Transforming the Institutional Landscape in Sub-Saharan Africa: Considerations for Leveraging Africa's Research Capacity to Achieve Socioeconomic Development

Alex Ezeh and Jessie Lu

Abstract

In order to achieve sustainable development outcomes in sub-Saharan Africa (SSA), African institutions must be the leading experts on and primary providers of research solutions to local problems. Despite years of investment in capacity building, SSA lags behind every other region in terms of research outputs and government investments, and new models for building institutional capacity are needed. Through interviews with African institutional leaders and development partners working in SSA, this study finds that funding inefficiencies lead to key challenges within institutions' governance and management structures, financial systems, talent management processes, leadership and institutional vision capacities, and peer support networks, all of which obstruct the ability of African institutions to become impactful and sustainable drivers of development outcomes in the region. We present for consideration three possible innovative models that can facilitate the emergence of strong Africa-based, Africa-led institutions: a multi-stakeholder funding platform, an integrator organization model, and a scale model.

Keywords: Sub-Saharan Africa, capacity building, research, socioeconomic development

Center for Global Development
2055 L Street NW
Fifth Floor
Washington DC 20036
202-416-4000
www.cgdev.org

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Alex Ezeh
Center for Global Development and Drexel University

Jessie Lu
Center for Global Development

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Center for Global Development
2055 L Street NW
Washington, DC 20036

202.416.4000
(f) 202.416.4050

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1. Introduction

An Africa-led agenda is essential to delivering better and more sustained development outcomes in sub-Saharan Africa (SSA). This work envisions a future in which African institutions are the leading experts on, and primary providers of, research solutions to problems in the region. Indeed, the African Development Bank Group Capacity Building Strategy recognizes that "no matter the amount of financial resources mobilized for Africa's development, such funds would yield only limited or modest results if countries do not have the human, organizational and institutional capacity to absorb and effectively utilize them."[1] While recognizing the centrality of these three levels of capacity and their interdependence in driving positive development outcomes, this work focuses on organizational capacity development with specific attention to knowledge-based organizations. Its theory of change argues that strong organizational capacity will create enabling environments for individual capacities to be nurtured and to thrive, drive operational efficiencies, and provide a solid base for broader societal change by modeling norms and values that characterize and influence positive development outcomes. We offer, for consideration, three models that could facilitate the emergence of strong Africa-based, African-led organizations with the requisite capacity to drive development discourses and practice on the continent.

This study was designed to assess the current status of Africa-based, African-led research institutions and think tanks and the constraints they face with regards to growth and the achievement of their mission. It also aimed to propose innovative models that could address the salient challenges and constraints to organizational growth and support the emergence of strong knowledge-based institutions and think tanks in the region. In contrast to other studies, this project takes organizational capacity strengthening as its primary objective; combines perspectives of leaders of institutions in SSA with views from development partners engaged in supporting research and organizational strengthening activities in the region; and posits interventions aimed at transformative institutional change rather than solutions targeted at siloed issues or sectors.

This report argues for new efforts to transform the research landscape and develop organizational capacities in SSA that will inform and drive development practice in the region. Such efforts should address the multiple constraints that influence and frustrate organizational growth and development, recognize the long-term nature of institution building, and pitch investments at a scale that will drive transformative change. To be sustainable, such efforts should:

1. Encourage, catalyze, and facilitate domestic investments in research and development (R&D);
2. Promote collaboration within and among African researchers and institutions; and
3. Respond to specific challenges that may be unique to SSA.

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[1] "African Development Bank Group Capacity Building Strategy" n.d.

The efforts will require new ways of working with Africa whereby African governments commit their own resources, long term, to the initiative; African institutions are primary recipients of grants—not through multi-layered subcontracting arrangements; and greater latitude is extended to untested local ideas that could lead to the expected transformative change the region desperately needs. The call to change the models of funding for African institutions so they promote increased research capacity in the region is not new—key stakeholders in African research organizations and universities have called for a new funding model for research-active institutions in SSA.[2] While the approaches outlined here may be difficult and challenging to implement, the alternatives, which have driven much of the development practice in SSA over the past 50 plus years, have failed Africa and its development partners. The time is now for a new approach to development practice in the region.

2. Background

The significant role local knowledge-based organizations play as "catalysts for ideas and in proposing practical solutions for policy problems" is increasingly acknowledged.[3] Local research organizations are better positioned to identify and understand salient local issues, gain buy-in from local actors to create more sustainable partnerships, and thus create stronger systems and governance mechanisms.[4] Studies have shown a strong correlation between research output and GDP, with some arguing that increases in local funding for research and development (R&D) can catalyze research capacity in a region, promote positive development outcomes, and improve socioeconomic conditions.[5] Others have noted more nuance to this trend, arguing that the relationship between R&D investments and economic growth is country-specific and requires consideration of contextual factors to understand the direct link between the two.[6] Regardless, weak research capacity potentially handicaps countries from achieving their full economic potential.

In this context, the current low levels of local investment in R&D in SSA translates to research in SSA that is highly dependent on external funding support, often through intermediary institutions, and thus not optimal for effectively addressing research problems in the region. The system of external financing affects both the topics that are studied and limits the role that African researchers and institutions play in such studies. In 2012, for example, Southern, Eastern, and Western Africa produced 79 percent, 70 percent, and 45 percent of their research, respectively, in collaboration with external actors, while only 2-3 percent of the research in Eastern and Southern Africa involved collaboration with partners in Africa.[7] This lack of locally driven R&D funding and agenda-setting in the region creates a

[2] Fonn et al. 2018.
[3] "2nd African Think Tank Summit: The Rise of Africa's Think Tanks - Practical Solutions to Practical Problems" n.d.
[4] Beran et al. 2017.
[5] Sahin 2015, Gumus and Celikay 2015, Fonn 2006, Watson et al. 2003.
[6] Pessoa 2010.
[7] "A Decade of Development in Sub-Saharan African Science, Technology, Engineering and Mathematics Research" 2014.

weak environment for innovation, stifles human capacity development, and makes it more difficult for African countries to break the cycle of poverty.

2.1 The Current State of African Research Organizations

There are many Africa-led and Africa-based organizations that currently conduct important policy research and influence government decisions. However, on the whole, African think tanks and research organizations frequently rank poorly on global assessments. As just one example, in the most recent 2017 Go-To Global Think Tank Report released by the University of Pennsylvania, only 15 think tanks in SSA were included in worldwide rankings of 173 institutions, with only 1 of these ranking among the top 50 think tanks in the world. The same report highlighted the sustainability crisis facing Think Tanks in SSA and noted that "Africa's think tanks face small staffs and budgets due to insufficient and irregular funding, high staff turnover due to low salaries, and financial instability. Taken together, they create widespread institutional fragility and an acute sustainability crisis in the region."[8] This assessment of the fragility of Thinks Tanks in SSA reflects the common challenges facing knowledge-based institutions in the region, from universities to public and private research institutions and not-for-profit organizations, based largely around insufficiencies in financing. Despite numerous efforts to strengthen research capacity in the region, knowledge-based institutions in SSA, both local and regional, remain relatively small in size, scope, and influence; limited in their geographic reach; and almost exclusively dependent on external funding support, especially for their research.

The constrained space for building strong and high-impact knowledge-based institutions in SSA can be attributed to a variety of factors.[9] For one, SSA lags behind almost every other region in terms of domestic investments in research and development (R&D), and consequently, in research outputs, patents, and personnel.[10] African governments contribute less than 1 percent of all R&D expenditures, with very little growth between 1997 and 2013.[11] As a result, much of the funding for research in SSA is external and overwhelmingly in the health sector. Even within health, an assessment of global, regional, national, and sub-national capacity for public health research, which uses Web of Science publications as a proximal metric, reveals that Africa produced less than 3 percent of all Web of Science publications between 2006-2010. A broader assessment of overall scientific publications and patents puts Africa's share at 1 percent and 0.06 percent of global outputs, respectively, with South Africa alone accounting for more than half of all outputs.[12] More importantly, Africa has experienced far slower growth in research output compared with other regions and research production on the continent is unequally distributed, with few countries being

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[8] McGann 2018.

[9] A thorough summary of the background of higher education research in SSA can be found in the Lancet: Fonn et al. 2018.

[10] "Health Researchers (in Full-Time Equivalent) per Million Inhabitants, by Income Group (Second Set of Charts)" 2018, "World Intellectual Property Indicators – 2017" 2017, Kebede et al. 2014.

[11] "How Much Does Your Country Invest in R&D?" n.d.

[12] "Patent Applications, Residents | Data" n.d.

responsible for a large portion of the quality research outputs from the continent and other countries virtually absent in global assessments.[13] Of the 15 think tanks mentioned above that ranked high globally, for example, six are based in South Africa and three in Kenya, while the remaining six are spread between Ghana, Ethiopia, Senegal, and Uganda.[14]

2.2 Constraints to Organizational Impact and Growth in SSA

The literature on the challenges institutions and development partners face in achieving successful capacity building in SSA is scarce. While many scholars have identified the need for strengthening the ability and impact of African organizations, few have identified concrete barriers, especially barriers specific to research-producing organizations; the literature focuses on general ideas rather than specific examples and thus may not necessarily reflect the realities faced by institutional leaders and development partners working in the region. Even so, the existing literature highlights the inefficiencies in the research and organizational landscape in SSA and acknowledges the need for change.

According to McGann and colleagues, the constraints to capacity building faced by SSA research institutions can be broadly categorized into four groups: first, uncertain and insufficient funding results in think tanks becoming overly dependent on outside sources and incites competition between institutions for a limited pot of foreign funds. Second, think tanks in SSA struggle with independence and autonomy, leading to blurred distinctions between think tanks and the government and thus loss of trust from the public. Relatedly, think tanks run the risk of becoming consultants since they are dependent on funding through a project-by-project basis. Third, limitations in the quality and capacity of researchers threaten think tank sustainability—think tank products may not meet international research standards due to a shortage of staff (including research, communications, management, and administrative positions) and issues with retention. Finally, McGann et al. suggest that it is difficult for SSA think tanks to create tangible impacts and engage with policy makers due to an inability to properly communicate work to users and produce relevant products.[15] Sawyerr adds an additional dimension to these four categories. He frames challenges faced by institutions in SSA around three bottlenecks that interact with and reinforce each other: 1) under-funding of research; 2) variable quality and relevance of work produced; and 3) non-use of local research. He additionally identifies challenges within this model, including discrepancies between research produced and research used; the continued emphasis of individual, project-level work over interdisciplinary and collaborative work; poor physical infrastructure for research; and university faculties focused more on projects than mentoring new generations of researchers.[16]

These constraints exist among efforts to improve research capacity in low- and middle-income countries (LMICs) as a group. Franzen et al. (2016) provide one of the most

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[13] Badenhorst et al. 2016.

[14] McGann 2018.

[15] Muyangwa et al. 2017.

[16] Sawyerr 2004.

thorough landscaping analyses of health research capacity development in LMICs through a systematic review of the existing literature.[17] Although this analysis focuses on health specifically, almost half of all SSA research outputs are in the health sciences fields, suggesting that trends in health research may proxy trends in research more broadly.[18] The authors identify three key narratives that consistently appear in qualitative studies on health research capacity development in LMICs. First, many studies acknowledge that power relations often result in international funders influencing research agendas more than LMIC institutions. For example, North-South collaborations that match LMIC institutions with high-income country institutions frequently disadvantage the LMIC partner. Despite long-term discussions on addressing this imbalance, power inequalities remain prevalent. Second, much of the literature advocates for increased relevance of research to policy and practice partnered with stronger emphasis on applied health research rather than traditional high-profile diseases. Third, the authors note a broader trend in the literature that prioritizes capacity building strategies that target entire systems over efforts that address specific challenges. The authors note that this trend appears largely in rhetoric, as there is currently limited knowledge on effective implementation of systems-level capacity building strategies.

2.3 Overview of Efforts to Build Capacity in SSA

Since the 1980s, research capacity strengthening has been a growing priority in SSA for both global and local stakeholders.[19] Indeed, there have been numerous development partner efforts to strengthen research capacity in the region (see Table 1). Though many of these efforts have been successful at understanding the problem and achieving gains at the institutional level, very little progress has been made in developing strong organizational capacity in the region as a whole.

To address these constraints and achieve effective solutions in the context of SSA, multiple theoretical frameworks have been proposed.[20] Common themes within these frameworks advise that efforts to address institutional capacity development should: be led by Africans and prioritized as a core area for growth and poverty reduction in the region; require external partners to respect African ownership and capacity and engage longer-term approaches; utilize independent monitoring to ensure mutual accountability between countries; promote information and knowledge dissemination and use by local actors; address institutional and policy restraints; and encourage collaboration across institutions in Africa.

Many of the efforts to address institutional research capacity have partially aligned with the recommendations set out in these frameworks (see Table 1). Some of these efforts have focused on funding specific research projects and others have emphasized twinning of

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[17] Franzen et al. 2016.

[18] "A Decade of Development in Sub-Saharan African Science, Technology, Engineering and Mathematics Research" 2014.

[19] Geissler and Tousignant 2016.

[20] see Madavo 2006, Otoo et al. 2009, and "Seven Principles for Strengthening Research Capacity in Low- and Middle-Income Countries: Simple Ideas in a Complex World" n.d. as examples.

African and Northern institutions, while a few have addressed a range of constraints that frustrate organizational development in the region. As noted in the table, with few exceptions, these efforts are often short-term, designed and driven by external funders, single-issue or single-sector focused, spread thinly across multiple organizations in multiple countries, and at levels of investment that barely go beyond meeting immediate organizational or programmatic needs of the supported African institutions. In addition, the limited engagement of African stakeholders in the design and funding of these efforts means the efforts often collapse once the external funders cease contributions.

Several reviews of these initiatives suggest mixed results, especially with respect to sustainability of the efforts and of the capacities built through them. As just one example, the Wellcome Trust's African Institutions Initiative (AII) was an innovative program that attempted to address the broader research environment in SSA through the creation of seven research consortia. These consortia connected African institutions with Northern partners with the aim of enabling African organizations to own and control their capacity building efforts. Uniquely, this effort was evaluated in real time and evaluators found that the program successfully improved technical knowledge; increased partnerships; engaged external stakeholders; and enhanced access to infrastructural resources. However, institutions in the consortia continued to struggle with staff retainment; management of finances; infrastructural shortages; and funding allocation questions, all of which remain salient issues for institutions—both those that receive support from outside funders and those that do not.[21]

[21] Cochrane et al. 2014.

Table 1. Select List of Previous Institutional Strengthening and Capacity Building Efforts in SSA

Name of Initiative	Funder(s)	Years Covered	Total Amount Invested	Description
African Capacity Building Foundation (ACBF)	African country governments, bilateral donor country governments, multilateral donors (WB, African Development Bank, UNDP)	1991-present	> US$700 million ~$26m/year	Improve capacity of African institutions (including think tanks, government organizations, the private sector, civil society) through strategic partnerships, research grants, technical support, and improved access to knowledge
Think Tank Initiative (TTI)	BMGF, DFID, Hewlett, IDRC, NORAD, the Netherlands	2008-2019	> US$200 million ~$16.6m/year	Support selected think tanks around the world through a combination of core support and technical capacity building programs
Partnership for Higher Education in Africa (PHEA)	Carnegie, Ford, MacArthur, Rockefeller, Hewlett, Mellon, Kresge Foundations	2000-2010	US$440 million. ~$40m/year	Provide support to higher education institutions in select African countries through joint grant making, generating and sharing information on challenges faced by these institutions and possible strategies, encouraging networking and lesson sharing, and advocating for the importance of quality higher education
African Institutions Initiative (AII)	Wellcome Trust	2009-2015	GBP28 million = US$37 million. ~$5.3 m/year	Creation of seven capacity-building consortia of both African and non-Africa organizations, each led by an African institution to broaden the resource base for research, support health science research, and support international networks and partnerships for health problems of resource-poor countries

Structured Operational Research and Training Initiative (SORT IT)	UNICEF, UNDP, World Bank, WHO	2009-present		Improve health research capacity through supporting health professionals to undergo training while also conducting research, which must be published and assessed for effects on policy and practice
Developing Excellence in Leadership, Training and Science (DELTAS)	Wellcome Trust, DFID, NEPAD	2015-2020	US$100 million ~$16.7 m/year	Create and support 11 collaborative teams across select institutions with the goal of producing world-class scientific research relevant to African priorities, training researchers, fostering mentorship and collaborative opportunities while also improving communication with stakeholders, and creating better research environments. This builds on the AII and 4 of the DELTAS grantees were part of AII.
Africa Higher Education Centers of Excellence	World Bank	2014-2020	US$290 million. ~$41.4m/year	A mix of grants and loans to support existing higher education centers of excellence in West and Central Africa and east and southern Africa by promoting regional specialization to address common regional challenges, strengthening training capacity, creating linkages with stakeholders, promoting knowledge sharing opportunities, and increasing qualified workforce
Medical Education Partnership Initiative (MEPI)	NIH	2010-2015	US$130 million. ~$21.7m/year	Fund institutions receiving PEPFAR support to expand and enhance medical education systems to increase number of health care workers, improve in-country medical education systems, and build research capacity to increase retention of higher education professionals
Council for the Development of Social Science Research in Africa (CODESRIA)	SIDA, ACBF, Denmark, the Netherlands, Ford, Senegal, NORAD	1973-present	Annual budget is ~$3m but varies from year to year	Pan-African organization that promotes quality social science research through encouraging collaboration both within the region and internationally, promoting dissemination of results, and supporting region-relevant research

3. Key Highlights, Insights, and Takeaways from Interviews

3.1 Framing of Interviews

Institutions in SSA face a wide range of challenges that constrain their growth, impact and long-term sustainability. The nature and size of funds available to them, including low levels of government investment in R&D, intersect and underpin broader challenges faced by research-oriented organizations in SSA: shortage of proper infrastructure, materials, and equipment; human resources limitations; and lack of defined niches and areas of expertise. To better understand these challenges and the ways in which they manifest themselves in the day-to-day operations of institutions in SSA, interviews were conducted with leaders of African institutions and development partners with significant interests in the region. These interviews confirmed many of the priors identified in the existing literature but also identified unique challenges, areas for improvement, and possible solutions.

Through experience working with institutions in SSA and review of the literature, this study explored constraints faced by institutional leaders in SSA in five broad categories. Opportunities were also given to each chief executive to identify other constraints that may fall outside of the five areas, but these opportunities did not yield any further areas of constraints. The five areas include Governance and Management, Systems and Processes (including Internal Controls), Talent Management and Reward Systems, Leadership and Institutional Vision, and Network of Peer Support and Accountability.

Under Governance and Management, we interviewed CEOs of African research centers and their board members on the role played by boards in providing oversights, supporting organizational growth and development, relationships between management and boards, and areas where the role and operation of boards can be further enhanced to achieve organizational goals and vision. Systems and Processes questions explored the existence of adequate systems of internal controls to assure transparent financial management and interviewed CEOs and their directors of finance on their financial literacy regarding not-for-profit accounting and their respective thoughts on potential strategies to optimize the financial health of their organizations. It explored their views on gaps in internal controls that could constraint the growth of their organization and strategies for addressing these. The Talent Management section recognizes the global nature of top talents in the 21st century and explores with CEOs how this affects the growth of their organizations, with specific attention to attracting and retaining top talents and potential solutions to any HR-related challenges they faced. Leadership and Institutional Vision questions explored with CEOs the existence of board-approved institutional goals, vision and strategic plan for their organization and how these align with their funding models. It explored the extent to which the organizational leaders felt they are "forced" to "follow the money" rather than their institutional goals, the magnitude of this challenge, and how the CEOs believe they could best be supported to address this constraint. The final section of the CEOs interviews explored the availability of opportunities for CEOs to interact and share experiences with other CEOs, whether such opportunities are desirable to them, and what they believe such platforms could accomplish for them and their organizations. The analysis of these interviews informed the development of the frameworks discussed in this report.

A complementary interview was subsequently held with a number of funders representing foundations and bilateral partners. These interviews explored their experiences working directly with African institutions, what they saw as the strengths and limitations of working with African organizations, and their perspectives on each of the three frameworks discussed here, especially whether their funding model would accommodate support for each of them.

Interviews with institutional leaders focused on the five areas discussed above. Through their responses, we identified emerging themes and used these to propose potential models to more effectively and sustainably strengthen organizational capacity in the region. These models were further validated in the interviews with funders (but not with the African institutional leaders as the models did not exist during the interviews with them). The following sections summarize results from the interviews conducted with institutional leaders and development partners. We summarize below the main highlights followed by a section that discusses the key commonalities and differences between the perspectives of institutional leaders and funders on institutional capacity in SSA.

3.2 Perspectives on Institutional Capacity and Viability in SSA

The interviews with each interviewee started with a broad question on what comes to their mind when they think of institutional viability in SSA. This gauged general perceptions among funders, CEOs, board members, and Finance Directors of African institutions on their respective top line views on institutional capacity and institutional viability in the region. As expected, the responses varied widely but generally focused on funding, size, and impact of organizations in the region, with African institutional leaders focusing more on funding and development partners on size and impact of organizations.

Institutional Leaders generally responded to this question in a way that reflected their experiences dealing with the various problems created by funding gaps. CEOs, board members, and finance directors commonly lamented a lack of core funding. Keeping the long-term viability of SSA institutions in mind, this lack of funding is thought to manifest in ways that create a "vicious cycle" that keeps institutions from gaining meaningful traction. Frustration with the inability to hire and retain quality researchers is a constant concern expressed by many CEOs. Some leaders made the argument that the dearth of quality research reduced their impact and resulted in mission strain and drift. The constant need to chase funding through proposals and deliver on donors' goals interferes with the creation of an African-led research agenda, according to several CEOs.

Board members were the most vocal about their feelings that African-led institutions are not being given the independence and freedom to construct or fully participate in their own destiny. As one of them stated: "Africa tends to be a child with many parents, very many parents. And unfortunately, most of the parents want their child to learn how to walk their way… and most of the parents do not want to hear and listen to the child when the child is asking to walk their [own] way. Our researchers, our PhDs, our patents, our ideas, we are a child, and nobody wants to allow us to walk our way. If you unpack that analogy, there's quite a bit in there." In a more prosaic way, a finance director argued that there is a lack of donor trust in SSA institutions' abilities and that the institutions are "almost part of the mission" in donors' eyes.

Another key obstacle to institutional viability the African leaders identified was a lack of mission alignment both between institutions and African governments as well as within the institutions themselves. Regarding the government, this was seen both as a lack of political will to succeed as well as a need to focus economic priorities on countries' more basic needs. In terms of institutions, the tendency to compete for funds or for dominance in each sector was advanced by one CEO as a roadblock on the way towards larger impacts. One board member described this phenomenon as a "lack of vibrancy between institutions."

CEOs and board members cited a lack of succession planning as another impediment standing in the way of long-term viability of institutions. As one board member put it: "There is also the issue of continuity in the sense of—when the founders of think tanks in Africa . . . as they grow older and retire, you find that it is difficult. You have succession problems, just like many businesses in Africa. So, succession planning I think, has not been a big part of think tanks in our part of the world. So, when you look, I don't think you'll find many think tanks in Africa, maybe apart from South Africa, which are 25 years old. There is such an issue, which is not taken into account early enough . . . succession planning, I think, should be a critical part of every research institution and think tank in our part of the world." As will be shown later, this "founder-owner syndrome" showed up repeatedly in the data and is seen as a common obstacle to institutional growth and viability in SSA.

When asked this question, funders tended to focus on the qualities they look for when deciding to award a grant as well as the areas they see lacking in SSA institutions more generally. Successful institutions, according to many funders, have strong governance structures as well as an effective leadership *team* rather than just an individual. These institutions are also said to have a clear mission that is ambitious yet acknowledges their limits by matching the mission to existing capacity. Furthermore, quality institutions are reported to be able to "create a public buzz" around the work they do and influence the direction of policy debates in their given sector. Lastly, funders underscored that all of these should be done with accountability, transparency, and effective communication with donors and policy makers.

One of the funders' biggest general critiques of SSA institutions is a lack of adaptability. Long-term viability cannot be achieved without an ability to react and change as new needs arise in the local context. Many SSA institutions have been founded in order to address one problem or to achieve one specific goal. While adherence to a clear mission is essential, funders consider an inability to grow and change to be a hindrance when the aim is institutional sustainability. Institutions must strive to become multi-faceted and responsive to the changing needs of the governments, policymakers, and citizens in their spheres of influence.

Funders identified things like governance structures and grant-writing systems as areas in need of improvement, but also turned a critical lens on themselves in some cases. One argued that the lack of long-term talent retention leads to missions crafted by donor organizations rather than by those on the ground who are most knowledgeable about the work that needs to be done. Additionally, the claim was made that the way donors have historically structured their funding has led to "an issue of capacity filling versus capacity building." In this funder's words, "we've started realizing that, look, these huge multi-donor-funded programs largely driven by Western organizations have actually come. They've executed their programs—some are five-year programs, some are 10-year programs—but they've kind of left. And after they left, whatever gains they thought they made actually never stuck, right? You find that governments are not able to continue the programs that have been launched, for one reason or the other." This point is at the heart of many funders' call to radically rethink the way funding of development programs in SSA is structured.

3.3 African Institutional Leaders' Perspectives

3.3.1 Governance and Management – Views of CEOs and their Board Members

All but one of the organizations visited had a board, and all but one organization had a CEO in place.[22] The views of CEOs on how engaged their boards are varied enormously as well as what they considered the main governance challenges they faced in their organizations. The most common governance challenges identified include (in parenthesis is the group mostly reporting the challenge): lack of clarity on board functions, including non-existence of board manuals (both), challenges with "founder-owner syndrome" (both), difficulty filling board positions (CEOs), getting boards to support fundraising or to open doors (CEOs), and attracting CEOs with both research and management experience (boards). Board members and CEOs offered perspectives on how governance and management functions could be strengthened in their organizations, which includes having clear board manuals that define expectations and board structure, including term-limits; and training, orientation and retreats for board members, especially on how they can support the organization in fundraising. Some examples of these views include:

> "What I see is … there's always the temptation of the board, you know, to kind of blot into management sometimes. But as long as you have a board charter that's very clear and you have a good chair of the board, then that boundary will always get back to where it needs to be. So you know, an incident where you might find sometimes that that kind of gray area happening is where I need to hire a senior director in the organization who reports to me." – CEO

[22] In the one organization without a Board, the Board is appointed by the government and since the terms of the previous board expired about two years ago, no new board has been appointed. In the one without a CEO, a board member, who is also the CEO of another organization, has been acting as CEO for almost two years.

> "I think, unfortunately, in the developing world, and especially in Africa, board members don't really understand what it means to be a board member. In many cases, the board membership in Africa, … has been viewed more as with prestige. 'You know, I sit on the board, yeah'? You may not even understand what the board is doing. Even when you understand what they are doing, you don't understand what it means to be on the board. And, therefore, you don't exercise your board's responsibility." – Board Member

> "But I don't feel like, our board members, once they leave Nairobi, wants to give …. I don't know what happens between November 18th and November 11th or November 14th the next year. So other than the occasional email, yeah, I think people have other lives to live. So . . . it's great that they come for the three days in November, but then after that, you don't sense the continuous engagement and support that you'd expect …" – CEO

> "I think primarily we're suffering from what you might call founder-owner syndrome, for lack of a better terminology. Meaning that institutions are founded, and they revolve around the personality that founded them, and so it affects growth. It affects governance. It affects processes. So, we are not easily able to detach ourselves from what we call 'ownership' in quotes. So, you find that even when donors have consciously set up certain institutions—and there are classical examples of where people who were recruited to run institutions died, and his or her relatives think that institution belongs to him and went in to almost seize the assets of the institution. Until you are told, 'No, no, no, no, no. Your man was simply an executive director. This thing does not belong to him.'" – Board Member

3.3.2 Systems and Processes, Including Internal Controls – Views from CEOs and Directors of Finance

This section included an assessment of current practices, policies, and procedures that govern financial resources and transactions at the organization and a 16-item multiple-choice questionnaire that assessed financial literacy of CEOs and their Finance Directors.

Institutional leaders generally believe they have strong financial systems in place. However, only a few organizations, especially the very large ones, have the kinds of systems that can ensure a strong internal control environment. These include an internal audit function, checks and balances built into systems, proper segregation of roles, reporting structures, procurement policies, and term limits for external auditors. To assess the extent to which these structures existed, a portion of the finance directors were given a checklist of good financial practices and asked to note the practices present in their organizations. Of the finance directors given the checklist, 80% acknowledged the existence of a finance manual that captured the basic provisions for understanding the financial health of the organization. However, the financial practices of organizations varied greatly in terms of processes for planning and budgeting, financial reporting processes, and methods for monitoring the financial health of their organizations. In terms of gaps in current financial practices, less than half of organizations kept track of information on win rates for proposals, monitored burn rates at project and grant level, had a risk assessment framework, monitored and managed risk, implemented consequences for fraud, had a whistle blowing policy, and had anti-fraud and anti-bribery policies.

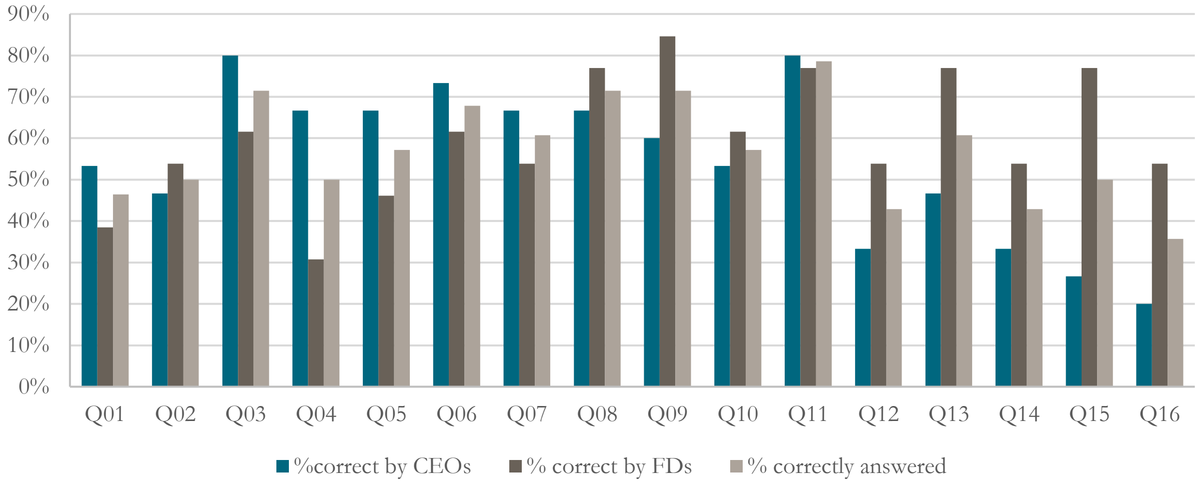
Overall, however, many of the organizations have put in place adequate policies and procedures to assure transparent financial operations, especially the larger organizations. The smaller organizations appeared to have exaggerated views of their internal control environment as evidenced both by the knowledge of their chief finance officer and the staffing size in their finance office, but they are actively working to improve their systems. Almost every finance director we interviewed was either in the process of implementing a new software system or expressed the need to move to a new system. Many identified trainings for their finance team, especially on non-profit accounting, computing and tracking levels of effort, and some form of Enterprise Resource Planning system, especially for the larger organizations (only one is currently developing such a system with support from an external funder), as ways to strengthen their finance function. Developing a business case for multiple organizations to share a common and more robust Enterprise Resource Planning system and having a private software company work with them could drastically reduce the cost of deploying such systems in the organizations that need them.: Examples of the views expressed by heads of finance and CEOs include:

> "I would improve budgeting by automating it. Having an automated, nice system which we are working on for the last two years that makes sense. But that's one thing. And why I say that is, now, we have introduced something around making sure that every budget is informed by a level of effort computation. . .. Now the second thing is to actually use the information that we get. If we made assumptions about budgeting, how are they borne out in reality? Because we can make assumptions, but in the end, we find that those assumptions were wrong. So being able to use that information to be better prospectively, as opposed to maybe doing the same thing and assuming it's fine without necessarily using the information that is generated to be better at budgeting in the future. I think the other thing we could do is focus team . . . What else would we do to improve our financial management? Maybe the focus team can do something similar, because when our burn rates are low, sometimes it's the underlying assumptions which where the denominator perhaps is too optimistic. And maybe if we did a focus team, it would be a more accurate denominator. Maybe our burn rate wouldn't be as bad." – CEO

> "I have been wondering whether there is a specific software for project management, because one of the major challenges with a research organization is how to cost staff time. Between the mainstream research work … and the requests that you get from stakeholders for research support, how do you quantify that researcher's time?" – Finance Director

The financial literacy test revealed that Finance Directors, on average, did slightly better (61 percent correct answers) than Executive Directors (55 percent correct answers) but there was as much variance in the performance of both groups, which is also related to variations in their skills and knowledge and the size of the organizations, with larger organizations employing more capable CEOs and finance directors. The percentage of correct answers among both groups varied from 19 percent (3/16) to 88 percent (14/16) with 5 of the 13 Finance Directors and 8 of the 15 Executive Directors completing the test scoring 50 percent or less. Among CEOs, Question 3 on General Liability Insurance gathered the most correct answers at 91 percent while question 16 on Conservative Accounting gathered the least correct responses at 20 percent. For Finance Directors, Question 4 on Purpose-restricted Net Assets gathered the lowest score at 31 percent while Questions 9 (Financial Danger Signs) and 15 (Capitalization versus Expensing of Equipment) gathered the most correct scores at 85 percent. Question 15 has the widest variance in the percentage of correct answers between Finance Directors and Executive Directors with Finance Directors being more than 3 times as likely to correctly answer this question as Executive Directors. Conversely, Question 11 (Cash Flow Statement) has the least variance among CEOs and Finance Directors and the overall highest percent of correct answers (79 percent) (See Figure 1 for all responses).

Figure 1. Responses of CEOs (Executive Directors) and Finance Directors on 16-Item Financial Literacy Test[23]



3.3.3 Talent Management

CEOs spent a lot of time explaining the challenges they have with respect to human resources regardless of the size of the organization—they all expressed significant challenges with attracting and retaining top talents. The reasons for this include tight budgets and the inability to offer long term contracts and competitive remuneration packages, especially when faced with competition for the same talents from governments, private sector, international NGOs and multilateral agencies. This competition is acutely felt when it comes to retaining the talents they have developed in-house. They also identified their location in Africa and concerns about personal security and the longevity of organizations as particularly affecting their ability to attract Africans in the diaspora. The weak human resource capacity in the region, especially weak preparation and mentoring of researchers, is seen as major constraint by many CEOs. Several noted that they have resorted to capacity building as a way to grow their own staff strength knowing fully well that many of them will leave as soon as they have improved their skills. As one CEO put it, they have become "revolving doors" to international jobs. Many noted that as long as they are unable to compete with INGOs working in their countries for talents, their organizations will continue to be seen as recruitment grounds for the INGOs and viewed as perpetually lacking in capacity. Illustrative quotes relating to these struggles include:

> "Now, … talent management is also a problem in many of these organizations because of availability of resources. Many times you would have very bright individuals who would rather stay abroad than come to Africa because the think tank's survival is very shaky. And when you are

[23] Questions 1-5 adapted from Board Source, accessed April 24, 2018; questions 6-16 adapted from Business Literacy Institute, accessed April 24, 2018.

a young scholar with a PhD and you're looking for some stability. You've just married and all of that, and come to a think tank where you're given a six-month or a one-year contract, and you have to leave after that, or that there's no resources, then it's a problem." – CEO

Moderator: "So when your valued staff members leave, who do they usually go to work for?"

CEO: "International NGOs. Mostly international NGOs. American, especially, International American NGOs."

Moderator: "Why do you think that's the case?"

CEO: "They pay better. Yeah, many people leave for higher salaries, actually. Most people are leaving for higher pay. Yeah. It's rare that someone would leave and go to a local university. They either go to CDC, or they would go to programs run by University of Maryland or San Francisco. Whatever, whatever. They will go to PATH or MSH."

"For instance, you have all these—we have invested, first of all, to develop these scientists, some to the PhD levels. I mean, to get where they are at the moment. Not only the researchers, but also the administrators, some of the administrators—some of whom you consider the backbone of the institute. But we struggle to keep them. We struggle to get their commitment. We struggle to get their organizational citizenship, their ownership. Because the nature of the business, which at the moment is so heavily dependent on grants, and the grants would always have definite period, number of years. So, the resource, the affordability, if you like, there is quite uncertainty around that. So, we find ourselves in a situation where we issue one-year contracts. We sometimes let some research scientists go out of employment because their grants have phased out, their projects have phased out.

"One of the difficulties, also, is how can you attract the best people and support them in such a way that they will be stable and stay. Because what happens is sometimes you spend a lot of effort by doing some capacity building. And at the end, those people are attracted by other institutions. They have more funding; they have more opportunities. So, you have to start again, again, and again. Because the best of them will go to work for institutions where they get better conditions, where they get more funding, well, you get the idea." – CEO

3.3.4 Leadership and Institutional Vision

This section of the interview with CEOs pointedly asked CEOs how their organizations decide on which opportunities to pursue and whether they will take on opportunities that are clearly outside their mandate. The resulting discussions highlighted the constant tension leaders of knowledge-based organizations face between remaining focused and relevant and meeting immediate operational realities like paying staff salaries. With only few exceptions, most CEOs reported that they will pursue any opportunity that provides resources to them and that they can almost always make any issue be relevant to or fit their mission. They recognize the potential of this approach to lead to diffusion or loss of institutional vision and an inability to develop or retain a niche. They also noted that the constant search for resources leaves their organizations in a very weak position when it comes to negotiating with funders on budgets, scope of work, or even the approach to the work because they would not want to jeopardize the opportunity. Even in cases where a good match is made between institutional vision and a funding opportunity, a lack of funding for basic resources can lead to a reduction in the quality of the final product. As institutional leaders discussed:

> "So the transition becomes very difficult. So that happens all the time. The thing is for you to be very clear about what you need, what your mission is. The challenge is that when you are cash-starved, you tend to take everything because you see everything as bringing in an extra dollar. So you have to get out of the financial starvation so that you're able to stand on your own and say no. People who are strained of cash will never say no. And that's why the financial freedom and financial ability is so important. Right now, we are out of deficit. So we are able to say no because now we are now in surplus. We are able to say, no, we won't take that. It's OK. Yeah." – CEO

> "So, you go and get some funds from various projects but they don't add up. So you look at an institution which has projects, it doesn't move. Because today, you want me to do health. Tomorrow, you want me to do climate change. The next day, you want me to do, I don't know, terrorism. The next—that institution is like, so where am I? What is my foundation as an institution? So at the end of the day, you are kind of running rather than sitting down and strategizing to say, this is where I want the institution to move. You are running around, not even specializing in anything. Because I have to pay my workers, so I have to do terrorism if that's what you want me to do. I have to pay my workers and you want me to do population issues, that's what I'm going to do. I have to pay my workers and you want me to do something else, that's what I'm going to do." – CEO

> "Maybe it goes back to the vision and mission. I think different organizations are struggling with vision and mission. And it's the cycle I talked about. People get stuck into survival mode. And maybe they find

> it hard to extricate themselves from that cycle. Yeah. And I think we are almost close to the point maybe we are now like 75 percent of what—75 percent of what we do is what we really want to do, and only 25 percent is perhaps, you know, we could do without. And maybe over time we'll get to 90-10 or 80-20. I don't know. But the institutions which are the other way around, 30 percent of what they do is what they really want to do, 70 percent are things they would rather not do, but they can't extricate themselves from this rut that they keep on running. Yeah." – CEO

One board member summed the implications of this funding pattern for African institutions was thus:

> "Because I think a lot of funding is actually debilitating, corrosive, erosive, and really, really self-serving and not directed at fundamental transformation. They might think it is—we think we want to address poverty in Africa, but we are not helping to build African institutions, African norms, African approaches to addressing poverty in Africa." – Board Member

3.3.5 Network of Peer Support and Accountability

This section explored CEOs' prior experiences in management and leadership before they were appointed CEO of their current organization and the types of networks they have for support in their current positions. We also explored their perspectives on the value of networks of other non-profit CEOs and what values such networks could bring to them and their organization. They generally saw many positives with having such networks (peer learning, partnerships, greater voice with national governments and regional bodies, etc.) but they also recognized the real tension between competition and collaboration and the lack of systems to promote collaboration amongst organizations in the region:

> "I think it would be great if there was like some kind of—like I can go for drinks every month somewhere in a nice hotel and chat. Maybe there's like a lecture on something. Yeah. I think some kind of light directions. Maybe not sitting in a classroom for the whole day. Some kind of like interactions with some new lectures, or new trends, new things, and new challenges. When I go back to this thing about the NGO board, if there was some kind of forum where maybe international NGOs would sit on a regular basis—yeah, some of these things would be talked about and maybe ironed out. … So I think some kind of regular interaction would be useful. You learn new things, learn new leadership trends, and what the whole world is grappling with, where the not-for-profit sector, the funding trends, and all these changes like global gag rule. – CEO.

> "I think sharing information is always good. Being able to interact and learn how others solve problems that face them, I think, is important. Again, in the university environment, you compete for budgets. You compete for some things. But it's not a dog-eat-dog sort of environment." – CEO

> "And that's another problem because people see themselves as competitors, you know, rather than collaborators. And I think that's what we need to do. So the private sector sees the opportunities. So they come to you very quickly. So I had a few of those. I have had meetings with the CEO of [Name of Foundation], who just came in and said, you know, I'd like us to have a meeting. We had a meeting. I think myself, I sought out maybe two meetings or so. It could be better." – CEO

3.3.6 Key Takeaways from Institutional Leader Interviews

The above discussions highlighted a number of constraints leaders of African institutions face in leading and growing their organizations. For each of the five areas discussed, the funding model of African institutions (characterized largely as small, short term, external sub-grants) always came up as a key factor limiting institutional growth and capacity in the region. Consequently, changing this funding model was viewed as a key potential solution to addressing the constraints institutions in the region face. However, funding of institutions in the region is also complex. While most CEOs noted that a mix of funding that includes core support is essential for knowledge-based institutions in the region to thrive, some felt core support may sometimes create laxity and complacency amongst leaders and scientists at such institutions. The limited investment of African governments, philanthropists, and the private sector in local R&D was also highlighted as a major constraint and that efforts at strengthening African institutions should prioritize catalyzing local support and investments in R&D. The need to support local research ideas was underscored as critically important but acutely lacking in current funding models. New funding models should also seek to encourage collaboration among African institutions.

Decades of implementing a funding model based on subcontracting, whereby African institutions largely serve as sub-grant recipients to intermediary global organizations, has resulted in a lack of collaboration amongst African institutions.[24] More importantly, as sub-recipients, many organizational leaders in SSA complained that they lack direct engagement with most of the primary funders of the projects they implement except in the case of guided and highly choreographed site visits; therefore, they fail to develop the necessary confidence needed to manage relationships with funders. Due to the inability to manage negotiations with funders on the content, scope and budget of the projects they implement, the development community often loses an opportunity to test out local ideas that may be more suitable to achieving transformative change in the region. Changing the funding model

[24] "A Decade of Development in Sub-Saharan African Science, Technology, Engineering and Mathematics Research." 2014.

for SSA organizations is seen as key to strengthening institutions in the region, especially knowledge-based institutions. Any anticipated change should consider a number of factors associated with the current model and will be sustainable to the extent they catalyze domestic funding, promote collaboration amongst local institutions, and support, to the extent possible, locally generated ideas and initiatives.

Another general reflection from the interviews with CEOs and their Finance Directors is the existence of many different policies, often without much applicability to the focus or size of the organization. Many of these appear like an effort to tick as many policies on a checklist handed down by a funder rather than an organic internal response to the governance and management needs of the organization. It was not uncommon for CEOs and Finance Directors to contradict each other on the availability of specific policies or the provisions of such policies. When a list was presented, even for concepts that appear foreign, once explained, the leaders tended to agree they have such policies but were not able to produce them. While there are basic principles, policies and procedures that all organizations should have irrespective of size or geography, the thought that organizations based in SSA are often subjected to higher scrutiny and larger sets of accountability measures, even when these are clearly counterproductive, is not uncommon. These demands place undue administrative burden on the leaders and yet many of them only receive a fraction of their true costs in overhead recoveries. An unfortunate unintended consequence is that these requirements further weaken the capacities and sustainability of the organizations.

These findings led the team to explore a number of mechanisms or frameworks that could be used to support institutional capacity strengthening of organizations in SSA. Because these ideas resulted from the analysis of interviews with institutional leaders in SSA, the frameworks have not been validated with them. Instead, in a follow-up survey with development partners on their experiences working directly with institutions in SSA, these models were explored with funders in terms of their feasibility, possible mechanisms for implementation, and the likelihood that their organization will subscribe to or support such a framework. The next section discusses the results of the interviews with funders and the final section provides general reflections on each of the potential models to support institutional capacity development in SSA.

3.4 Development Partners' Perspectives

The interviews with development partners covered thirteen funding organizations, both bilateral funders and foundations. The interviews started with an assessment of development partners' general views on institutions in SSA, especially around their viability, sustainability, and impact (discussed earlier). The questions then explored the extent of their programmatic interest in SSA, modes of funding their work in the region (whether directly to African institutions or through intermediaries), and their experiences working directly with institutions in SSA. We then explored areas where development partners see SSA institutions as particularly strong or weak relative to other global organizations present in SSA that they work with in the region. The final parts of the interview explored their views on three separate models for supporting institutional development in SSA and what they would see as key metrics to monitor in order to show whether any investments targeted at strengthening institutional capacity in the region are yielding the intended results. Their views on these issues are summarized below.

All the funders indicated they have strong or nearly exclusive focus of their overall funding (or their non-domestic funding), some up to 95 percent, in SSA. They clearly justified this focus in terms of where the need is greatest or where they believe they could have the greatest impact. A majority (8 out of 10 responding) of the funding organizations appear to work largely through intermediaries although many of them are currently in the process of a significant strategic shift to work more directly with local/African institutions. Two of the funders stated that nearly 100 percent of their funding goes directly to SSA-based organizations. Some identified the size and capacity of African institutions as the key limiting factor or constraint they face in implementing this new strategic direction. These size and capacity issues were alternately represented as a lack of experience with administrative functions for specific things like fellowship programs, a lack of operative capacity to handle large grants, and, in one interview, an acknowledgement that funders may hold a bias that favors the research produced in northern countries as opposed to those produced in SSA.

3.4.1 Weaknesses of African Institutions

In framing the weaknesses of research institutions in SSA, funders frequently alluded to the characteristics of strong institutions that are often not present in their African partner institutions. These qualities include strong organizational structures, a well-conceptualized and well-communicated institutional vision, and the ability to produce and disseminate impactful research. In terms of organizational structures, development partners shared that they look for rigorous and accountable financial systems as well as well-developed governance and leadership structures, including leaders with strong management skills. Echoing opinions in the institutional leader interviews, multiple individuals also brought up the founder-owner syndrome as a variable that interferes with and jeopardizes a strong organizational structure.

Development partners also described good organizations as ones that are able to achieve long-term sustainability, which means that organizations are able to both work with contemporary problems but also set up the structures needed to adapt and respond to problems in the future. These successful organizations should craft their mission around this long-term goal of adaptability and relevance and communicate their visions accordingly. Development partners also noted that strong organizations can produce research that is both high quality and relevant, and thus able to impact debates and address issues.

Funders also added two further weakness of institutions in SSA, which include resource constraints and a resulting lack of vision. Resource constraints in the region are a severe limitation, since they adversely affect both the quality of the research and the incentives for staff to stay at institutions. Research institutions must compete with both international organizations and local private sector companies to incentivize staff to stay. These incentives include competitive salary as well as available resources for individuals to conduct their research. They noted that oftentimes institutions are ill equipped to properly support researchers, which means that researchers cannot stay connected in global debates, and thus have difficulty producing current and useful research. These resource constraints also cause mission drift, as organizations are constantly in search of funds and unable to work on their long-term strategy. To illustrate:

> "One of the key things we look for is, from a business perspective, how strong is the institution in terms of its governance, in terms of its policy, in terms of its fiscal adherence. If some of those aspects are not there—they don't have a board for example, a board that's actively involved in the governance structure of a particular organization, that automatically puts that organization in jeopardy, from consideration for a grant."

> "I would say a clear mission that is really sort of corresponds well to the position and capacity of the organization. Some organizations have really, really, ambitious, super ambitious missions. And then it's very hard to imagine how a relatively small organization, or one that's not perfectly positioned could actually achieve those goals. So there's a correspondence between the mission and the actual capacity of the organization that's important. I think also viability depends on engaged and the high capacity board."

> "One [quality] is the extent to which they are equipped and prepared—you might say, ready—to engage in public policy processes, again, by ensuring that they have good communications mechanisms, that their research processes are involving key stakeholders, involving policy actors at relevant times, that the organization is guarding its reputation of making sure its credible… But then they're obviously operating in an environment where they cannot control everything which goes on in the external world."

> "Because there are some very essential elements, you might say, that any research organization needs to have in place is to make sure they have good quality assurance mechanisms, they've got good internal review mechanisms, they've got some kind of systems which look at questions of ethics, all of the kinds of characteristics of strong research that you would wish to see to ensure that internally, there are some kind of well-functioning insurance mechanisms in place."

3.4.2 Challenges of Working with Institutions in SSA

Funders identified a number of challenges they face when working directly with African institutions, especially when compared to working with International NGOs and multilateral agencies. In alignment with the general shortcomings outlined above, development partners noted that institutions in SSA have a reputation for being weak and unable to handle large grants. Many of the individuals interviewed noted that the poor reputation of SSA institutions translates to a lack of trust in their research products. However, even the institutions with strong structures are not immune from challenges.

An indirect contributor to the weaknesses of institutions in SSA is the preference of many funders to work through international organizations in SSA, which are oftentimes seen as stronger and more desirable partners. These international organizations are perceived as having the appropriate systems and adaptive ability to handle grants from development partner institutions. Additionally, international organizations tend to bring global expertise, which is oftentimes missing from smaller organizations, and have the ability to tap into a global community to leverage a broader network of expertise. It is important to note that some funders recognize that these assumptions may not be based in fact, and that this pervasive preference for international organizations seriously weakens institutions in SSA and frustrates the development of the key attributes of strong organizations that funders look for in SSA organizations. Some funders noted that the shared cultural affinity between northern research institutions and northern donors may automatically create the perception that northern institutions are more attractive and accountable recipients of donor funds.

Institutions in SSA run into a number of challenges specifically in the grant negotiation process, which is a significant weakness as expressed by development partners in the interviews. Grant applications from institutions in SSA often fall short of strict funder guidelines, requiring funders to work more extensively with African partners to exchange knowledge and ensure quality. Development partners also expressed some concern that institutional leaders in SSA are often not great advocates of their organizations—within negotiation processes, many of the funders interviewed indicated that they wished institutions in SSA expressed more concretely their strengths and advocated more strongly for their needs, both in terms of research projects and financial support.

> "Who's monitoring and managing and supporting those philanthropic and foreign assistance dollars? It's mostly entities that are not from Africa because of the rationale—I won't say, the excuse—the rationale is that Africans, as you know, don't have the governance, don't have the leadership, don't have the talent, don't have the capability, don't have the quality, don't have the experience to actually provide this kind of support."

> "And to some extent, funders are to blame too, because they are much more likely to trust results coming out of [NAME of an American university] than coming out of a regional hospital in Jinja. So you're facing an uphill battle almost at every level, without sounding negative, at every level, even before you can start. Getting the best brains is not enough."

> "There is a cultural closeness between a northern philanthropic donor and the northern university or NGO, which might not be automatically the case with a university in the South."

> "It's actually not very complicated to actually physically make grants to local institutions. The place where—the most difficult part of the discussion with these African institutions is actually getting them to be clear and be upfront about what they can and cannot do and having those expectations discussed upfront."

> "But we have gotten grants that have had to be written over and over and over. And I've approved grants that, because I've made a site visit, I know they're doing really good work, but you couldn't tell it from the grant."

3.4.3 Perspectives on How Current Models of Funding Perpetuate Challenges

Development partners described in great detail their perspectives on the ways in which the historical and current state of funding initiatives in the region contribute to weakening institutional viability. Those interviewed generally conceded that the historically prevalent model of partnerships between funders and institutions in SSA has adversely affected the capacity of institutions in the region. Multiple funders acknowledged that the desire for immediate results within very specific programmatic areas has led to problematic and sometimes damaging partnerships, and the traditional project-focused and sector-oriented approach has complicated the development of research in the region through siloed funding streams. This theme also presents a challenge to integrating capacity building efforts into the current paradigm of support in the region. Since existing funding mechanisms are focused on specific program areas to achieve specific short-term goals, developing and incorporating programs to address capacity on a long-term timeline can be challenging.

Many of the respondents noted that there is very little alignment between how funders allocate resources and the comparative advantage and specialties of various institutions in the region. In particular, those institutions that are more well-known tend to receive more funds, regardless of their expertise in the research area. This results in preferential funding as well as lower quality outputs, since funders are not adequately matching funds to the correct institutions.

Finally, many interviewees noted that an exacerbating circumstance is the inability of local governments to take on the responsibility of funding research. Sustainability of institutions is a significant concern for funders, and this involves encouraging governments to take on the responsibility of funding research. Multiple development partners noted inconsistencies between the amount of funding governments can provide for R&D, their willingness to do so within limited budgets, and the amount of funding development partners can provide for R&D. Most development partners believe that governments have significantly more money to devote to funding research, although they also acknowledge that governments in SSA operate within highly constrained budgets. With these constrained budgets in mind, some development partners noted that the continued presence of funders in the field could act as a disincentive for governments to reallocate money for research. Additionally, some development partners noted that it is difficult to create buy-in from governments, and that governments are often more willing to invest words rather than real money.

3.4.4 Strengths of African Institutions and Reasons to Fund Them

When asked about the key strengths local institutions bring on board, many funders were very clear and explicit about a number of strengths that make SSA institutions ideal partners with which to work. Institutions in SSA have three main strengths, according to the funders: 1) local knowledge and understanding of local problems and context; 2) local negotiating power with the public and governments; and 3) high value for money.

A number of development partners expressed a preference for working with SSA institutions because of their deep contextual knowledge. Many funders noted a changing trend in which local knowledge has become prioritized over research conducted by external actors. For example, one funder said that SSA institutions bring different approaches and analytic methods to the table "because they're living it. They're living it. You have outsiders coming in. They're not living it." The importance of using local expertise to address local issues was also repeatedly emphasized, especially to ensure proper solutions to region-specific problems. Finally, interviewees acknowledged that local expertise translates to increased local commitments, which results in longer-term investment and thus more sustainable and appreciable impact.

This relates to the second strength of institutions in SSA: local knowledge and familiarity gives local organizations a strong ability to communicate with relevant policymakers and other stakeholders, through a cultural closeness that external players often cannot leverage. These institutions in SSA have the ability to understand local political dynamics and create ongoing relationships with local policy communities.

Finally, the funders noted that institutions in SSA tend to have higher value for money. That is, these organizations can accomplish a larger amount of work with a very strict research budget. As one development partner bluntly stated, "the reality is we can support more work for the same dollars." There are often two dimensions of this perspective. One is the acknowledged inefficiencies of working through multiple layers of intermediaries, often with high overheads and no real value added to the program. The other is the fact that African institutions can deliver a lot more value for the same dollar invested. Additionally, many development partners described SSA as a target for their funds because of the specific context of the region—due to the large number of perceived issues in Africa, placing money in the region ensures that funders can create the largest amount of impact in the region that is most in need. These three strengths were noted throughout the interviews:

> "But when you're in a group, and especially one that's dominated by African researchers and journalists and African journalists and all of this, the way they approach issues is very different because they're living it. They're living it. You have outsiders coming in. They're not living it. They can keep that pseudo intellectual distance. It's hard to do that

> when you're living it. And the questions are different. And so it's much more powerful from an application stance."

> "So institutions who know the landscape very well, who have worked with the key players there that can actually help you navigate how to get to impact, is the biggest draw. And that's the area where these institutions have actually been able to outperform, just in terms of bringing that raw local knowledge.

> "We don't think of it in cost effectiveness terms, but the reality is we can support more work for the same dollars."

> "The question for [our organization] is, where does the support we give to research have the greatest opportunity to make a difference on the ground to challenges, problems, issues that can be resolved in a range of national context? And I think we accept that sub-Saharan Africa for us is an area where we believe the investment that we can give to researchers is very likely to make a very significant difference. So for us, it's a very high priority."

3.4.5 Suggestions for Improving Capacity Development

Throughout the course of the interviews, funders offered a number of suggestions on how to address some of the limitations they experience in working with local organizations in the region. For one, a number of development partners suggested that increasing aggregation, collaboration, coordination, and information sharing could be an important first step in improving capacity in the region. This would both level and increase the playing field and allow for more constructive work across the region, allowing the region to "function more as a collaborative unit." Secondly, a total of nine funders (out of thirteen) suggested core funding as an important element of empowering institutions in SSA to be stronger and more impactful. Third, funders highlighted a need to build on existing structures in a more intentional way to ensure better strengthening in the future, which involves focusing on institutions on which there is something to build. Along with this, there is a need to better align institutions' current strengths with the possible contributions that funders can make to support them and foster improvement. Fourth, there were two notable changes to incentive structures that funders described in the interviews: 1) strengthening public institutions to incentivize talent to seek out employment at think tanks and to stay, rather than leaving for better opportunities, and 2) incentivizing structure change, which also involves retaining staff, through a mechanism similar to a rewards system for quality research. Fifth, a number of development funders noted that an essential step to increasing the viability of organizations in SSA is to ensure that they have strong and visible reputations. This increase in reputation will increase visibility, which will then attract funding and hopefully act in a cyclical nature. A final possibility could be to engage other sources of funding beyond governments and development partners to further increase R&D investments in the region.

Interview data involving solutions like aggregation, investments in core funding, and improved incentive structures include:

> "But I think the more we can work in a collaborative way, the more the research will be appreciated, and the less it will be seen as just simply an academic exercise that's sitting in—it's the purview of just a few."

> [using farming as an analogy] "So what we talk about often is, obviously, aggregation and aggregating farmers together so that out of many, we create one market. So out of many smallholders that they come together—and they come together in a cooperative or they come together in a producer group—but they come together so that they have a bigger value proposition to the buyers, they have larger volume, they are able to produce with a certain higher level of standardization, in terms of quality, in terms of quantity, and on a consistent basis. Because they have that shared understanding, and they're not just one individual anymore—that they've come together."

> "So part of this has to be a discussion with funders around whether funders themselves can be maybe more flexible around the types of funding they support. And that's a harder—that's hard for organizations to attract, which is that really critical core funding."

> "You need at least 15, 20, 25 percent to really dedicate to building an institution. If part of your ethos is to commit to institutional development, funders should be willing to make that investment. They don't squeal when they're paying 65 percent to Harvard. Why squeal when you're doing this to an African institution?"

3.4.6 Key Takeaways from Development Partners' Interviews

Overall, the interviews with development partners revealed that there are a number of existing limitations to working with institutions in Africa, but the strengths associated with improving the capacity of these organizations correspond with an overwhelming commitment among those interviewed to adjust the current paradigm of funding development initiatives in the region. Funders oftentimes struggle when working with institutions in SSA because of their weak organizational structures, poor reputations, low levels of visibility, and inability to successfully absorb large grants, all of which can be addressed through capacity building initiatives and changes in funding models. Across all interviews, development partners expressed a desire to improve on the current model of funding in the region to ensure that there is a higher level of local ownership over research projects. Those interviewed noted many benefits of increased local ownership, including better understanding of local issues and stronger influence among local stakeholders. To achieve this improved level of local ownership, many of the individuals offered solutions as well as ways to track success toward reaching this shared goal.

3.5 Key Summaries from the Perspectives of Institutional Leaders and Funders

3.5.1 Commonalities

Both funders and organizational leaders seem to believe that a new funding model that incorporates a mix of core support and project funding is the best way to support institutions, especially knowledge-based institutions and think tanks in SSA. While acknowledging the many instances when core funding has not been the most effective mechanism for achieving institutional capacity development, both funders and organizational leaders reiterated that core funding allows for "freedom to think beyond [needs], and getting them to think for themselves and for the organization." If organizations are constantly chasing funds, one development partner asked, "now how much space do you have to really think?"

In lieu of regular, sustained core funding, there was an area of agreement regarding the need to create new funding streams. Many of the institutional leaders would like to find ways to monetize their previous research efforts or otherwise create and market a sellable product. For instance, some are considering ways to package and license the data they have collected in order to infuse their organization with some amount of recurring revenue. This is in line with funders' and many institutional leaders' goal to increasingly focus on applied research. The perception is that institutions and researchers need to cease viewing academic publishing as the major goal of their work and increase efforts to make their research useful in a "real-world" sense. While this means purposefully crafting research that speaks to the concrete goals of political leadership, it also includes creating products that will tend to a need being experienced in a given region. That this goal may create new funding streams is an interesting synergy between these viewpoints.

This desire to better align research processes and outcomes also manifests itself in a shared desire for more publicity and outreach. Many institutional leaders expressed the need for concrete investment in this area to better "sell" research "products" in order to increase the chances that they will be taken up by policymakers. Moreover, when successes do occur, it is equally important that an institution publicizes them across multiple platforms. Interestingly, some leaders expressed frustration that their researchers and other staff are not fond of "bragging" about their successes and would rather "let the work speak for itself." This sentiment echoes some of funders' frustrations with the communication styles of SSA organizations and demonstrates that the need for change in this area is perceived on both sides.

3.5.2 Discrepancies

While funders and organizational leaders agree that project-specific funding leads to mission drift, a discrepancy exists regarding the idea of donor-driven research. Organizational leaders tend to perceive a pressure to conform their work to the outside desires of funding organizations. More pointedly, some leaders claim that they are treated as "consultants" rather than as equal partners worthy of making true contributions to research. Funders tended to agree that research sometimes becomes directed by their organizations and positioned it as a regrettable outcome because of the high premium they place on local knowledge. Donor organizations have clear objectives for themselves, but they have come to recognize that there is a greater chance for success when problems and solutions are defined by those on the ground. Yet, in order to provide this kind of targeted, quality research, institutions need to have the freedom and breathing room to focus on their work without worrying about meeting basic organizational needs. This circular problem regarding project-specific funding is beginning to be viewed as detrimental to funders' long-term goals since the benefits of local knowledge depend on "giving them the freedom to think beyond us and our needs . . . [and] getting them to think for themselves and the organization."

Another difference in perceptions appears regarding financial tracking. Many of the institutional leaders feel as if current funding structures presuppose that they are untrustworthy. As one stated, "And we already demonstrated that we have good systems, a good financial management system. We are open to audits. We are open to institutional audits, we're open to financial audits, we are open to lifestyle audits. We are open to—any kind of auditing is not our problem. We are not afraid of transparency. That's never been our problem." Yet, this leader feels more beholden to donors than ever before and is upset "about the way funders have treated us. And it's gotten worse with neo-liberalization. It's getting really, really worse with the market orientation towards funding." On the other hand, funders do feel that there are many institutions that require improvements in financial knowledge and tracking, but do not perceive these as creating antagonistic relationships. One funder even perceived improving financial knowledge as a positive "process of knowledge exchange. . . That relationship-building is really important."

3.5.3 Metrics for Measuring Success

The interviews with both development partners and institutional leaders closed with a question regarding how one might measure progress in building organizational capacity in the region. Most development partners struggled with this question for two main reasons: 1) institutions are so varied that a uniform set of criteria may not be accurate to account for the situations of all the organizations; and 2) capacity building is an inherently intangible effort and thus difficult to measure through tangible criteria. However, interviewees did offer a few insights that showed a great deal of agreement with the responses of many of the institutional leaders, who were asked a similar question regarding potential indicators of success in making their organizations more impactful.

One possible metric could be a measurement of the purpose of the organization and their outcomes and successes. As one funder stated: "it's only effective from a research standpoint if somebody has taken that research and applied it or done something with it or used it or it did influence policy, and there's some direct attribution. I think knowledge generation and knowledge creation is still paramount. But also, the utility of that is where I feel like more and more organizations are going to be judged. Their success is going to be judged less on the input and less on the output and more on the impact—the intention—of what the funding or the organization was really established to do. And so those indicators would have a lot to do with uptake, utility, performance—real attributes that can be assessed and attributable to that organization." Another development partner stated, "I would like to see some metrics that really indicate the throughput went from x number to y number… And I want to see, if it's based in a particular country, I want to see this institution making a difference to the country profile... And importantly is, that somehow the investments we've made in this institution for x number of years, that whoever graduates from this institution have put back for that same period of time."

Similarly, institutional leaders cited uptake of research and its ability to influence policy implementation as a key indicator of success. A particularly "utopian" view of success would include greater ownership and investment on the part of African governments and civil society: "I think, ultimately, it will be that—for me, success will be when there's a better ownership within Africa of these institutions. And ownership in the sense that governments consider value when they are willing to invest in public institutions, and that the institutions themselves see themselves as partners for government".

A few other funders mentioned that they wanted to see some amount of progress in institutions in terms of attracting other funders. One development partner asked: "Are they actually change-makers beyond grant-takers? Yes, they'll take my money. But are they really trying to bring about change?... I don't want them just to work for us and to meet our challenges and make sure that the grantees that we fund are compliant. I want to know that they're thinking beyond [our] funding, that they're thinking about their institutions in the long term." Another funder echoed this, stating: "I would like to see this organization become strong enough to attract other funders to the same tune as probably I am investing, my institution is investing." For their part, some institutional leaders recognize these same kinds of occurrences as indicators of success. One mentioned "donors who come in maybe funding one project, we've seen them getting involved in more funding. We've also seen ourselves getting bigger grants from the donors we had in the past."

Yet another respondent tied these two metrics together, stating that she was interested in "how their voice is used, sort of, in the public square. You know, if there are metrics around policy change, and there are metrics around budgetary change, and around services provided. And then we're quite interested in services and quality of services, as well." Another respondent added: "So in the end, you could say that has that institution got individuals who are winning research grants? Because if they do, then they're probably a successful organization, which is success. And if there's no one there who is winning grants, quite clearly, they are not a research-intensive organization. So, you know, maybe at its really simplest, you could look at whether you have got people winning grants and have you got a pipeline of well-trained researchers coming through? Because, ultimately, you and I are having a conversation about research." However, in the SSA context where well-trained researchers are difficult to attract and retain, this metric is sometimes difficult to attain and may not mean the organization is not "research-intensive." One leader's comment highlights the uphill battle SSA institutions are often contending with: "It's not been easy. We've had to work hard towards getting the funding that we have. It means that you have to continue being relevant, sustaining the effort. What you've been able to gain. We have to work hard to ensure that we sustain it and even improve on that. Staff have had to work extra hard to remain relevant in the field. That's why for them to be able to attract funding, it means that we are doing good work, that it's getting attention out there."

4. Way Forward

Given the consensus between both funders and organizational leaders in SSA about the need for local leadership and knowledge to drive development practice in the region, the importance of an African-led development agenda for sustained impact, and the significance of size and capacity in achieving impact, how do we frame a new orientation to development assistance in Africa that catalyzes the role of local institutions in driving development discourses and practice in the region? We highlight three potential models that respond to the results discussed above to facilitate initial conversation around these issues.

4.1 Model 1: Multi-stakeholder Funding Platform

This model posits the creation of a joint fund in which funders match government investments to support SSA institutions. This pooled funding mechanism would be available, on competitive basis, **only to organizations in the African countries where governments are contributing to the fund**. This model has three inter-related objectives that respond to the current constraints to institutional development in SSA. First, it seeks to catalyze domestic investments in knowledge-based organizations and think tanks in the region; second, it responds to the need to support local ideas and knowledge that could lead to transformative change in SSA and supports initiatives that would not otherwise be funded given the current sector- and issue-specific funding models that dominate research funding in SSA; and finally, it could significantly promote multi-country research partnerships and collaborations in SSA, encourage aggregation, and possibly catalyze capacity in countries with weak research capacity and infrastructure.

4.1.1 Components/Structure of the Fund

One possible path to implementing this model could be:

1. **Start with contributions by African governments:** Under the leadership of a regional body, such as the African Development Bank (AfDB), 10 or more SSA countries would be invited to each contribute at least $5 million each year for at least 10 years. (The amounts to be contributed, timelines and number of countries needed to launch the program should be further refined based on discussions with stakeholders). The idea is that an equal amount at the base level will be contributed by each country wishing to participate in the program. Some governments can give more but not less that the base level to the pooled fund. Say a minimum of 10 countries is needed to start the program (this number is subject to further discussions) and that the base contribution is $5 million each year, this will leverage a total of $50 million each year for 10 years in funding support from African governments. The payment of this base amount would open the opportunity for institutions (universities, research centers, policy think tanks, etc.) in the countries

whose governments are contributing to apply for funding from schemes supported by the fund.

2. **Matching contributions from development partners:** Development partners (including African philanthropists, corporations, etc.) will be approached to match the funds contributed by African governments and leverage it at a rate up to (or at least) X times to 1. Assuming X is 10, this would release about 550 million USD each year to support local ideas and initiatives for a minimum of 10 years. Additional leverage could be achieved through joint calls with other funding schemes for sector-specific calls.

3. **Managing the fund:** To manage this fund, the lead institution, such as AfDB, would create a governance board for the fund with representation from country governments as well as development and technical partners. A Scientific Oversight Group comprising membership from organizations that regularly manage scientific reviews (including the Wellcome Trust, the National Institutes of Health, the International Development Research Centre, the National Research Foundation in South Africa, etc.) would be created to support the development of calls and select review committee members for each call. National governments, the African Union, and development partners may suggest areas of focus for calls, with a maximum number of calls that could be made each year in different areas. The hosting institution could be requested to provide free space and zero overhead recovery to the program as its institutional contribution to the initiative and to invest any undisbursed funds in the most profitable portfolio of the host institution and returns from this investment would be accumulated over the initial 10-year period to create a perpetual Trust Fund that will continue to support local research in SSA.

4. **Special considerations in calls and awards:** To promote cross-country collaborations, extra points may be awarded in the selection process to applications that include multi-country collaboration within SSA. To catalyze research in countries that contribute but have very weak research capacity and/or infrastructure, extra points may also be awarded for proposals that include meaningful engagement by institutions from those countries with weak research systems or capacity.

5. **Types of work to be supported:** This will need to be clarified further but awards could support different types of research including basic research, translational research, policy-oriented research, product development, and capacity building. Each call could have a maximum amount to support successful proposals, say up to $200 million per call and 3-4 calls per year, with individual awards being in the range of 15 to 30 million USD (or more). The awards could include a generous overhead rate of say 20-25 percent. At this level of investment, institutions would be able attract top talents to lead the work and these talents would be able to create teams around them that would make them competitive for other global funding opportunities. Within the initial 10-year period, funded organizations are expected to demonstrate the value of research to local public and private agencies who are

expected to take stronger interest in expanding their support to local research centers.

6. **Additional ways to promote locally oriented research:** The fund could also provide or facilitate value-add initiatives to promote research in the region, including assisting with registration of patents and intellectual properties, commercialization of patents, increased access to research resources (like Web of Science and other bibliographic databases) to institutions in the region, etc. Grants can be for up to an initial period of 5 years and clear decisions made on whether a call is a one-off call or one that will have subsequent calls and whether funded organizations will go through another open call or limit the competition to only those institutions funded through the initial call. Reviews of funded programs will be undertaken in years 2 and 4 and decisions made in Year 4 on future funding decisions. A portion of royalties from patents and other commercialized products from work supported through this mechanism could be retained to continue to grow the endowment.

4.1.2 Timeframe

The program could run for an initial period of 10 years. Every 3 years, there will be an open window for new countries to join. A country may only opt out at the end of the first 10 years. However, countries that do not meet their annual commitment would have institutions in the country suspended from competing in any subsequent calls.

4.1.3 Implementers

The program would ideally be housed at a key regional organization that is focused on broader development issues in the region, such as the AfDB as proposed above. Since the funding is not sector specific, meaning it should fund work across a range of issues–basic sciences, health, education, energy, agriculture, environment, WASH, infrastructure, governance, natural resource management, etc.—the African Development Institute at the AfDB may be well-suited to host the fund and the AfDB may be persuaded to make an in-kind contribution that would include providing a zero overhead charge to managing the fund, which would make those cost savings its institutional contribution to building institutional capacity in SSA. Other possibilities may include the Science Granting Councils Initiative Secretariat, especially if the country commitments come through their National Councils for Science, Technology and Innovation.

4.1.4 Budget

The above configuration of funding foresees African governments contributing no less than 10 percent of the total funding envelope. Another 10 to 15 percent could come from African philanthropists and businesses. This will be a new model of funding with African governments and corporations leading the way in establishing a funding mechanism to support African institutions. Fifty percent of the total funding envelope could come from a number of multilateral, bilateral and foundation partners who will be represented on the governing board of the Fund. About a quarter of the total funding envelope could come from entrepreneurial efforts of the fund managers which will largely seek collaboration for joint calls with other funding mechanisms. While a 550 million USD annual budget to supporting knowledge-based institutions in SSA is clearly an ambitious undertaking, especially if one compares this to the size of previous investments to support institutional (research) capacity strengthening in the region, it is important to note that the research budget of one single U.S. university in 2017 was $2.6 billion, and more than 40 U.S. universities **each** had annual R&D budgets that exceeded the 550 million USD in 2017.[25] To create the type of transformative change we want to see in African knowledge-based institutions and to have them provide the leadership in knowledge and action needed to achieve sustained positive development outcomes in the region, it would require investments at levels greater than what is noted here. If more than 10 countries sign up initially, efforts must be made to significantly increase the resource envelope so that contributing countries are able to see significant returns in terms of support to institutions in their countries, the increases in their research output, and the contributions of their research to informing local policy decisions. These will lay the foundation for greater domestic investment in R&D by the African countries and governments, including private corporations in the countries.

The example of the Ouagadougou Partnership provides strong confidence that this model is possible. A total of 8 funders comprising bilateral agencies and foundations provide a total of at least $100 million annually for family planning programs to 9 Francophone African countries in the Partnership. However, there are major differences with what is being proposed here. First, the African countries themselves, until recently, were not required to make financial contributions to the Partnership. Second, the funding is channeled to and through intermediaries and a major concern is that while the total amounts being contributed far exceed the Costed Country Implementation Plans budgets, countries still complain of a lack of resources since much of the money remains in overhead costs of the intermediaries. But the Ouagadougou Partnership provides a strong basis to consider new funding models that could catalyze domestic funding, building the capacity of local institutions, and in the medium and longer term, provide better development outcomes for SSA.

4.1.5 Risks

The biggest risk associated with this multi-stakeholder model would be sustaining the commitment of African governments, especially when there is a regime change. This could be mitigated by strengthening the voice of civil society in budget decisions whereby research and higher education institutions in the countries lobby for their government's continued engagement in the initiative. Another risk would be getting the buy-in of the regional host, such as the AfDB, to own the idea and put in place the necessary leadership and administrative structures to drive the work. Initial conversations with the new Senior Director of the African Development Institute, which would be an ideal home for such an initiative at the AfDB, has been very positive and encouraging. A related risk would be sustaining the commitment of funders for 10 years when their initiatives are often on a two- to three-year horizon. This will be discussed upfront with funders and necessary safeguards including in the agreements of the stakeholders. Perhaps one of the greatest challenge would

[25] "NCSES Academic Institution Profiles – Rankings by Total R&D Expenditures" n.d.

be ensuring a governance arrangement that is both transparent and accountable and also has faith in the capacity of African institutions to define what they need to contribute to transformative change in the region. It is hoped that the Governance arrangement and Scientific Oversight functions discussed above would greatly help here. It is possible that some would see a 30 million USD grant to an African institution as a huge risk, but if we cannot make those levels of investments in African institutions today, then in 10 years, we cannot expect them to have developed the capacity to manage 100 million USD in grants. Besides, the real ideas that will transform Africa are sitting with Africans, and unless we invest in some of those untested and risky ideas today, the real solutions we need today, and tomorrow, will not materialize.

4.1.6 Preliminary Feedback from Funders on the Multi-Stakeholder Model

This model was discussed with funders and it prompted interesting discussions. In general, ten out of the thirteen development partners interviewed expressed support for this model, but only if certain issues are addressed. Three development partners expressed skepticism for the model, mainly based on different funding priorities and different scales at which they prefer to operate, at least in the region.

The funders who expressed general support for the model considered the following to be its positive aspects. They noted that the model could add cohesion to the research field in the region and improve coordination to decrease redundant research and promote collaboration. It would also place African institutions as front and center for these projects, promoting country ownership through both the government investments and the increased visibility of research. As one development partner noted, “It’s not a handout, it’s a hand up, it’s a helping hand. It’s a real partnership where we both have a shared sacrifice or a shared interest and shared responsibility to do that.” Another attribute seen as a particularly attractive aspect of the model is the power to leverage funds, which is especially useful for development partner institutions that have smaller budgets but still hope to achieve impactful change in the region.

However, the development partners that expressed support for this model also articulated few concerns that the model should address. At the core, they noted that more work must be done to properly understand what is driving the demand for such a model. Further research should landscape previous efforts, draw out lessons learned, and plan for the future sustainability of such a multi-stakeholder funding platform. In addition, the model should prioritize linking research to application. It should also empower institutions to increase their visibility by improving communications and more widely sharing their results. Another consideration could be to involve the private sector and other non-traditional stakeholders to ensure that the pot of available funding is stable and sufficient. Development partners hope to gain more clarity on the governance structure and the types of research projects that will be supported through the fund. *The elaborations of the model presented above sought to address some of these concerns.*

A number of funders noted certain limitations associated with this model. For one, it may be difficult to get actionable buy-in from governments. As one development partner noted, "African governments sometimes pledge and don't pay." Additionally, some development partners believe that they are unable to contribute the amount of money that the model would require, and some sector-specific funders articulated reluctance associated with funding such a broad, multi-sector approach. Development partners also shared concerns around the bureaucracy created by a multi-stakeholder or multi-funder platform. These platforms tend to be unable to move as flexibly as the process of funding research in the region may require; they run the risk of compromising the objectivity of the fund; and they also make it harder to create alignment on important decisions given the myriad viewpoints of the stakeholders. With these issues in mind, several funders noted that a strong governance structure is essential to this process. Such a broad platform could also erase country-specific issues, and one development partner mentioned that a country-by-country approach may be more effective in addressing context-specific challenges while also catering to some funders' preferences to work more locally with recipient institutions.

4.2 Model 2: Integrator Organizations

As the data show, two key challenges currently prevent growth of institutions in SSA: first, African institutions face limited budgets that severely constrain their work and development and second, development partners have difficulty approving large amounts of resources directly to African institutions. One of the fundamental weaknesses of current international development assistance models built on sub-contracting is that only a small fraction of the funding actually supports work on the ground. Sometimes the same grant passes through more than five intermediary agencies before reaching the final local implementer. At each step in this journey, significant portions of the investment are lost to cover headquarters operations, often located in the country where the funder is based. While this may be excusable in some bilateral contexts, foundations are not under the same constraints to follow such inefficient funding arrangements. The key rationale for using these intermediaries is often the absorptive capacity of local organizations, which are seen as lacking the proper systems to financially manage large grants. This creates a chicken-and-egg dilemma whereby local organizations need larger funding to develop, demonstrate, and grow their absorptive capacity, but they do not receive such funding because they cannot demonstrate absorptive capacity. The dominant funding model of SSA institutions that involves short-term small project grants can never support the development of such capacities in the region.

In the US and Europe, it is not uncommon to find "integrator organizations" like The Tides Foundation, International Institute of Education, and the UN Foundation, among others. These organizations receive funds from donors and then distribute nearly all of these resources to smaller organizations at their discretion, reducing the levels of intermediaries, maximizing the funds traveling from donor to institution, and managing the distribution of resources to various organizations across countries and sectors. In addition to distributing loans and grants, these integrator organizations also provide programs of study and training and other forms of non-financial support to organizations under their umbrella. These organizations can host programs that are independently run and that work with multiple partners outside their organization. Such organizations filling these integrator roles are virtually absent in SSA.

This model anticipates the development of sub-regional organization(s) that subsume independent research organizations in the region. This integrator organization(s) would catalyze a variety of collaborative activities that would promote the capacity of institutions in the region, leverage larger investments to these institutions, and provide a supportive environment to enhance institutional performance. Beyond leveraging larger grants and ensuring that a substantially larger percentage of such funds are availed to the final implementers, which will enhance the operational capacity and effectiveness of the local implementing organizations, these integrator organizations could also promote knowledge and experience sharing; empower organizations to aggregate and have a better value proposition to funders; and equip member/partner organizations with better systems at scale—for instance, a shared high-quality finance system (like an Enterprise Resource Planning system) managed by the integrator organization or a shared journal access account between organizations.

This integrator organization model aims to develop local entities that have the capacity to receive large grants and to manage sub-contracting relationships with other organizations in SSA with an agreed cap on how much could be retained by the integrator organization in administrative overhead rates. Because these integrator organizations would be Africa-based and Africa-managed, they could manage all sub-financing based on an African agenda, which may or may not involve the input of key stakeholders or governments. This model also hopes to enable significant proportions of development assistance funds to reach local implementing organizations in SSA, which will further enable them to attract more skilled staff and invest in systems and processes. A final objective of this model would be to drastically enhance south-south collaboration among institutions in SSA and achieve greater economies of scale in systems and processes. More thinking would have to be conducted to determine how such a model might involve African governments and other key sources of currently untapped resources.

4.2.1 Activities for Implementation

The activities to implement such a model need to be discussed with both institutional leaders and development partners in light of the introduction and objectives above. Before other actionable steps are taken, the first step would be to note considerations of whether such integrator organizations should be sector specific or generic; whether to work with existing organizations and build their capacity to play such a role or set up new entities to drive the work; how such integrator organizations should ideally be registered—as private for-profit or not-for-profit entities; and where to locate such entities. Because of the many unknowns associated with the implementation of this model, the timeframe and budget are both currently variable and highly dependent on discussions with key stakeholders.

4.2.2 Implementers

There are already a number of organizations that are working in this area but at much lower levels and smaller scales. For example, APHRC leads the CARTA consortium of 8 universities and 5 research institutions across 8 countries in East, West and Southern Africa with a focus on health. RUFORUM at Makerere University in Uganda coordinates a network of 105 universities across 37 African countries with the aim of strengthening postgraduate training and research in agriculture, science, technology and innovation. AERC in Nairobi has been leading a collaborative research, training and policy outreach on economic policy making in Africa since 1988. AESA at the African Academy of Sciences leads the DELTAS Initiative and various other programs to enhance research capacity in Africa. The ARUA has been coordinating leading universities in SSA to promote their greater engagement in research. Whether these consortia, forums and alliances can rise up to play such integrator roles or whether new entities with clear mandate aligned to playing an integrator role need to be established are questions further elaboration of this model should clarify.

Whereas most of these initiatives/organizations are contributing to building individual and institutional capacity for research in Africa, they are all sector specific and currently operate at levels far below what an integrator organization can possibly achieve. Indeed, international consulting and audit firms appear to be positioning themselves more effectively to play such a role. Unfortunately, they do not have the experience or background in research and science to add value to what knowledge-based organizations do beyond their expertise in financial oversight. More research and thought should be invested to understand and clarify this model further and to decide on a possible list of potential organizations that could serve such an integrator role in the region.

4.2.3 Risks

One of the biggest risks of the integrator organization model would be building trust amongst African organizations to buy into an initiative like this. Another related risk is whether African institutions and their leaders would treat their agreements with the integrator organization with the same respect and responsiveness they would have with any other prime grantee they are in a sub-agreement with or simply assume "the integrator organization will understand" when reports are late or incomplete, for instance. This must not be assumed or taken for granted and clear guidelines and performance indicators must be developed to manage the relationships. Also, there is the risk of not getting strong leadership for the integrator organization(s). When such organizations are expected to manage hundreds of millions of dollars in sub-agreements, the leader must have the capacity to lead— to be entrepreneurial and innovative and at the same time, and to understand research. A final risk is how a new inflow of capital could likely change the local organizations that are being sub-contracted by the integrator organization. These organizations have been accustomed to surviving with so little resources. When they receive 3-5 times more resources for the same quantity of work they did in the past, are they able to recruit more capable staff, strengthen their systems, and position their organizations for much greater impact? Making this investment may require smaller investments in coaching and supporting institutional leaders on how to make needed improvements to strengthen the capacity of their organizations.

4.2.4 Feedback from Funders on the Integrator Organization Model

Development partners were generally positive in their response to this model, with seven funders expressing approval, three funders expressing reservations, and three funders were not asked about this model, as it was still in development during the early rounds of interviews.

Development partners noted the following strengths of the model. For one, it could potentially increase the visibility of organizations that currently struggle to make themselves known to funders. This would also allow institutions to better manage finances in a way that is aligned to U.S. 501(c)(3) requirements, which would open many opportunities for research institutions in SSA to access funding. The collaboration created by such a model could also help push the research agenda forward by aligning research efforts and empowering organizations to work together to achieve a shared vision or goal.

There are notable shortcomings funders identified with this model, as well. For one, previous efforts to create one integrator organization for various efforts have led to integrator organizations becoming overwhelmed and thus ineffective. Additionally, many funders prefer to develop personal relationships with their grant receivers, and such a model would add another layer and interfere with this preferred way of working for some funders. There are also some power disparities associated with such a model; development partners expressed concern on how the integrator organization would interact with other organizations, and whether this might create some semblance of a hierarchy that places certain integrator organizations as more powerful from the organizations under the integrator organization. Finally, some concerns revolved around the current lack of strong details regarding implementation, such as the timeline and budget. There are also currently no systems in place in this model to ensure that the integrator organization is accountable to both funders and research institutions, as well as no systems to plan for sustainability in the long term. A concern was also raised regarding how to manage competition or tension between potential integrator organizations and the need for greater clarity between those that are primarily fiscal sponsors and those that serve as institutional hosts for individual projects/initiatives.

4.3 Model 3: Scale Model

Many institutional leaders could not clearly identify the best ways to improve their institutions to increase absorptive capacity or increase visibility with governments. On the other hand, many development partners assessed the strengths and weaknesses of African organizations by very specific metrics. One possible model that could improve institutional capacity and thus place African organizations in a much stronger position to absorb larger grants from funders while also increasing their reputation and visibility among governments and local users of research is a scale model. This model proposes a rubric that assesses organizations based on size and type of organization. The rubric would clearly identify systems and processes organizations at a given level must meet and what they would need to put in place if the organization is to be evaluated at a higher level. Within any given tier or level, organizations would have to meet all the requirements needed for certification at that level. This system is not meant to be a ranking system, but rather a mechanism for designing systems and processes that are sensitive to organizational size and creating clear indications of the types of institutional and operational investments needed when organizations begin to grow into the next tier.

This idea derives from biomedical labs, which are rated as levels 1, 2, 3 and 4. At each level, a lab can qualify as excellent and top-notch. For a particular lab to move from, say level 2 to level 3, however, there are several new requirements that must be met before it can be certified as a level 3 lab. Having these objective measures clarified would mean organizations would know what they would need to do to move to a higher tier. This model allows organizations to benchmark themselves and sets clear goals for institutional development if they want to move to a higher tier. It also allows funders who may be interested in supporting a particular organization to move to a higher tier to know exactly what types of investments (systems, processes, people, governance, etc.) are needed to be put in place in the organization.

The African Academy of Sciences has been coordinating the development of a "Good Financial Grant Practice" model to serve as a global quality finance standard to define financial management requirements for organizations of different sizes. The GFGP aims to "strengthen African research and development infrastructure by developing an innovative standard for the best practices in the management of funds awarded to grantees."[26] Preliminary discussions with GFGP suggest ample opportunities to expand the model to cover governance, human resources and other aspects of institutional development beyond financial management. Using the GFGP, funders can have assurance on the capacity of the organizations they are supporting, and African institutions can avoid the multiple demands for institutional reviews and due diligence by sharing results of prior evaluations. An adapted version of the GFGP to apply to institutional strengthening in SSA is shown below in Table 2. What may be needed for this model is a more robust institutional assessment rubric that covers governance, financial and human resources, geographic scope of operations, etc. Tiers could be defined by size (budget), geographic focus, or any other relevant criterion. For example, regarding finance, a tier 1 organization with an annual budget of 50,000 USD may not require an internal audit function whereas it would be mandatory for a tier 3 or 4 organization with an annual budget of 10+ million USD.

[26] "Good Financial Grant Practice" n.d.

Table 2. Outline Rubric for Proposed Scale Model

Themes	Tier 1	Tier 2	Tier 3	Tier X
Governance	A – sets of indicators	A + B	A + B + C	A + B + C + …+ X
Finance	A	A + B	A + B + C	A + B + C + … + X
Human Resources	A	A + B	A + B + C	A + B + C + … + X
Geographic Focus	Sub-national/CBO	National	Regional/Continental	Global
Programmatic Focus	Single issue	At least 2 issues	At least 5 issues and absorptive capacity to take on new issues	Unlimited
Etc.				

This model would aim to provide an objective rubric that is known by organizational leaders and funders that can be used to identify organizations at a given point in time and make transparent where they are and what may be needed for them to move to another tier. It provides objective measures for what institutional capacity strengthening means and how to track progress in supporting organizations to move from one tier to another.

4.3.1 Activities for Implementation

This model still requires a lot of thinking around what is needed to implement it and what specific contributions it is designed to make to institutional strengthening in the region. For one, it would provide clear metrics for tracking the impact of investments aimed at strengthening organizations in the region. Most of the activities would be developmental in nature and utilize the experience of developing the GFGP. It may even be best to work with the African Academy of Sciences to extend their current GFGP model and, through consultative meetings with institutional leaders, define what governance systems and human resource capacities should look like at different levels of organizational development and size.

4.3.2 Other Details around Implementation

The timeframe of the implementation of this model would be variable and highly dependent on the leadership driving the development. But building on AAS's experiences with GFGP will be the best strategy, once the GFGP has been launched and lessons learnt from its implementation. A phased development may be necessary with extensions of GFGP to cover governance arrangements first, then human resources, and finally vision, mission and strategic focus. The GFGP already plans to extend the model to data management, use of animals, safeguarding, research management, grantor reporting, etc. However, many of these new areas have standard protocols and guidelines that are universal and unlikely to vary depending on the size of the organization. The team hopes to continue discussions with

AAS and their partners working on GFGP to explore how the model could be reasonably adapted to include governance and human resources standards.

4.3.3 Risks

There are a number of risks associated with this model. One could be the acceptance of the framework by African organizations. If there is no clear appreciation that we need organizations of varying sizes and that quality organizations can belong to any tier, then growth and moving to a higher tier can easily become a goal for an organization rather than a reflection on how to strengthen the organization's effectiveness and impact at any given level. Another risk is that some funders may decide, for purely operational reasons, to work with organizations at particular tiers. We hope that this will be normally distributed across all tiers—meaning that there will be as many funders wanting to work with level 1 organizations as those wanting to work with level 4s, at least relative to their size and needs. This system could apply to organizations in other regions and could lead to a global standard for organizational growth and development.

4.3.4 Preliminary Feedback from Funders on the Scale Model

In discussions with development partners, this model was met with the most skepticism, though many of the individuals interviewed acknowledged the benefits of having such a platform. The opinions on this model were highly split, with six of the development partners articulating reserved support for the model and five expressing significant concerns. Two of the individuals interviewed were not asked about their opinions on this model.

There are notable positives associated with this model. One development partner summarized the benefits in the following way: "And for [institutions] to really know what they're good at is really important and to know what you're not good at or what your strengths are or where your areas of need are. And I think having that ability to discern where there are gaps and then to basically be able to come up with solutions and how those gaps or those skills that you have can be utilized to the best of their ability, but also to be able to provide a greater insight into that is really critical." Development partners also noted that such an information sharing platform is likely to increase transparency and accountability, as well as standard setting to improve research and management quality. One development partner that had contributed to TTI noted that this model is similar to the TTI application process, in which gathering information was very useful for development partners to learn more about the institutions.

Some of the biggest concerns with the model may come from a limited understanding of the rationale, purpose, and basic structure of the model. For example, there was concern that the model could create an implied hierarchy through the rubric format. This potential hierarchy has an innate spectrum of high performing versus low performing, and the rubric would be better if it emphasizes that this is a pathway rather than a ranking. Put another way, the funders argued that the model must differentiate between functioning as a mechanism that shares expectations (which is desirable) versus a filter that prioritizes only certain institutions (which is not desirable). Since development partners usually opt for quick fixes to problems, this could lead to funders prioritizing institutions that rank on higher tiers. The diversity of organizations in the region may also pose a challenge to finding one broad set of criteria to include in the rubric. One specific funder noted that weights should be placed on "How we figure out how the organizations themselves request or want that, so that it's not something we're imposing."

Other concerns revolve around difficulty with the implementation of such a model, namely: questions around overhead expenses and transaction costs, unknowns around the institution that will house or implement such a rubric, concerns around similar models that already exist, and worries around the bureaucracy that might emerge. Additionally, many funders already have due diligence processes that subsume risk assessments of potential fund receivers. These concerns notwithstanding, the GFGP, which is supported by a number of funders, actually seeks to do this with respect to financial systems. They have created a four-tiered classification system where organizations can be categorized with specific requirements at each level. The requirements at each tier have been carefully developed through consultative processes involving African institutional leaders, consultants and development partners. The implementation of the GFGP will provide an excellent learning opportunity on how the platform can be expanded beyond financial systems to support other aspects of organizational capacity development.

5. Conclusion

There is clear consensus in the literature and among institutional leaders in SSA and development partners that the existing models of funding research and development initiatives in SSA cannot deliver the development outcomes the region desperately needs. Such models have contributed, unwittingly, to weakening local organizational capacity in region, which is at the heart of poor development outcomes in the region. Changing this funding model will be key to developing sustainable, high-capacity, and locally-focused organizations capable of driving leadership in development thoughts and practice. The time is ripe for such a change, but it will require bold and decisive action on the part of African governments, African institutional leaders and their development partners.

Building on available evidence, this paper has proposed three models that could support organizational capacity development in SSA as a development imperative. These models are aimed at facilitating initial conversations among key stakeholders committed to seeing transformative change in the region. The models provide broad frameworks that could support the emergence of local knowledge systems to solve local problems, strengthen collaboration amongst African institutions, catalyze domestic funding for research, and create sustainable mechanisms for long term domestic funding of research in the region. They also provide frameworks for achieving scale and impact in development practice driven largely by local actors, achieve operational efficiencies through size and integration of related services, and make external development dollars go much further in delivering development results in the region. Finally, the models offer opportunities to enhance transparency and accountability while reducing undue reporting burdens that frustrate institutional growth and viability and offering the opportunity to develop benchmarks that could guide organizational development initiatives with clear metrics to track progress.

Capacity building is intrinsically a long-term endeavor, and these models are meant to initiate a change in focus and perspective among African governments, African institutional leaders, and development partners with a strong programmatic focus in the region. African governments must rediscover the role local knowledge systems play in achieving positive development outcomes. African institutional leaders must stand up and have themselves and their organizations be counted as key players in leading transformative change in the region. Development partners with a strong focus in SSA must recognize the inefficiencies and futility of current funding models in delivering positive and sustainable development outcomes in the region. If we plan to have, by 2030, local African institutions with the requisite capacities to drive development thought- and practice leadership across SSA, we must invest in them today in ways we have never done before. Organizational capacity is not a fixed entity that can be counted on to remain in perpetuity. Even the most endowed and capable institutions in high-income countries would collapse in a matter of a few years if they ceased to receive a continued mix of funding—project, program, core and other forms of support. But success begets success and the institutions that will emerge in SSA from the initiatives proposed here will operate at levels of effectiveness that will virtually guarantee their long-term sustainability.

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