents said they valued the need for building gender related skills/expertise for their work in raising and allocating resources for health.

A common finding across country consultations was the broadly held view that there is no overt gender-based discrimination between women and men in entering and progressing up the ladder in health financing. It was stated that there are no challenges in recruiting women or under-represented candidates, and that people with disabilities typically do not apply. This perception indicates a "gender-blind attitude" that risks making invisible underlying intersecting discrimination and biases against women and other under-represented groups. An indication of gender blindness was seen in gender survey data for Nigeria, where women considered discrimination against women as a significantly bigger problem compared to men, who were less concerned.

> *"We've tried to push for gender equity in research grant discussions, but I must be honest that there is still some resistance from our male colleagues on this. Their attitude is that we start from a point of equal playing field, then bring the gender issue when there is a tie. But I think we need to be more deliberate than that because what many women go through is nowhere near what a man goes through."*
> *-WHO AFRO*

Survey results indicated that some female staff did not feel that they were equally represented in senior management and leadership positions and that there is gender-based discrimination against women. In comparison, responses from men suggest that they do not see such inequities. Women were also more likely to take a stronger stance while men were more likely to reflect ambivalence (i.e., neither agree nor disagree), which suggests that there is a differential experience and/or perception amongst men and women in the importance and role of gender parity.

Triangulation of findings indicates that existing gender policies need clearer identification of roles and responsibilities across government, while strategic frameworks of action and targets are more regularly updated and relevant. The countries surveyed lack strong inter-ministerial coordination structures involving the MOH, MOF, and Ministry of Gender or Women's Affairs. For example, Nigeria's Gender and Health Technical Working Group does not involve the MOF. In Malawi, the MOF staff from the Budget Directorate work with the Planning Department of the MOH throughout the budget cycle, but the Ministry of Gender does not seem involved in these budgeting processes. The Burkina Faso MOH has a gender unit since 2015, but respondents report that it has never really functioned: the unit has been housed in various places within the Ministry, and members are yet to be appointed. In Zimbabwe, the Ministry of Women's Affairs, Gender, and Community Development were reportedly focusing on piloting capacity-building in gender budgeting in six selected pilot ministries including Ministries of Health and Child Care, Public Service, and Ministry of Finance and Economic Development.

In summary, findings suggest while countries may have policy commitments to mandate a range of policies including affirmative action, gender equity and gender responsive budgeting, the extent to which these are effectively carried out was often found to be lacking. Gender analysis is not routinely considered and is often an add-on, not integrated into work planning, budgeting, and reporting in countries surveyed. Organizational culture and the lack of operationalization of gender policies are perceived as driving gender inequities in government health financing roles. Male respondents do not seem to perceive these continuing barriers as significant. Some countries are making greater efforts to operationalize their commitments on gender, and there are limited signs that this is reaching MDAs concerned with raising and allocating resources.

4.3 Challenges to building and sustaining government capacity

4.3.1 Staff recruitment

This assessment explored some of the barriers to recruitment that have contributed to the capacity gaps being experienced, and the limited sustainability of efforts to address them. Ministries of Finance and Health frequently have limited control over what skillsets get hired or included in their own organograms, given the oversight provided by public service agencies (PSA). Government salaries and benefits often struggle to compete on the jobs market, and this is linked to inflexible limits applied across MDAs. In addition, there are rotation systems of MOF staff that result in those staff gaining insufficient understanding of the health sector before rotating out, and little opportunity for MOHs to absorb their skills and knowledge. Well-intentioned efforts by development partners to fill skills gaps

via secondees can replace rather than strengthen the roles of permanent staff and result in the hollowing out of technical government units, limiting the sustainability of capacity strengthening efforts.

Rigidities in the hiring process has been cited as an explanation for high vacancy rates in past studies and this assessment found related explanatory factors, citing convoluted bureaucracy, political processes, and insufficient funding as reasons for suboptimal staffing.[29] A common theme across countries is the existence of a central PSA with a strong mandate over work structures and recruitment in government offices. PSAs must approve the creation of a new position—sometimes along with the cabinet—however, the degree of control that MDAs have over the actual hiring for a vacancy differs. In South Africa, Eswatini, and Ethiopia, MDAs are largely given control over recruiting for vacancies. In Nigeria, on the other hand, it is difficult for MDAs to influence hiring at all, as vacancies are posted without job descriptions, deployment of new hires to MDAs is at the discretion of the PSA, and communication of capacity requirements are not usually met. In addition, a respondent from Kenya stated that hiring processes may be faced with political interference which can cause delays or even unsuitable candidates to be hired. Even when recruitment is largely in the hands of MDAs, the structure imposed by PSAs can act as a barrier to recruiting the required expertise. In South Africa, MDAs are limited in their ability to hire experts like actuaries and data scientists that fall outside of the classic ministry cadres, even when they exist on the job market. Economists are often hired into a country's economic common service using a standardized term of reference, without a formal mechanism to request specific skills or experience in new hires, for example expertise in health financing.

Salary and conditions are often cited as the primary reason that some specialized capacity cannot be recruited. In Ethiopia, the MOH related its inability to staff its Health Economics and Financing Analytics unit with a health economist to the low salary and poor benefits package imposed by public sector mandates. Elsewhere, MDAs have circumvented challenges with standardized government salary scales using allowances, in-kind benefits, per diems, and donor funding.

It is common for the MOF to assign economists and other finance officers to the MOH from a central ministry or pool to support with budgeting and other finance-related tasks, as is the case in Kenya, Malawi, and Eswatini. These officers typically arrive without experience in or understanding of the health sector, are only expected to stay for a fixed term of a few years and can be reassigned at short notice. At subnational level rotation is reported to be even more frequent and repeated loss of experience is a greater issue. While MOH respondents acknowledged that this system of rotating economists has its pros and cons, most lamented the recurrent loss of expertise it entails and wish for 'departmental' economist positions to be established.

A common channel for recruiting expertise in study countries is through development partners. Economists and other technical advisors are often on secondment assignments at MOHs. For example, in Ethiopia, government units in charge of economic evaluation, financial analytics, resource mapping, and public financial management are mainly supported by secondments and similar arrangements exist across governments. These secondments unfortunately often lack longevity and sustainable impact.

> *"…before assigning a secondee to the government, partners and the government should make sure that there is a government-hired staff to whom skills and knowledge will be transferred. Besides this, there should be a performance target for the secondees regarding the capacity building/skill transfer objective they are assigned to, and this performance should be evaluated periodically. This way, there will be skill and knowledge transfer every year and this can help ensure actual capacity transfer to government staff. By the time the secondee leaves the organization/ position, the government staff who took the on-the-job training from the secondee should be able to accomplish the jobs that used to be managed by the secondee."*
> *- Ethiopian respondent*

However, when combined with high staff turnover and often insufficient staffing, this transfer of skills may be difficult to accomplish and sustain. When MDAs know that these roles are likely to be filled, at least in the short term, it reduces the incentive to create and recruit for the skillsets.

Overall, the most important barriers to recruitment reported were a mixture of government-wide policies and some more idiosyncratic systems. Salary limitations are certainly a factor, but bureaucratic inflexibility may be equally significant. The challenges that are more amenable to intervention may be around specific areas such as rotation of key staff and secondee arrangements.

4.3.2 Legal frameworks and affirmative action policies for gender parity

Women's rights advocates within governments, civil societies, and global and regional partners have played critical roles in lobbying governments to make efforts to promote gender parity in public sector employment. Despite slow progress, constitutional and public administration-wide gender parity and affirmative action mandates, legislation, and regulations are important for holding governments accountable. Most countries' constitutions mandate gender parity of women and men and affirmative action measures to promote women's leadership and equality. Countries such as Nigeria, Eswatini, Zimbabwe, Rwanda, and Kenya have gender quotas of 30 percent representation of women; in Malawi 40 percent minimum; and in South Africa, 50 percent. Kenya's 2010 Constitution has a 'two-thirds gender rule; to mandate that no more than two-thirds of the members of public elective or appointive bodies shall be of the same gender and calls for legislative and affirmative actions to actualize the target. In Zimbabwe, the 2013 Constitution includes a Non-Discrimination and Equality Clause, an expanded Bill of Rights for Women's Rights, and a legislative measure of at least 30 percent representation of women in Parliament. In Malawi, the Gender Equality Act states "an appointing or recruiting authority in the public service shall appoint no less than 40 percent and no more than 60 percent of either sex in any department in the public service."[30] Malawi's Growth and Development Strategy II and White paper II have affirmative provisions to increase women's equal representation in the overall public spaces.[31]

> *"There are no challenges to recruiting women. But in my opinion, gender parity is affected mostly by the family of the girl child and their ability to avail her of the necessary education and support to compete in a career world."*
> *-Nigerian respondent*

Until adequate attention is paid to making workplaces gender equitable, diverse, and inclusive, women and under-represented groups will remain low in numbers and siloed into gender-segregated occupations, while being under-represented in senior management and leadership. Gender quotas and targets often remain at a higher policy level. Focusing on numbers denies attention to complementary

and equally needed mechanisms to address women's domestic responsibilities. Targets also need to be adopted and regulated within gender targets and complementary affirmative action at line ministry level.[32] There are few policies, legislation, and regulations to guide gender parity in hiring and retention of staff.

4.3.3 Retention and career progression of existing staff

High staff attrition is a barrier to sustainable capacity strengthening due to the loss of institutional knowledge and specific expertise. There were unclear findings on staff retention, with some countries reporting strong retention of staff in their MDAs and others noting chronic turnover. Career progression is seen as predictable but related more to years of service than performance or skills gained.

Among the functions of raising and allocating resources, lost expertise through frequent and sometimes unpredictable staff rotation, compounded with lack of interest in building specialized skills is a significant challenge. Because temporarily assigned economists and finance officers know that they will typically rotate out of the MOH within a few years, most are uninterested or even unwilling to seek specialized health financing skills, preferring to acquire more general economics knowledge that will be more beneficial to them in other ministries.

There were conflicting results on how long staff usually stay in public service. For staff who have built strong analytical skills or government relationships, 'brain drain' is often a challenge. A Malawi MOH staff member described their department as being "seen as a steppingstone to work with the UN." However, in Nigeria it was reported that government staff typically complete their entire stipulated 35-year service tenure at both national and subnational levels. In an Ethiopian health agency, most technical staff have remained in their role since its inception some 10 years earlier, however it is noteworthy that staff turnaround for senior positions was significantly higher. The average tenure of government staff in each country and department may have an impact on whether it will be most transformative to focus on creating a stronger pipeline of young graduates, or to focus more on building capacity of existing staff.

MOFs typically have a person that acts as focal person for health during the budget process, and these appear to have more continuity. In Ethiopia, the same person has remained as focal person for the last 10 years, while the Nigerian focal person had been in their position for 8 years. This should afford these individuals time to build an understanding for the health sector in an organic way. It was similarly not found common for MOF staff to rotate internally between directorates. This is in line with related research which found that it was rare for desk officers in Uganda and Sierra Leone to change department during their career, but they could change from one sector to another.[33]

It was generally reported that the career path in government service is clear, however, it is often based on years worked and not clearly linked to capacity growth.

> *"Performance appraisal should be linked with finishing courses. Otherwise, there is no motivation for officers to do trainings on their own."*
> *-Malawi MOF economist*

In one government unit it was observed that senior positions tended to be recruited from the external government system, likely reducing staff perception of career progression prospects and thereby motivation. Respondents also highlighted the importance of getting to know a health financing specialist who can act as a mentor to acquiring health financing expertise. A senior civil servant in Malawi noted that they had benefited greatly from a development partner staff member who would assign them technical pieces of work such as Stata analysis, thereby building technical capacity and

sparking an interest in further studies in health economics. Conversely, a mid-level economist from Malawi complained of a lack of opportunity and time to apply the skills that were learned in trainings. Instead, they noted that technical work is often outsourced to technical advisors from development partners. This can be a considerable barrier to capacity building in a context where much of capacity building takes place through work on-the-job.

4.3.4 Gender equity dimensions of staff training, retention, and career progression

It was unclear from this assessment how gender-specific barriers affect career growth within MOFs. Responses indicated that women have responsibilities in childbearing and childcare that may impact their tenure and progression, however these were not expressed as discriminatory. From the gender survey of the South African National Treasury, most male and female respondents agreed or strongly agreed that men and woman have equal access to hiring opportunities, promotions, on-the-job and skills training, mentorship, and equity in influencing decision making as relevant to career advancement in their unit. Both male and female respondents felt that their organization encourages them to take parental leave and family responsibility leave. It should be noted that women tended to have slightly less positive perspectives than men.

> *"I would deem proper childcare as something to support women. I see my female colleagues suffer in not having proper childcare to endure. They can be supported in their careers especially as the burden of childcare seems to be predominantly on women. When a child is sick, the women in my office are called away and not the men."*
> *-Nigerian female leader*

Based on interviews with women leaders in Malawi and Nigeria, male favoritism was mentioned as a major obstacle to women equally accessing professional development opportunities including work, training, and professional advancement more broadly. This contradicts gender survey respondents from Nigeria who perceived that there was no disadvantage to any specific gender and stated that women and men had equal opportunities to training and mentorship where the opportunity exists.

> *"Within the state civil service, there are no conditions to help women gain positions. The civil service treats men the same way as women. There is no special condition to favor women."*
> *-Nigerian respondent*

A South African study has made the case that "consideration of women in lower management levels affects their career in the long term as the succession from entry-level positions to higher-level management positions requires a considerable time frame and is often delayed."[34] Some countries in the assessment, such as South Africa and Ethiopia, have family-friendly policies that, for example, institutionalize maternity and/or paternity leave, flexible working hours, and breastfeeding-friendly spaces that enable a smooth transition back to work post-maternity leave.

For this study, female leaders were interviewed to identify major opportunities available that helped them to progress through their career path to their current leadership position; among these, they identified educational opportunities, having female mentors and coaches, internships, and career fairs. Similarly, literature shows that good practices for promoting and retaining women include formal mentoring networks, targeted leadership development initiatives,[35] flexible work environments that are partially underpinned by study scholarships from employers, continuing professional development including on-the-job training, and supportive superiors are mutually reinforcing enablers.[36] One

important lesson learned from a recent systematic review of what works to advance gender equity in health systems, including women's career advancement, found "[...] isolated actions focused on a single level and a single difficulty are ineffective in reducing these inequalities, and it is necessary to have broad approaches that act simultaneously on awareness, on the structural and organizational level, and on the acquisition of professional skills."[37]

4.4 Conclusions on government capacity

Overall on the government side of this assessment, there were rich discussions and findings around the definition of capacities and skills needed to perform resource raising and allocation functions for health and the most notable gaps in capacity that exist. The thematic areas that emerged—of analytical skills, management and communication and PFM—are nuanced and should be understood and addressed in the context of the systems and processes in which they operate. Although appropriate gender equity policies, including affirmative action, gender focal persons and the machinery to act upon these exist, they are often insufficiently operationalized. Most government systems still contain significant gender inequities in recruitment and career advancement. Bureaucratic barriers to recruitment are reportedly as important as salary and benefit considerations, and existing processes including staff rotation and centralized human resource procedures can be counterproductive. Efforts to address the capacity gaps identified should consider both the specific skills required and the systemic barriers to capacity growth and retention.

5 Assessment of capacity and gender equity in academic institutions and training systems

There is a wide range of skillsets required to raise and allocate resources for health, as described in 'Gaps in skillsets and capacity' above. This assessment categorized these capacities broadly into data analysis, communication and management, and PFM. Given it is not a single established academic field, health financing experts come from a range of backgrounds and these skills must be developed through a combination of pre-service educational disciplines and in-service training, mentoring, and networking. This complexity can make it difficult to assess the availability and quality of fit-for-purpose academic institutions, programs, and courses. In addition to the production of graduates, the additional role that universities and academic think tanks play is to generate evidence as needed by policymakers, in effect supplementing the capacity of MOFs and MOHs by outsourcing some of the skills required.

This section starts by exploring university education, undergraduate and graduate, and the range of programs available in the region with particular focus on the availability and growth of health economics programs. While many methodological disciplines are needed, the focus on economics was driven by respondents' perspectives, particularly those of key stakeholders leading regional conversations on this topic. The gender equity landscape around education and training is then explored. The section goes on to discuss three other major thematic areas that emerged from the assessment: in-service training and other channels of capacity building, universities' capacity for policy-relevant knowledge production, and the important and growing roles of regional institutions and networks in health financing functions.

5.1 University based education

The most common degree program that respondents considered relevant was economics or health economics. However, consultations show that there are several other undergraduate and graduate programs from which health financing experts in SSA also commonly originate, including social sciences like economics, business, statistics, and actuarial sciences; medical programs like medicine, nursing, and pharmacology; and programs in-between like health workforce management and public health. The challenge in assessing these programs within the context of this landscape assessment is that many universities have such programs, but from them only a small minority will end up working on the raising and allocation of resources for health.

A primary challenge university faculty highlighted was lack of funding for teaching positions and low salaries, which can create dependency on research funding. In most countries finding competent and willing staff was highlighted as a key challenge, particularly when starting up new programs. University faculty highlighted that the challenge was even more severe for universities further away from the capital city. For example, the low scale of the recently started master's in health economics program at The University of Zimbabwe (four enrollees in its latest cohort, down from six the year prior) is reported to be primarily due to a lack of tutors. A respondent from another country described that

temporary teachers were constantly on the search for better financial conditions and do not hesitate to leave when a competing institution offers a higher hourly rate. As with government staff, some faculty staff also cited data analysis as a key capacity gap to expanding course content.

> *"A self-identified gap is that we're thin on the practical skills in data analysis. You can't teach what you don't know. There is room for improvement among lecturers, and room to increase course content focused on working with data sets."*
> *- Makerere University*

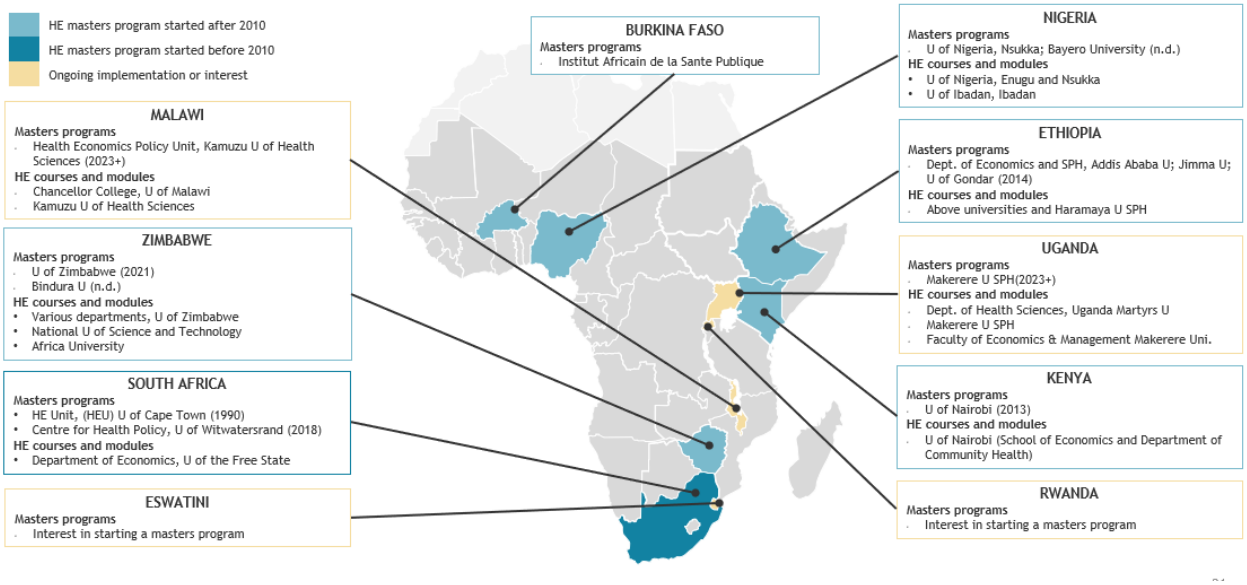
To ensure that graduates align with the country's development agenda and can be absorbed into government positions, governments sometimes engage directly or indirectly with universities. An example is the Ethiopian Education policy, which set a quota for the percentage of new students that were required to join a science, technology, engineering, and mathematics (STEM) discipline. Government can also influence academic capacity building through scholarship candidate selection by National Research Funds. South African university respondents expressed a desire for increased government input on both curricula and research topics. It was noted that this could have the additional benefit of providing more certainty on the level of demand for and consequent resources required for teaching positions.

5.1.1 Health Economics education in the region

Given that health economics is the clearest entry point from any university program to health financing as a profession, it is useful to map out relevant programs in the region and their capacity to meet the current and future need. Six out of nine assessed countries have at least one active health economics master's program. Health economics programs can be based in economics departments as well as in health departments. Studies into broader regional availability of health economics programs indicate that the countries assessed have comparatively strong health economics teaching capacity that is not mirrored in the rest of the region. However, these studies also indicate that the number of active health economists is growing, including in countries without health economics programs.[38,39] Another regional observation is that the vast majority of health economics programs are English taught, which may pose a barrier to the many countries that do not use English as a primary or secondary language. This is reflected in a similar dominance of English in regional academic networks:

> *"As an association, we recognize the need to address gender inequality in this space. We also need to address the language issue. There is a big representation of the English-speaking teams which in most cases happen to be men. How do we bring the French and the Portuguese speaking men and women into the conversation?"*
> *-AfHEA*

Figure 2: Overview of health economics teaching programs in study countries



Of the countries in SSA, South Africa was considered the most advanced in terms of the breadth, maturity, and quality of its health economics teaching programs and research output. The University of Cape Town (UCT) launched the continent's first master's program for health economics in 1990 and continues to be at the forefront of the field in SSA. Its role is relevant in both the national and regional context, as many international students from across the African continent choose to study at South African universities. Nigeria, Kenya, Ethiopia, Burkina Faso, and Zimbabwe also have universities that offer health economics programs at master's level. Master's programs in health economics were launched in Kenya and Ethiopia in 2013 and 2014, respectively. Both program implementations were supported by development partners, but in the case of Kenya the Kenyan MOH as well as UCT were key collaborators in designing and launching the program. Malawi, Rwanda, and Eswatini do not have dedicated health economics programs, but master's programs in health economics is currently in development at the Kamuzu University of Health Sciences in Malawi and Makerere University in Uganda, both scheduled to begin teaching in 2023. The University of Eswatini economics department recently introduced a health economics elective for fourth-year bachelor's students, and expressed a desire to work more closely with the MOH and development partners to demonstrate the practical value of health economics:

> *"When selecting electives, students usually choose courses that they believe will make them employable. For example, most students go for monetary economics since banking is a huge industry in the country. They don't really understand what they can do with Health Economics."*
> *-University of Eswatini faculty member*

There are also institutions not strictly based in a university department that contribute to the training of health economists and to the generation of research output in SSA. Key examples include Kemri Wellcome Trust Health Economics & Research Unit (HERU) in Kenya, Health Economics and Policy Unit (HEPU) in Malawi, Health Economics and Policy Programme (HEPP) in Uganda and Ifakara Health Institute in Tanzania. Africa Center for Disease Control and Prevention (CDC) and the University of Bergen Centre for Ethics and Priority Setting unit have recently signed an MoU for collaboration to help

build capacity and support with analyses, including the University of Bergen unit hiring one PhD candidate and one post-doc to support the Africa CDC Health Economics Program (HEP).

Findings from all countries indicate that most postgraduate applicants are mid-career professionals who already have experience working in the health sector in some capacity. It was noted from multiple university respondents that undergraduate economists do not often progress directly to a master's program in health economics due to a lack of awareness and because of unclear or limited employment opportunities. While there are instances of government-funded scholarships, consultations indicate that students are typically self-funded. Despite these challenges, interviewees in South Africa all noted that health economics programs were oversubscribed—in one case ten times over—highlighting that there is still significant unmet demand.

Overall, assessment findings indicate a need to increase domestic and regional supply of undergraduate and graduate programs relevant to raising and allocating resources for health, in order to build sustainable pipelines of staff that are not dependent on global north universities or development partners. The mapping of the skillsets required for government finance functions to university training is complex. Although a wide range of programs are relevant to meet the need, health economics competencies are seen as core to most respondents and has been used as a case study to explore the linkages to policy and challenges to producing more graduates. Consultations have shown that individual choice of education programs is largely driven by a desire to maximize future employability, as education is often self-funded and associated with significant investment burden on behalf of students and their families. It is therefore imperative to demonstrate the opportunities associated with opting for health financing-related courses and programs.

5.2 Higher education from the gender perspective

Efforts to improve gender parity from primary to tertiary education in fields relevant to health financing have brought steady progress to girls and women's participation and success in SSA and globally.[40] Despite improvements, in the SSA region, only 8 percent of girls and women enroll in colleges and universities as compared to 10 percent of boys and men.[41] In Ethiopia, data from the Ministry of Education Annual Abstract shows that participation of women in tertiary education is very low. For instance, female enrollment in undergraduate programs is only 35 percent for undergraduate programs, 7 percent for master's programs and 10 percent for doctoral programs in the 2017/18 academic year.[42]

Findings from data collected for this assessment indicate variation across countries in student body gender parity. In Nigeria's Enugu University, female students reportedly outnumber male students in health financing related fields, making up 60 percent of the students in health economics programs. Both male and female students have the same entry requirements. In the Northern parts of Nigeria, however, the opposite was reported whereby male students and teachers dominate in health financing. In Malawi, while the general reported trend is that 60 percent of students are women,[43] this was not reflected in the programs reviewed for this study. Despite respondent reports that entry requirements are lower for women, the economics program at Chancellor's College was found to have 40 percent women enrollees. In Burkina Faso, the master's in health economics program at the African Institute of Public Health was nearly in parity but with slightly more men than women, while the MPH program at the Joseph KI-ZERBO University had a 3:2 female to male ratio. In Ethiopia, consultation respondents reported unanimously that there are few women in the candidate pool for master's in health economics programs.

Overall, girls and women face gender-based discrimination to entering, succeeding, and graduating from higher education institutions that contribute to the leaky pipeline in health financing fields. From secondary to higher education, barriers range from 'household and care responsibilities, early marriages and pregnancies, cultural norms that prioritize boys' education, inadequate school sanitation facilities, parental concerns about girls' safety on the way to and from school, and school-related gender-based violence.[44] This is compounded by a wider context of women long having been excluded from education. Gender stereotyping, sexual harassment, and lack of family friendly policies limit the aspirations and advancement of female staff who are already in academia. Masters and PhD programs also often do not have gender-friendly policies, which acts as a major deterrent for female students who are already married and young mothers to continue to health financing post graduate programs.

Residence and regional location were also important barriers to continuing education raised by respondents in Nigeria, Ethiopia, and Zimbabwe. For example, in Zimbabwe, improvements in educational attainment are heavily skewed towards urban populations with little headway among rural populations. According to a study on global trends in women and girls' participation in STEM fields, "adolescent girls from rural or disadvantaged areas are at a higher risk of educational exclusion."[45] As previously described, there are significant regional disparities in female participation in health financing fields in Nigeria.

The data collected also indicates that there are limited numbers of female faculty in the countries in this study. At Enugu University, two-thirds of teaching staff are men; at mid-career, slightly more men than women staff are represented; and by senior levels, eight out of ten staff are men. This suggests that more men are advancing into leadership as compared to women. Respondents from teaching institutions in Burkina Faso stated that overall, universities and colleges do not have formal policies or approaches to ensure gender equity in recruitment, training, or consideration of women's specific difficulties and needs.

> *"To advance as an academic, staff need to spend time (outside of their teaching hours) producing research. However, the university does not provide time or resources for this; one has to make time outside of work hours to do so. This is something that women cannot always do because of family obligations."*
> *-University of Malawi male faculty members*

Such barriers contribute to a gender ratio that is largely in favor of men . In Ethiopia, women only make up 16 percent of faculty at the Addis Ababa University School of Public Health, 7 percent in the University of Gondar School of Public Health, and 15 percent of Addis Ababa University Department of Economics. Out of fifteen health economists in the faculties of Kenya's University of Nairobi and Kenyatta University, only two are women. In Eswatini, since most of the health science courses are based on a nursing qualification which is a female-dominated profession, most faculty members in the courses are women. Both in the Swaziland Institute of Management and Public Administration and Faculty of Health Sciences at the University of Eswatini, women made up an average of 60 percent of faculty across mid to senior levels in both institutions. In Malawi, it was reported that very few women specialize in health economics in university and that those that who earn PhDs are highly sought-after by the private sector.

Some initiatives were identified that aim to better support female students through networking and mentorship. For example, female faculty in the Addis Ababa University School of Public Health launched a 'women's health research working group' four years ago to motivate women faculty and build their capacity in research. The network has helped female faculty share experiences, get

academic support from senior faculty members, and use learnings for career development, said a respondent.

Most Ministries of Education in SSA have commitments to equity in education at all levels. Many universities have either a gender policy or certain gender equity directives as part of broader institutional regulations. As illustrated from data collected for Malawi and Zimbabwe, actions taken include lowering entry points for female students in university entry admissions to promote gender parity; regularly tracking disaggregated enrollment and results by gender; and specific affirmative measures for female students.[46] However, affirmative actions and efforts to build a culture inclusive of women are often piecemeal, underfunded, and not a strategic priority of leadership.

5.3 In-service training, short courses, and internships

Government staff report acquiring many of the specific skills required for raising and allocating resources for health during their service, most commonly through on-the-job experience and short trainings. The most common trainings relevant to raising and allocating resources for health that were mentioned by respondents were short courses from the World Bank and WHO. Various development partners active in study countries also offered trainings on topics like health financing, costing, budgeting, and planning; for example, the African Economic Research Consortium (AERC)'s advancement of economic policy research and training. Representatives of WHO AFRO lamented that the short course approach has failed to have a transformational impact on health financing capacity on the continent and that a new approach is needed. They also underlined the vital need for coordination among stakeholders:

> *"I feel that we should all be working towards once common goal: That each country in the continent has internal technical capacity to drive health financing reforms. A lot of ongoing initiatives focus more on the process rather than this end goal."*
> *-WHO AFRO*

Skill growth on-the-job has emerged as a key channel of capacity building among government staff interviewed. However, respondents from several countries highlighted that there was a complete absence of a training plan in their MDA. Even in cases when a needs assessment was conducted, there was usually a lack of funding to fill the assessed gaps. A Malawian respondent explained that staff usually must proactively find training opportunities or self-teach to learn more advanced topics that are not picked up on-the-job. As described above, there was little or no in-service training focused on gender equity or specific relevant skills such as gender-based budgeting according to respondents.

Discussions of on-the-job and short trainings highlight a sustainability challenge in past efforts to build capacity in raising and allocating resources for health due to being uncoordinated, too small scale to build broad based capacity and often not tied to day-to-day responsibilities. If targeted effectively these courses may build technical skills in the short term, however systemic challenges to staff turnover, rotation and growth must be addressed for these skills to be sustained and built upon.

5.3.1 Government colleges and civil service training institutions

A key domestic source of capacity building, at least in theory, are government colleges like South Africa's National School of Government, Eswatini's Swaziland Institute of Management and Public Administration, Kenya's School of Government, and Ethiopia's Civil Service University. These colleges are found across SSA countries and have the mission of building capacity in the public sector. Unfortunately, interviews found them to have little to no impact on strengthening health financing

capacity. The best example was found in Kenya, where the government college offers training on management/leadership and PFM. Other respondents reported that their government college is outdated and not internationally competitive, while the college itself complains that MDAs need to take initiative:

> *"MDAs must articulate to us what they require us to do for them so that we can program it. Then we go and look for capacitation if we are short, there is no point in them sending their people far away when government has built this structure."*
> *-Swaziland Institute of Management*

Nevertheless, findings from Kenya indicate government colleges may have a comparatively wider subnational reach. Four out of five respondents at county level working in both health and finance reported having received the 'health systems strengthening' training from Kenya's School of Government, with most having also received a different training from different development partners. This suggests that training through government colleges can help ensure consistency in training and messaging, particularly across subnational entities.

Case example: Burkina Faso's National School of Finance (ENAREF)

ENAREF is a public administrative institution under the supervision of the MOF. It opened its doors in 1988 and welcomes national students and trainees as well as those from several other French-speaking African countries. As of 2022, ENAREF's teaching staff is composed of about one hundred high-level national and international experts and specialists, divided into permanent and temporary teachers. ENAREF offers introductory and graduate programs in fields like finance, accounting, economics, decentralization and regional planning, and management. It also offers short courses on topics such as: program budgeting and results-based management; and preparation, programming, and budget execution focused on gender mainstreaming. Students gain access to ENAREF mainly through professional and direct civil service competitive examinations and ENAREF entrance tests. These students come mainly from countries in the West African Economic and Monetary Union (UEMOA) zone (Burkina Faso, Niger, Côte d'Ivoire, Mali, Togo, Benin), but also from countries outside of the zone (Guinea-Conakry, Guinea-Bissau, Central African Republic, Congo Brazzaville, Gabon, Chad, Comoros Islands). Students mainly come from national and foreign universities and public and private institutes as well as national and foreign public and private administrations.

ENAREF does not offer specific training in health financing, but it trains managers and operational actors responsible for PFM deployed in all ministries. This includes initial and ongoing training as well as capacity building sessions organized on an ad hoc basis for institutions. ENAREF could play a more important role in strengthening health financing capacities in Burkina Faso and in neighboring countries through:

- The creation of training modules dedicated to health economics, health financing, or the specifics on PFM in the health sector, and
- The creation of favorable conditions for students to access these training modules (setting affordable training fees and awarding scholarships and/or grants with a gender and equity perspective).

5.3.2 Internships and secondments

Internships, secondments and fellowship programs linking university students and graduates with the public sector have the potential to build capacity in government while growing awareness and prestige of public sector jobs among a range of disciplines. They can nurture a pipeline from universities to government institutions. The South African National Treasury Graduate Development Programme (NTGDP) based at the MOF runs for two years and is considered competitive, receiving a healthy number of applicants annually. The NTGDP is aimed at students near graduation as well as the newly graduated and takes students from a wide range of specializations from accounting, finance, and economics to development studies, computer science, and events management. There is a similar internship program organized by the South African MOH.[47] Research has found in several countries that the high esteem in which an MOF is held is a strong pull factor, partially because work experience at the MOF will improve the chances of securing employment in the private sector later on.[48] In Kenya since 2011 the AERC has partnered with the MOF to place master's and PhD students on a three-year internship program to strengthen economic policy analysis and financial management capabilities. [49] During the 2020/21 fiscal year the Kenyan MOF had 37 master's graduate interns, of whom 9 completed their mandatory three-year internship period. The program has seen 36 interns in total fulfil the internship term, of whom 25 have been employed as economists at the Kenyan MOF. Smaller, ad-hoc internship experiences were also recorded at the MOF and MOH in Ethiopia. University respondents expressed interest in establishing internships in many countries, but government staff highlighted rigid and bureaucratic recruitment practices as a barrier to fully leveraging these programs.

Best practice learning opportunity: South Africa MOF Health and Social Development Department

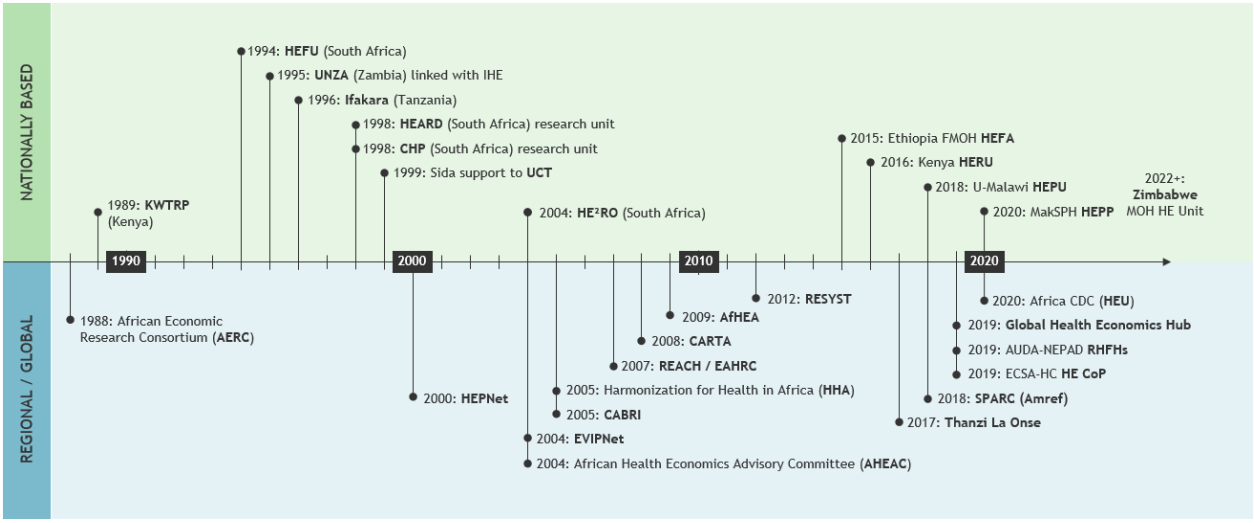
An example of a team with strong capacity is the Health and Social Development Department at the National Treasury in South Africa. It was noted that the Health and Social Development Department operates in a lean team that leverages partnerships for specific analyses as necessary and whose skillset goes beyond generic quantitative analysis to health sector-specific applications. The five core staff at the time of consultation had backgrounds in commerce, public health, and business administration, and included two PhDs in health economics and business administration. Success factors mentioned by respondents include the competitive intern program, incentives and support for junior staff to further their formal studies, mentoring, and opportunities for professional development within and across directorates in National Treasury. Research indicates that the relative strength of MOF compared to line ministries like MOH is not unique to South Africa, but a common feature across countries of all income brackets.[50]

While regional growth in university programs relevant to health financing is necessary to transform the health financing capacity in the long run, there are clear benefits in supplementing this with short courses, in-service training and mentoring, internships, secondments, and fellowships. These channels of capacity strengthening have an important role to play in supplementing the skillsets of staff and linking graduates from one discipline with the multidisciplinary needs of health financing policy. Such channels must be coordinated and have time horizons that allow for institutional capacity growth and learning that complements existing capacity and is maintained over time.

5.4 Academic institutions as research producers and their link to policymakers

Academic institutions and regional networks can support in generating and using locally relevant evidence for raising and allocating funds for health. This section primarily discusses nationally based initiatives, programs and thinktanks, while the following section focuses on regional and global initiatives and consortia. Because regional initiatives often seek to strengthen capacity of domestic academic institutions, there is some overlap. The following timeline depicted in Figure 3 provides an overview of the initiatives raised during this landscaping assessment.

Figure 3: Timeline overview of regional/global and national academic capacity building initiatives



In addition to training experts, academic institutions have a role in generating locally relevant evidence that can play a vital supporting role in making the case for raising and efficiently and equitably allocating funds for health. However, the financial realities of many SSA universities means that research focus is often steered by access to donor funding and is not always aligned with the biggest needs in a country.[51] Funding can also be unpredictable, with respondents in South Africa noting certain funders withdrawing funding for research virtually overnight following the Covid-19 pandemic outbreak. Fulfilling the supporting role requires that researchers, units or other collaboratives are enabled, structured, and incentivized to seek out policymakers and policy-relevant questions around which to generate evidence.

5.4.1 Policy focused research units

One approach to improving academic institution's ability to inform policy is through the establishment of HEPUs or similar health financing research-to-policy units housed at domestic universities or academic institutions, such as the Kemri Wellcome Trust-supported HERU in Kenya or the Thanzi La Onse-supported HEPU in Malawi and HEPP in Uganda. Thanzi La Onse is an international project led by the University of York that collaborates with and supports Malawi and Uganda HEPUs in generating high quality research to inform resource allocation decisions to improve population health and reduce health inequalities in these countries and across the region.[52] Units can also be housed in regional bodies, such as Africa CDC's Health Economics Unit, described in section 'Regional institutions and networks' below. These units can sit between MOH Planning Departments and Universities and usually

have the explicit purpose of working in partnership with government, so that research output is guided by government policy questions[53].

After research evidence has been produced, it is important that policymakers have an interest in and capacity to absorb it. This was a recurring theme that emerged from consultations and discussions with regional and country stakeholders. The Lancet Commission on the future of health in SSA highlights the need to develop expertise in knowledge translation in order to strengthen links between researchers and policymakers and increase the uptake of research results[54]. In Uganda, the Supporting the Use of Research Evidence project, based at Makerere University, tested a rapid response mechanism to provide policymakers with evidence on health topics including health financing. It generated interest from policymakers increased their confidence in the policymaking process.[55] A wider initiative with a similar aim is the Evidence-informed Policy Network (EVIPNet), launched in 2005 by the WHO. EVIPNet Africa was launched in 2006 with seven partner countries across SSA, but by 2021, the Africa network had only been implemented in 13 member states.[56]

The initiative for university-government collaboration can also come from government. The South African National Treasury was mentioned as a positive example of an MDA that has prioritized proactively leveraging capacity available from external partners including universities, private sector, and development partner-funded technical advisors. Examples referenced were a collaboration with the University of Witwatersrand to develop evidence for the introduction of a sugar-sweetened beverage tax, contracting private sector actuaries, and developing an HIV investment case together with Boston University. In Ethiopia, a Health Economics and Financing Analysis (HEFA) case team was established within the MOH in 2015 to institutionalize health accounts practices among other functions.[57] At the time of this study, however, the HEFA and resource mobilization case teams were almost entirely made up of development partner secondments, meaning that the units ran a high risk of losing human and financial resources with shifting donor priorities.

Lessons learned from the attempted creation of research-oriented MOH units in South Africa and Burkina Faso

In 1994, the South African Minister of Health championed the creation and financing of a health economics and financing unit. The unit established strong ties with three universities, including establishing an internship program, and by the early 2000s the unit had a staff of 10 qualified health financing specialists. Similarly in Burkina Faso, in 2018 the Minister of Health attempted to close the gap in evidence-to-policy translation through the creation of Knowledge Management and Transfer Unit (UGTC).

Unfortunately, neither unit was sustained. In South Africa, the unit director left in 2003 and was not replaced; as donor funding simultaneously ceased, the unit progressively began to disintegrate. In Burkina Faso, the unit failed to fulfil its intended purpose after insufficient funds for recruitment were allocated beyond the head of unit. In both cases, respondents highlighted a lack of support and understanding of the benefit the units could offer as the key reasons for failure, illustrated by an unwillingness at central levels to fund staff positions for these units. A respondent with experience in the South African unit described the main issue in this way:

> *"The main cause of the unit's disintegration was a lack of appreciation and understanding of the unit and the work it did internally at the MOH. Most colleagues came from clinical backgrounds and sometimes had trouble*

> *understanding health financing and economics approaches. In addition, by the end of 2005 the unit's responsibilities had shifted toward tasks more suited for accountants, thereby reducing the attractiveness of the unit to health financing experts."*

While these relationships between government and academia are critical, they only exist in a few countries. University respondents with an expertise in health economics from across SSA highlighted a lack of collaboration with the public sector as a missed opportunity and voiced their interest in establishing stronger partnerships. While individual experts are sometimes consulted by government or development partners as part of health financing projects, formal partnerships were reported to be rare. A 2017 mapping[58] of Health Systems Research Institutions in Eastern and Southern Africa did find that 21 of 29 surveyed institutions reported collaboration with government, but it is possible this number is more a reflection of interest than formal partnership.

5.4.2 North-South academic partnerships and decolonization of global health

This study has found it very common for SSA universities to have partnerships of some form with one (often several) 'global north' universities to build capacity in training graduates and in producing high-quality and locally relevant research. Such partnerships, often originating from high-income countries, can certainly be valuable to SSA universities, but some have been criticized for failing to strengthen, incorporate, and involve institutions from LMICs in priority setting and publications.[59] An additional issue is the risk that SSA students who study in the global north as part of such partnerships decide to stay in the host countries and thereby do not contribute toward building a critical mass of expertise in SSA.

> *"Partnerships can also contribute to the brain drain (of elites). Indeed, after training in Northern institutions, some elites are attracted by more advantageous offers and working and living conditions, even if the return to the countries of origin is sometimes mentioned as a condition for the granting of scholarships."*
> *-Burkina Faso respondent*

Respondents from Makerere University echoed this concern, stating that regional collaborations are more sustainable than north-south collaborations, and providing an example:

> *"The Africa Hub Initiative is one south-south collaboration example - 5 or 6 schools of public health focusing on capacity building for health systems research, with Makerere University as the coordinator. The Initiative was successful and still exists, but there is an issue with a lack of resources. Through the initiative, network of external examiners of MPH students was created."*
> *-Makerere University respondents*

At the same time, the longstanding partnership between Makerere University in Uganda and Karolinska Institute in Sweden (supported by Sida) is an example of a successful north-south academic relationship. It has produced nearly 50 PhD graduates, with all graduates remaining in Uganda after the completion of their PhD.[60] The recent north-south South Ethiopia Network of Universities in Public Health project in Ethiopia, which placed a larger emphasis on building local capacity and reducing the amount of teaching in the northern institution in favor or localized teaching, concluded that the strategy can be effective for building capacity while retaining talent on the continent.[61]

In summary, there have been a number of initiatives from the side of universities to generate evidence and put in place mechanisms to respond to the evidence needs of policymakers. However, resources to establish these initiatives have often come from donors, government demand for their products is inconsistent and the collaboration required with governments and other universities is often reliant on personal relationships and short-term funding. For such initiatives to be sustained, they must be met by a demand for this evidence from the government. This will need to be coupled with resources that flow through government to incentivize faculty and students to continue to enter this field of research.

5.5 Regional institutions and networks

5.5.1 Regional organizations

Regional institutions and networks are important to filling gaps in regional knowledge-sharing, evidence generation and translation, and teaching capacity. Depending on their role and capabilities, they have potential to convene and coordinate governments and development partners; hold governments accountable to funding health and improving gender equity; provide technical support in using evidence and regional knowledge for policymaking; build capacity of governments and individuals; and strengthen local academic institutions' research and teaching capacities. Outside of South Africa, inter-African university collaboration accounts for less than three percent of Africa's total research output and depends largely on personal relationships.[62] Limited data systems and quality also pose systemic bottlenecks to evidence generation.[63]

One important ongoing regional initiative is the Africa Leadership Meeting (ALM) Declaration; '*Addis Ababa Commitment towards Shared Responsibility and Global Solidarity for Increased Health Financing Declaration*,' which emerged from a regional meeting in Ethiopia in February 2019.[64] The main objective of the ALM declaration is to drive growth in domestic financing for health. This declaration calls for the establishment of Regional Health Financing Hubs (RHFH) in each of Africa's five regions, led by the Regional Economic Communities (RECs). Specifically, hubs will offer practical and technical expertise to help implementation of initiatives outlined in the ALM declarations, facilitate cross-country learning, and coordinate alignment of development partner efforts with Africa's priorities. Representatives interviewed for this study view the health financing hubs as central to addressing the gaps in health financing skills and capacity. They also added that health financing tracker, which is one of the ALM initiatives, is important to keep governments accountable in their commitments to allocating more resources to health. An individual from African Union Development Agency's New Partnership for Africa's Development stated that "*many are talking about innovative financing, but few are talking about efficiency in utilization of domestic resources.*"

Global development partners support governments and build capacity in health financing and gender mainstreaming in different ways beyond providing funding. This can take the form of direct technical assistance to governments in areas like National Health Accounts and Gender Responsive Budgeting, joint efforts like the CABRI and Africa Regional Technical Assistance Centers (AFRITAC), PFM and health financing short courses such as those offered by IMF, WHO and the World Bank, entering academic partnerships with local institutions, and by bringing ministers and other high-level stakeholders together like the African Governors Caucus at the World Bank and the Harmonization for Health in Africa initiative. African women leaders advocating for gender equity in healthcare systems and national governments are other important platforms to leverage regionally. Examples include the African Regional Hub of Women in Global Health and the African Women's Leadership Network.[65] Regional organizations like AfDB and AERC are also important actors for financing and capacity

strengthening in health financing and gender equality. For example, AfDB representatives interviewed for this landscaping indicated that the World Bank applies gender diagnostic tools to all potential grantees to ensure gender equity when considering the beneficiaries of the project they are funding.

> *"Most of our operations look at things from a gender equity lens, so for every project we fund, it must be disaggregated into how many women the project will reach in terms of beneficiaries and how many women will be part of the decision making."*
> *-AfDB*

The East, Central and Southern African Health Community is an active collaborator with regional and international research institutes and development partners on several health financing capacity strengthening initiatives. There may be potential for other regional organizations to play a similar role.

Africa CDC is another key regional institution for both its convening power and role in building capacity for evidence generation and translation within SSA governments. With support from the Centre for Global Development, the HEP at Africa CDC was established in November 2020. It aims to bring health economics closer to policymaking and to strengthen capacity, research, and evidence translation. The HEP was designed to support the mobilization and use of important health economics evidence for both the Africa CDC and African countries, including support for local capacity building. The aim of the HEP is to leverage itself within the Africa CDC and African Union (AU) to mobilize existing health economics expertise and deploy them for continental, sub-regional, and country policy processes.[66] In February 2022, Africa CDC was elevated to the status of an autonomous public health agency for the continent, thereby having its position strengthened. During this study's consultation, the head of the HEP expressed:

> *"We are still in our early days for Africa CDC, so we are having discussions with potential partners to secure funding. We seek to embed capacity strengthening into everything we do. Take research as an example: if study is commissioned in our organization, we will ensure some skill transfer takes place to the ministry or department concerned."*
> *-Head of Africa CDC HEP*

5.5.2 Other regional initiatives

The Resilient and Responsive Health Systems (RESYST) was a more temporary initiative (2012-2018) focused on evidence production and capacity-building within academia. The international research consortium aimed at 1) producing a coherent body of policy-relevant health systems research, with a focus on gender and intersectionality, while 2) building capacity of 'global south' member institutions to strengthen and sustain this research, and 3) supporting dissemination and use of evidence in policy decisions and debates. Led by the London School of Hygiene and Tropical Medicine with membership from 10 universities across the global south, it was highly successful at producing policy-relevant research and influencing policy decisions (e.g., the NHI in South Africa and the National Health Financing Policy and Strategy in Nigeria, among others). It also supported member institutions to become 'go-to' sources of advice and evidence for policymakers, relationships that continue to this day—e.g., KEMRI Wellcome Trust in Kenya, Health Economics Unit at UCT in South Africa, and Ifakara Health Institute in Tanzania (among others).[67]

Other regional and international collaborations have seen significant success in building a critical mass of experts through strengthening SSA academic institutions' capacity. RESYST aimed to build capacity for academic research at global south institutions, accomplishing a high rate of LMIC and female lead

authorship and success in follow-on funding grants.[68] The Consortium for Advanced Research Training in Africa (CARTA) is an Africa-led network of universities, research institutions, and international academic partners, formed with northern donor funding. It aims to improve capacity and collaboration among member institutions, with the goal of developing a critical mass of highly trained African scholars at PhD level who apply research skills to solving regional population and health issues. CARTA accomplishes this goal through scholarships for PhD fellows and institutionalization of proven CARTA 'innovations' within member institutions—such as improvements to mentorship and supervision; seminars to advance research skills; fellowships and workshops for faculty; and ongoing workshops, grants, and mentorship for fellows post-graduation. While not directly focused on health economics and financing, CARTA has achieved high completion rates in a relatively short time who go on to generate prolific research outputs, with a strong focus on women's leadership and success.[69,70,71]

In addition to driving knowledge exchange, regional consortia and initiatives have promoted women in academia through prioritizing female authorship and implementing scholarship quotas. For example, CARTA has purposely aimed to support women's enrollment (required 60:40 women: men ratio) and success, leading to similar participation rates among women and men. CARTA "achieved this by meeting women's practical needs around childbearing and childrearing" and "…has produced some outcomes that challenge gender norms, such as fathers being child minders in support of their wives and creating visible female role models."[72]

Much of CARTA's success comes from its networking power and ongoing support for graduates, which helps maximize the benefit of expertise that is built. These supports often do not exist for government staff, which can lead to feelings of isolation. A respondent from a regional consulting firm said that:

> *"Officials can feel quite isolated after returning from their skill development program. Taking skill transfer further by including ongoing facilitation and support has shown good results in other areas of public health, so should have potential for health financing too."*
> *-Genesis Analytics*

An initiative that aimed to address this challenge was the Health Economics Policy Network (HEPNet), which came out of Sida support for strengthened regional health economics capacity through the Health Economics Unit at South Africa's UCT between 1999 and 2013. It both supported capacity development of PhD students through scholarships and supplementary trainings on communications, health economics, and policy; and facilitated regional networking between academia and government institutions. Initial successful outcomes included regional workshops and meetings organized, increased understanding for health economics by ministries of health, and most appreciated, being connected to the wider international arena through the international Health Economics Conference.[73] Consultations suggest that individuals who were part of the network have gone on to become influential regional experts and have acknowledged the value HEPNet offered. Nevertheless, HEPNet experienced challenges with sustaining commitment, cooperation, and communication within such a diverse network,[74] and was not able to secure sustainable funding for institutionalization after Sida funding ended.

A successor of HEPNet Is the African Health Economics and Policy Association (AfHEA), a bilingual (English and French) non-political and non-profit association inaugurated in March 2009 with headquarters in Accra, Ghana. The overall mission of AfHEA is to contribute to the promotion and strengthening of the use of health economics and health policy analysis in achieving equitable and efficient health systems and improved health outcomes in Africa, especially for the most vulnerable

populations. It accomplishes this through contributing to the development and retention of health economics capacity in Africa, promoting the use of health economics tools in decision-making processes, and contributing to regional information exchange between researchers and policymakers. Its membership includes over 350 health economics, financing, and policy experts from African countries residing within and outside the continent.[75] A WHO AFRO representative explained the critical role AfHEA has played in advising the regional team: when WHO AFRO's African Health Economics Advisory Committee was founded in 2004 but failed to take off, AfHEA successfully stepped in and replaced this Committee's core function of advising the WHO regional director on key issues. A representative from AfHEA explained the association's critical role in sustainable capacity strengthening:

> *"A lot of short-term capacity building initiatives are ongoing but at AfHEA we lean towards the long term because we believe the piece meal approach would not really lead us to where we want to be. When I talk about longer term, ''m talking of partnerships with universities and training institutions."*
> *-AfHEA*

Based on consultations with researchers, there is a lack of connectivity with regional health financing networks and room to strengthen their role. AfHEA was mentioned by some, as was the Nigerian branch of the International Health Economics Association. Interestingly, respondents from both Nigeria and Malawi expressed a wish for the revival of previously active domestic health economics and policy associations that had become defunct. The past role of Sida in working toward regional integration of health economists through HEPNet was appreciated by respondents from different countries, while the University of York was highlighted by respondents in Eswatini, Malawi, and Uganda as an important current partner through their role in the Thanzi La Onse project.

5.6 Conclusions on academic institutions, education and training

To conclude the findings on academic institutions and training, the 'supply' side of this landscape assessment is a complex one. There is general agreement from the literature and consultations that the regional and local output of graduates with the necessary skillsets is insufficient, and that many graduates with appropriate skillsets are drawn toward other sectors or abroad. Gender inequities are prevalent among faculty and students, although they often reflect deeper social norms and roles rather than policies of universities and training institutions. Findings indicate challenges with creating new programs as well as underutilized output potential in some existing health economics programs, largely related to issues with attracting and adequately paying teaching staff.

There are country- and university-specific efforts to address this, but they often require significant resources and time horizons for funding that are not the norm. A range of solutions has been built up to try to creatively address the lack of supply, including on-the-job training, mentoring and secondments. Consultations indicate that improving linkages between academia and government—for example, by supporting curriculum development, commissioning research, and establishing internships—may strengthen interest in programs by demonstrating value and providing a clearer career path, while also increasing attractiveness of faculty positions by providing additional funding and opportunity to leverage their expertise toward policy-focused evidence production. Governments stand to gain from strengthened linkages through the potential for better informed budgeting and evaluation processes.

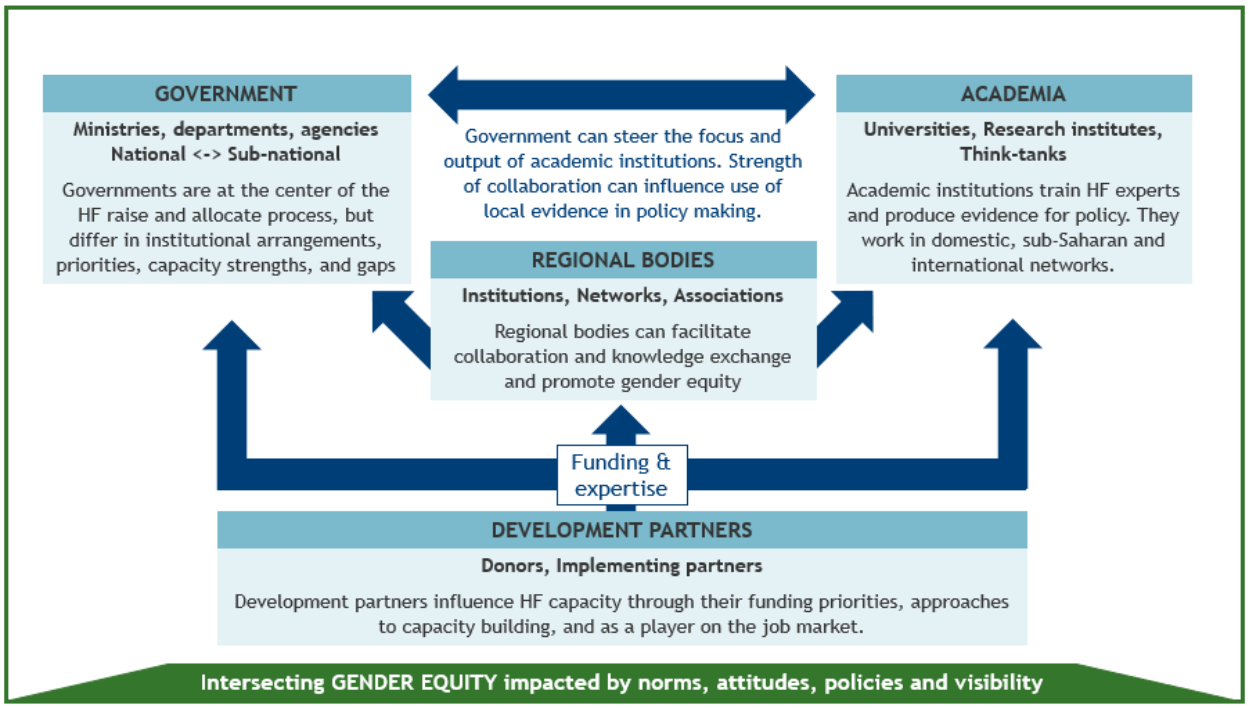
Regional organizations have demonstrated an ability to facilitate the bridging of this gap, and development partners can play a supporting role by providing opportunities for students and faculty to

contribute. These efforts all have potential to contribute to capacity growth, however they must be coordinated within coherent, long-term country and regional plans rather than being implemented ad hoc as quick fixes or short-term innovations.

6 Opportunities for intervention and investment

Emerging from consultations, several opportunities emerged that may help address the capacity gaps identified across this assessment. The framework depicted in Figure 4 summarizes the stakeholder groups included in this assessment and their interrelationships, including government agencies (MOFs, MOHs, Ministries of Gender, etc.), academic and research institutions, regional bodies, and development partners (implementing partners and donors). Each of these stakeholders plays an important role in intervening to improve and advance investment in social sector capacity for health financing across the continent. Findings suggest that realization of opportunities may occur through interventions complement support across these stakeholders.

Figure 4: Sustainable Capacity Building Framework



The remainder of this section outlines opportunities for further action and investment involving one or more of these major stakeholders, as identified through our consultations. However, it is important to note the limitations of these recommendations, as the applicability and feasibility of these opportunities will vary across contexts and would require action from a range of actors to be successful. While some opportunities such as training and mentoring are more discrete, short-term examples, long-term systemic change and sustained impact will require a fundamental shift in institutional structures and processes, in addition to the infusion of external funding not currently available. This list is therefore neither exhaustive nor sequential, but represent a starting point for advancing the kind of multi-pronged collaborations that will be required to address persistent capacity challenges in social sector health financing.

OPPORTUNITY AREA: Establish stronger linkages between government and academia

Findings showed there is weak communication and collaboration between government departments and universities, but that universities are interested in increasing their engagement with government.

To strengthen this linkage, governments must better define and communicate capacity needs and policy objectives to teaching institutions, to **inform or create course and program** offerings relevant to health financing. Governments and universities should jointly explore the potential for **student involvement** to carry out assignments in support of government processes as part of coursework or thesis writing or allow access to government financial and health data to strengthen data analysis training of students.

Investments could support the establishment of formal engagements between governments and universities to **commission policy-relevant studies or analyses** and design programs that address skill gaps, to work towards a virtuous circle of government demand and university supply of evidence generation and use. Universities should be engaged early to allow time for rigorous work and government requests should be associated with appropriate funding.

Initiatives could establish **post-university fellowship, internship, and/or mentorship** programs with governments, regional bodies, and/or development partners. This would help graduates apply theoretical knowledge learned during training and help to more directly link capacity development to targeted job skills. In addition to building a pipeline of qualified candidates, these types of programs would help increase the visibility of public sector positions; increase competition and prestige of positions; build relationships between individuals and institutions on supply and demand side; and develop momentum and ideation within student pools. South Africa's National Treasury and the AERC are examples of potential models to be emulated.

OPPORTUNITY AREA: Establish institutional health financing-focused units

This assessment has identified existing units specialized in health financing within both government and academic institutions. While their roles are distinct, effective collaboration can help to bridge the gap between government and academia and can serve as strong national focal points for public sector health financing expertise.

Health Financing Units (HFUs) within government can serve as the focal point for economic and policy analysis towards the development of investment cases for negotiation with MOF as well as the legislature. The structure and implementation of these units affects longevity and ownership, so it is important that these units are carefully designed (learning from challenges previously described in the South Africa and Burkina Faso contexts). It is recommended that units are embedded within government systems, such that civil service positions are created with health financing-specific terms of reference that fit into the government organogram and are paid as government employees.

Units funded directly from external resources can often be standalone, with unclear reporting lines and mandates, and dependent on key people/champions and funding sources. Where external funding is needed to set up these units, these challenges can be mitigated by passing funding through government channels.

OPPORTUNITY AREA: Establish institutional policy-focused units at universities

Alongside HFUs, purpose-built university units focused on producing policy-relevant research can complement government units and create a supply and demand dynamic for evidence generation and use.

Health Economics and Policy Units (HEPUs) or similar health financing research-to-policy units can be housed at universities, but with the explicit purpose of working on policy questions in partnership with government, with a particular potential for synergy with HFUs. HEPUs are likely to need external funding at first; however, their aim is to achieve self-sustainability over time by demonstrating value to governments through the improved value for money, health outcomes, and equity that may follow from building more robust evidence into policymaking. Thanzi La Onse has successfully supported HEPU creation in Malawi and Uganda, and is now designing plans to support others in SSA in setting up similar initiatives.[76]

This value proposition should generate further interest from governments, who will in turn commission more research, generating a continuous cycle of demand. This will (1) allow academic units to access government funding, receive commissions, and conduct policy relevant work, while (2) providing policymakers access to research skills and technical support they may not be able to (or need to) hire on a full-time basis. **Other research units** at universities, like South Africa's Health Economics and HIV/AIDS Research Division, Center for Health Policy, and Health Economics and Epidemiology Research Office may raise research quality and status, increase the opportunity for doctoral students, and improve universities capacity to inform policy though evidence.

OPPORTUNITY AREA: Improve conditions for gender-equal opportunities

Target interventions within government and educational institutions to support gender representation in recruitment, retention and career growth and awareness of gender equity policies and mechanisms.

Findings from focus countries show that women are under-represented in government health financing departments within raise and allocate positions in general, but that there is variation in terms of women's representation in senior leadership across countries. While these cases of proportional or slightly higher women's representation in leadership are encouraging, this assessment also found several examples of unequal barriers facing women. It should be noted that isolated actions focused on a single institution, level or barrier may be ineffective in reducing many systemic inequalities; as such, holistic interventions with political backing at high level are preferable to achieve lasting change through changed cultures and norms.

Discrete investment opportunities include investing in female **mentors** and **coaches**, targeted **leadership development** initiatives, and other empowerment mechanisms to inspire confidence and avoid internalizing cultural prejudices that may have a self-censoring or self-limiting effect. Female mentorship will help build role models for women earlier in their career, increase motivation, and build companionship to help mitigate the challenges of navigating a male-dominated field.

To attract more female candidates, governments and partners should strive for **exposure of female experts** from the health financing field at public events like career fairs, conferences, and

advertisements to act as role models and encourage women to enter the field. Governments must aim to improve the adequacy and **awareness of benefits** like parental leave and explore potential policy improvements such as making parental leave more equal by increasing leave days for fathers. Collection and analysis of data on the real-life implication and **effectiveness of gender quotas** at lower levels (Ministry, University, department, unit) has the potential to inform better designed policies.

These approaches should be **backed by human and financial resources**, family-friendly policies, and engagement of men as allies. Others can learn from the Ethiopia MOH's Leadership incubation program for health, which offers women structured leadership courses, coaching, mentoring, networking, and shadowing in collaboration with the American International Health Alliance.[77]

OPPORTUNITY AREA: Strengthen and optimize the government gender machinery

In addition to encouraging more female leadership and participation in the workplace, there is also a need to strengthen coordination and collaboration among the Ministries of Gender, Finance, and Health to promote gender responsiveness in raise and allocation health financing processes. Exemplars include multisectoral commissions such as those in South Africa and Zimbabwe, which hold their own governments to account in meeting regional commitments.

A starting point is to better **integrate government gender machineries** to avoid remaining politically marginalized, under-funded, and siloed. Initiatives undertaken should avoid perpetuating the perception of gender as a 'women's issue,' often exemplified by the placement of gender focal points within MOH in Sexual and Reproductive Health Departments without significant involvement in overall PFM processes. This integration should be supported through formalized multi-stakeholder groups to engage government, civil society, and donors in mainstreaming gender into health financing functions and the health sector in general.

One tangible function related to raising and allocating resources is the **institutionalization of Gender Responsive Budgeting (GRB)** by integrating a gender lens into PFM of healthcare—across planning, budgeting, spending, and monitoring—and building capacity for implementation. A clear opportunity could be advocating for and supporting the collection and analysis of sex- and age- disaggregated data. This could be followed by monitoring and accountability frameworks to track implementation of GRB and ensure results.

Support must be given to national and regional **gender equity initiatives** and international treaties such as the African Gender Equality Strategy for education, developed by the Forum for African Women Educationalists and passed by the AU in 2018, but that is yet to be effectively implemented. A related area of support is the **reinforcement of regional bodies** such as the Southern African Development Community, East Africa Community, and Economic Community of West African States that have normative frameworks that push for gender parity and track member states' progress, and national Gender Equality bodies.

OPPORTUNITY AREA: Strengthen existing university training programs and institutions and develop centers of excellence

This study's literature review and consultations have shown that there is an insufficient supply of graduates in the region with the skillsets required to perform health financing functions of raising and allocating resources. The supply gap is exacerbated by the fact that graduates are less attracted to government service than opportunities abroad or within the private sector.

Aside from more catalytic and innovative investments, there is a fundamental need to shore up investments in existing universities and research institutions that offer health economics and health financing programs. Governments are likely to want to invest in universities domestically, but the uneven distribution of programs suggests that strategic investments in regional centers of excellence may also be fruitful. Institutions can then be **networked** to share faculty and other resources, as well as to establish **exchange programs** among students. The Government of Rwanda is in the scoping stage of establishing a regional Center of Excellence in Health Economics. With investments in the Center, it could serve to increase the health financing expertise not only in Rwanda but across the region. This could leverage lessons from initiatives such as CARTA in building the quality of training programs and securing the future of graduates. Having evidence-based 'innovations' in training programs and facilitating learning and networking between institutions on the continent in implementing and institutionalizing these innovations could help promote quality of programs.

Within these investments, there should be explicit mechanisms to **prioritize female authorship** and establish **scholarships** and fellowships for women to access programs connected to the health financing workforce. They can explore ways to **change or mitigate practices** that disfavor women's progression, such as research work predominantly being carried out in after-hours, conflicting with women's disproportionate domestic responsibilities.

OPPORTUNITY AREA: Support the expansion of new university training programs

While the last ten years have seen positive growth in the regional supply of health economics programs and tertiary teaching institutions in general, there are still comparatively few universities and research institutions offering health economics and health financing programs in the continent, and they are mainly taught in English. In consultations, major universities in countries not currently offering health economics programs expressed plans or interest in their establishment.

Investments should support universities in the region to **establish programs** for health economics and health financing that are responsive to the needs of the government towards bridging the skill gaps. This will entail the development of tailored and sustainable health financing introductory / graduate programs through collaboration between government, universities, development partners, and national schools of government.

Initiatives should leverage lessons from similar initiatives like the establishment of Health Economics programs at UCT funded by Sida through the HEPNet program and University of Nairobi supported by USAID and World Bank. A few universities such as Makerere School of Public Health in Uganda and University of Rwanda School of Public Health are in formative stages of starting programs and could

benefit from such investments. Particular attention should be given to **regional imbalances** in the supply of training programs, and the potentially larger comparative benefit of investing in non-English speaking courses.

OPPORTUNITY AREA: Build in-service training capacity targeting existing government staff

In conjunction with strengthening university programs and their pipelines into government, it is important to also invest in more constrained, tailored, and direct channels of capacity building. Particular attention should be placed on the highest-value skills and in MDAs with high tenures and low turnover of staff.

Consultations with government health financing staff identified the need to implement or improve **needs assessment** practices to progress upon the indicative capacity gaps identified through this assessment into recurring, more broadly representative but country-specific lists of capacity building priorities.

Investments could target **short courses and mentorship programs** for current national and sub-national staff engaged in health financing at both in MOF and MOH. These short courses could be integrated into the in-service training programs at schools of government where they exist; provided by local academic institutions; or supported by development partners. These initiatives should be targeted based on structured needs assessments and country-specific follow-up analyses that allow for detailed and continuous insight into priority gaps. Short modules on gender and social equity in health financing and on leadership roles in promoting gender parity should be integrated.

Opportunities should be provided **for on-the-job learning** to build motivation and skillsets. Development partner technical assistance—including secondments—should provide opportunities for government staff to carry out qualified tasks that set them up for skill growth and build confidence. Performance and capacity growth should be more clearly tied to job evaluations and promotions to encourage staff to capitalize on these growth opportunities.

National Schools of Government should explore the potential to play a larger and more sustainable role in providing short courses and trainings with the help of more clearly articulated demand from government and if needed, external capacity strengthening support. These have strong potential to address common gaps across Ministries holistically and there may also be scope for university staff to benefit from some of this capacity building like data analysis and presentation skills, and in turn, better be able to build skill among their students.

OPPORTUNITY AREA: Build in-service training capacity targeting sub-national government staff

Health financing capacity gaps (in skills, numbers, and by sex) are more pronounced at sub-national levels, with subnational MDAs typically having more difficulty in attracting and retaining expertise outside of capital cities. Sub-national capacity becomes even more important as countries have moved or are moving toward increased decentralization of health financing.[78]

Therefore, capacity building should **disproportionately be focused on sub-national departments of health and finance**. This should include infrastructural investments such as ICT that could enhance efficient, transparent, and integrative financial and management reporting systems that enable

visibility of resources available for the subnational units. Consultations also revealed that subnational governments can be important links in the recruitment pipeline for central Ministries. Therefore, when designing sustainable capacity building initiatives at subnational level, it would be valuable to understand the types of skills developed through subnational operational experience, and how relevant health financing skills can be built and channeled back into the system.

OPPORTUNITY AREA: Support regional bodies for improved integration and knowledge exchange

Regional leadership will be necessary to take any initiative to sustainably grow health financing capacity and bring it to scale. There are several important regional bodies and initiatives that will require technical and financial support to deliver on the current opportunities.

Investments should seek opportunities to strengthen **regional networks and associations** to enhance regional capacity development, research, and knowledge sharing between academia and governments. One such initiative is the ALM Declaration which is working to establish RHFHs in each of Africa's five regions. The Health Economics Program of Africa CDC is another body with the mandate and strategy to be a regional leader in this area. This program aims to support the mobilization and use of important health economics evidence for African countries, including support for local capacity building. Such regional hubs can create a platform for policymakers, academics, funders to share evidence; engage in health financing capacity strengthening; advocate for and channel resources to Africa-based institutions; lead development of a common framework for health economics and financing; and monitor progress in health financing capacity. AfHEA also already plays a key role in advising policymakers, researchers, and entities like the WHO through its wide network of African health economics, financing, and policy experts. This type of network can provide a channel for African-origin experts residing abroad to provide their expertise for the benefit of the region. To enable sustained collaboration, these networks should be equipped with operational basics, such as a paid administrator and some degree of certainty over funding. This should also leverage African women leaders in global health such as the African Women's Leadership Network.[79]

Strengthen **regional initiatives that aim to promote women's leadership and gender parity** in the health sector. Africa CDC finances the Kofi Annan Global Health Leadership Program which aims to build public health leaders (Fellows) in Africa in acquiring advanced skills and competencies to strategize, manage and lead public health programs that will positively transform public health in Africa. The program takes an equal opportunity approach to ensure equal participation of women and underrepresented groups.[80]

INSTITUTIONAL ENABLERS

Beyond these initiatives targeting individual capacity, changes in institutional arrangements and policies would help governments to absorb and retain health financing capacity more sustainably and advance gender equity in the workplace.

MDAs should be granted more autonomy in hiring for specific skills or capacity gaps, in cases where a central PSA currently controls recruitment. This may or may not be amenable to reform depending on the political will as rules tend to be common across government and there may be resistance.

Introducing some flexibility in these arrangements, however, could allow MDAs to recruit for their highest priority needs in a targeted way. Exploring this opportunity space should include assessing the potentially restrictive impact of standardized government-wide role definitions and the potential benefit of introducing new titles like ‘data scientist’ as well as allowing for more detailed and tailored job descriptions and evaluation criteria for applicants.

Consider exploring a **longer tenure for finance and planning officers** assigned to the MOH by MOF, or strengthen handover and knowledge management systems to mitigate loss of institutional knowledge and experience that comes with frequent rotation of officers.

Strive to ratify and implement mechanisms like **family-friendly and anti-harassment policies, affirmative action, and gender quotas**. While these exist in many countries, it is important to evaluate the implementation, awareness, and ultimate impact of policies and benefits. This study has found gender blindness to be an issue in workplace culture, and it is important that the gender inequality problem is highlighted and acknowledged by all—both men and women.

7 Conclusion

This landscape assessment provides perspectives from country and regional stakeholders into challenges and opportunities for sustainable strengthening of gender-sensitive health financing capacity in a range of settings across SSA. The key skill gaps identified among Ministries of Finance and Health, Health Insurance, Universities, and other stakeholders were found in the domains of data analysis (e.g., economic evaluation and modelling, actuarial, forecasting, big data), communication (e.g., report, presentation, speech writing, negotiation, advocacy), management (e.g., planning, monitoring, partner coordination, business administration), and PFM (e.g., accounting, budget development and monitoring). These skill gaps interact with systematic and institutional barriers and processes that require parallel reforms to tackle skills gaps in a sustainable way. Gender inequities have been identified in several areas and include insufficient representation of women; implementation and awareness of gender sensitive policies, particularly around recruitment, advancement, and training; support for and coordination with gender machinery; and organizational gender-responsiveness. These challenges are often sector- or country-wide and impact career choice, recruitment, career progression, leadership, capacity building, and retention.

Nonetheless, consultations revealed existing initiatives and further opportunities to address these imbalances in the health financing sphere in particular. Across contexts, the assessment identified key interacting components of successful interventions to build capacity, including where there is strong political will, where interventions specifically target the technical skills to institutionalize improvements, and where there are mechanisms to sustain efforts within a strong organizational culture. Areas have emerged from this assessment that warrant further investigation for intervention, including government recruitment rules and frameworks and the implications for capacity; addressing practical barriers to gender mainstreaming policy initiatives like awareness, political will, and data gaps; fostering channels to leverage interest in increased collaboration from academic institutions; and creating an enabling public sector career environment that promotes capacity development and retention. Findings shine an important light on gender imbalances that must be prioritized in any initiatives to improve capacity for health financing across SSA, alongside a post-COVID-19 appetite to invest in regional public health institutions and universities.

This assessment has focused on those health financing professionals who work specifically to raise and allocate resources, drawing insight from key respondents with relevant roles within MOF, MOH, teaching institutions and other bodies in a select number of countries. Similar assessments could be extended to other areas of health financing drawing from shared pools of expertise, or with deep-dive examination of specific focus areas. Engagement with universities for this assessment revealed high levels of interest in bridging the gaps between these institutions and policymakers, and many opportunities to invest in more policy-targeted research and training. However, the value prospect of investing in such academic institutions and products must be clear to government for these investments to be prioritized. For such models to be sustained financially, it will be necessary for there to be continuous government demand as well as means for resources to flow through government to create these systems for collaboration. External funding is an important contributor to policy-relevant health financing research for now, but ultimately government will be paying for these skills and services and systems should be set up to deliver good returns on investment by being responsive to government needs.

Several existing regional, global, and country-level initiatives are already making progress in the area of sustainable capacity strengthening of health financing in Africa. This assessment deliberately engaged with such initiatives to ensure that its findings are learning from and feeding into regionally owned and driven initiatives and bodies with a mandate to deliver upon identified investments and opportunities.

Overall, there is momentum and clear desire among a wide range of stakeholders to explore new approaches to sustainable, gender-sensitive strengthening of governments' capacity to raise and allocate resources for health. The release of this assessment is timely as it closely follows the announcement of the Africa CDC HEP strategy, operationalization of parts of the AU ALM declaration, and renewed interest in the decolonization of global health agenda. This assessment is one input into an important process that can and should leverage the appropriate intent and expertise of external actors. However this process must be firmly anchored in and led by Sub-Saharan African governments and institutions if it is to succeed in the long run.

8 Acknowledgments

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9 Annex

Table 1: Consultation respondent profiles

	Finance MDAs	Health MDAs	Insurance MDAs
Number of consultations	35	68	9
Gender	14% Women	32% Women	33% Women
Educational background	89% Economics 4% Medically focused 7% Other	36% Economics 43% Medically focused 21% Other	9% Economics 55% Medically focused 36% Other
Average tenure	15 years	15 years	13 years

Source: consultations.

Table 1 illustrates the demographic make-up of individuals consulted for this study. As described in the Methodology section, consultation respondents were selected by their organization, but it is important to note statistics are not necessarily representative of each organization's full demographic make-up.

Table 2: Representation of women in senior positions and overall in government MDAs

MDA	% Women, Senior level	Total Senior level	% Women, total	#, Total
Nigeria				
MOF, Budget and Planning (Budget office)	30%	37	39%	319
MOH, Health Financing Unit	50%	2	20%	10
National Health Insurance Scheme	33%	3	17%	12
Nigeria Sovereign Investment Authority	50%	2	29%	7
Nigeria PHC Development Agency, Basic Healthcare Provision Fund	50%	6	42%	60
Nigeria PHC Development Agency, Health Financing Unit	50%	2	80%	5
Enugu State MOH, Department of Planning, Research and Statistics	100%	1	71%	7
Enugu State Agency for UHC, Department of Planning, Monitoring and Evaluation	100%	6	35%	37
TOTAL	42%	59	39%	457
Kenya				
Treasury, Budget implementation	20%	15	6%	49

Treasury, Macro & Fiscal department	0%	4	17%	12
MOH, Health Financing	60%	5	45%	11
National Health Insurance Fund, Benefits Design & Actuarial Services	56%	9	37%	51
National Health Insurance Fund, Strategic Planning and Research	45%	11	59%	49
CRA, Economic Affairs	67%	3	50%	6
OCOB, Budget implementation	25%	12	15%	52
Makueni County, Health services	39%	18	42%	106
Taita Taveta County, Finance and Economic Planning	35%	26	27%	73
Kakamega County, Finance and Economic Planning	41%	22	42%	117
Baringo County, Health Services	35%	23	24%	86
TOTAL	36%	148	33%	612
Ethiopia				
MOF, Budget Directorate	20%	5	53%	17
MOF, Projects Monitoring and Evaluation Directorate	0%	3	50%	12
MOF, UN & CRGE Directorate	0%	4	25%	28
MOF, International Financial Institutions	0%	4	38%	16
MOF, Bilateral Org Directorate	100%	3	50%	12
MOH, Partnership and Cooperation Directorate	17%	6	22%	27
Ethiopian Health Insurance Agency	40%	5	67%	27
Amhara Regional Bureau of Finance, Revenue sharing and equitable development studies	0%	1	33%	3
SNNPR Regional Health Bureau, Resource Mobilization	0%	1	17%	6
Amhara Regional Health Bureau, Resource Mobilization	0%	1	13%	8
TOTAL	21%	33	39%	156
Malawi				
Ministry of Health	N/A	N/A	29%	562
Eswatini				
Ministry of Health (Planning Unit)	0%	1	40%	5
South Africa				
National Treasury ('leads')	50%	10	N/A	N/A
National Treasury Public Finance division	67%	6	N/A	N/A

Source: Government HR data, consultations

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