



Canadian Bureau for
International Education

Innovation in the Public Sector in Sub-Saharan Africa: Barriers and Opportunities

Final Research Report on Public
Policy in Sub-Saharan Africa

Prepared by Elmond Bandaoko

February 2022



Global Affairs
Canada



This report was undertaken through the African Leaders of Tomorrow (ALT) Extension Program for 2021-2022. CBIE acknowledges the financial support of the Government of Canada through Global Affairs Canada and the Mastercard Foundation for the publication of this report.

TABLE OF CONTENTS

| | |
|---|-----------|
| List of Figures, Tables and Boxes | iv |
| List of Abbreviations and Acronyms | v |
| 1 – Introduction and Background to the Study..... | 6 |
| 1.1 – Purpose and Objectives of the Study..... | 7 |
| 1.2 – Methodology | 7 |
| 1.2.1 – Ethical Considerations..... | 8 |
| 2 – Framing the Study: The Concept of Public Sector Innovation..... | 9 |
| 2.1 – Why Innovation in the Public Sector? | 11 |
| 2.2 – Measuring Public Sector Innovation | 11 |
| 3 – Study Findings | 13 |
| 3.1 – An Overview of the Public Sector Innovation Landscape in SSA..... | 13 |
| 3.2 – Perspectives from ALT Alumni on Public Sector Innovation in SSA..... | 15 |
| 3.2.1 – Rating of Public Sector Innovation in SSA | 15 |
| 3.2.2 – The Impact of the ALT Scholarship Program on Innovation Capacities..... | 16 |
| 3.2.3 – Innovations initiated by ALT Alumni in SSA..... | 18 |
| 3.3 – Drivers and Opportunities to Innovation in the Public Sector in SSA | 19 |
| 3.3.1 – Leadership and Management Practices | 20 |
| 3.3.2 – Increased Penetration of ICTs in SSA | 20 |
| 3.3.3 – Dedicated Public Sector Innovation Units in Some Contexts | 21 |
| 3.3.4 – Continuous Capacity Development..... | 21 |
| 3.3.5 – Collaboration and Partnerships | 22 |
| 3.4 – Disabling Factors/Barriers to Innovation in the Public Sector in SSA | 22 |
| 3.4.1. –Public Sector Inertia and Unsupportive Organizational Culture..... | 23 |
| 3.4.2 – Lack of Innovation Champions..... | 25 |
| 3.4.3 – Lack of Incentives Towards Innovation..... | 25 |
| 3.4.4 – Rigid Regulatory Environment | 26 |
| 3.4.5 – Limited Priority for Research and Development (R&D) | 27 |
| 3.4.6 – Inadequate Infrastructure for Innovation | 28 |
| 3.4.7 – Limited or No Funding Towards Innovation | 29 |
| 4 – Conclusions and Way Forward | 30 |
| 5 – References | 32 |

LIST OF FIGURES, TABLES AND BOXES

Figures

| | | |
|-------------|--|----|
| Figure 1 – | Rating of Innovation in PSOs in SSA | 16 |
| Figure 2 – | Impact of ALT Scholarship on Innovation Capacity | 17 |
| Figure 3 – | Relevance of Skills and Knowledge to Public Sector Innovation in SSA | 17 |
| Figure 4 – | Main Drivers of Public Sector Innovation in SSA..... | 19 |
| Figure 5 – | Main Barriers to Public Sector Innovation in SSA..... | 22 |
| Figure 6 – | Do You Feel There is Culture to Support New Ideas Within Your Organization? | 23 |
| Figure 7 – | Organizational Support to Innovation Champions..... | 25 |
| Figure 8 – | Incentives or Rewards for Innovation in the Public Sector | 26 |
| Figure 9 – | Is the Regulatory Environment Supportive o f Innovation?..... | 27 |
| Figure 10 – | State of Research in PSOs in SSA | 28 |
| Figure 11 – | Availability of Infrastructure for Innovation in the Public Sector in SSA | 29 |

Tables

| | | |
|-----------|---|----|
| Table 1 – | Approaches to Innovation in the Public Sector..... | 10 |
| Table 2 – | Different Approaches to Public Sector Innovation Measurement | 12 |
| Table 3 – | Examples of public sector innovations in South Africa | 14 |

Boxes

| | | |
|---------|--|----|
| Box 1 – | Transformation of public sector delivery through Huduma Kenya Centers | 13 |
| Box 2 – | Disability and Duty to Accommodate Program Developed by ALT Alumnus in Uganda | 18 |
| Box 3 – | Centre for Public Service Innovation Programmes, South Africa | 21 |

LIST OF ABBREVIATIONS AND ACRONYMS

- ▶ **AAPAM** African Association for Public Administration and Management
- ▶ **ALT** African Leaders of Tomorrow
- ▶ **ANRSA** Agence Nationale de la Recherche Scientifique Appliquée
- ▶ **CBIE** Canadian Bureau for International Education
- ▶ **CPSI** Centre for Public Service Innovation
- ▶ **GhLA** Ghana Library Authority
- ▶ **GSAM** Ghana's Strengthening Accountability Mechanisms
- ▶ **ICTs** Information and Communication Technologies
- ▶ **IDIA** International Development Innovation Alliance
- ▶ **IPAC** Institute of Public Administration of Canada
- ▶ **ISD** Integrated Service Delivery
- ▶ **KCCA** Kampala Capital City Authority
- ▶ **NEPAD** New Partnership for Africa's Development
- ▶ **OECD** Organization for Economic Cooperation and Development
- ▶ **OGP** Open Government Partnership
- ▶ **OPSI** Observatory for Public Service Innovation
- ▶ **PASSA** Participatory Approach for Safe Shelter
- ▶ **PSOs** Public Sector Organizations
- ▶ **R&D** Research and Development
- ▶ **SDGs** Sustainable Development Goals
- ▶ **SDI** Slums Dwellers International
- ▶ **SSA** Sub-Saharan Africa
- ▶ **UN** United Nations
- ▶ **UNDP** United Nations Development Programme
- ▶ **USSD** Unstructured Supplementary Service Data
- ▶ **WASH** Water, Sanitation and Hygiene
- ▶ **WIEGO** Women in Informal Employment: Globalizing and Organizing

1

INTRODUCTION AND BACKGROUND TO THE STUDY

In Sub-Saharan Africa (SSA), governments face different challenges in developing, implementing, and evaluating public policies as well as in delivering services effectively and efficiently (van der Walddt, 2017). The enhancement of public service delivery remains one of the key priorities for public institutions in SSA. Public service delivery improvement remains one of the key priorities for public sector institutions in SSA. For this to happen, it requires the building of a resilient, agile and people centered public service- a public service that accepts both challenges and opportunities presented by innovation. Most of the Public Sector Organizations (PSOs) in SSA struggle to provide adequate services and products to the public due to multiple factors. Some of these factors include lack of clear policies of innovation, regulatory or legislative constraints, poor coordination of various departments, lack of adequate funding and lack of incentives to drive innovation to mention but a few (Agolla and Van Lill, 2014). In most SSA countries, poor governance structures constrain the ability of government institutions to formulate and implement effective public policies to address a myriad of social and economic challenges such as poverty and inequality, high levels of unemployment and growing informality and political instability among others. Moreover, many public services in SSA are marred by high levels of corruption (World Economic Forum, 2015), lack of professionalism and expertise brought about by lack of adequate training in public administration, service delivery and policy implementation. However, it must be acknowledged that SSA is not a homogenous region; there are some countries where public sector innovation is evolving through new models of addressing public problems. Some of these examples are documented in this report.

The complex challenges confronting public institutions in SSA require new approaches to public policy development and implementation as well as in the delivery of public services. Innovation is now central to the public sector's ability to respond effectively to multiple challenges posed by social and technological change and rising public expectations that come with it. Moreover, the current COVID-19 pandemic has demonstrated the centrality of innovation in crisis response and recovery through measures such as open government, digital government, and solutions crowdsourcing. Thus, public institutions need to re-invent themselves through exploring new ways of providing services and solving public problems (CBIE, 2018; World Bank, 2018). This may include measures such as enhanced delivery systems, better-managed public finance, a more skilled and accountable public workforce, as well as new ways to monitor services and coordinate the agencies that provide them. Faced with these increasing pressures placed on 'value for money', policymakers and researchers alike in SSA are therefore intensively engaged in developing innovative concepts and tools for public sector reforms (Klingebiel et al, 2019).

For these innovations to be successfully developed and implemented, they require well trained professionals who are equipped with skills such as policy analysis, problem solving and civic engagement. It is against this background that the African Leaders of Tomorrow (ALT) scholarship program was created to equip young African professionals with ideas on public sector innovation, knowledge

of results-oriented and evidence-based policies, crisis responsive public service, and other approaches to deal with unique public sector challenges confronting public institutions in SSA. Since the end of the ALT scholarship program in 2019, there has not been any systematic analysis to understand how the ALT alumni working with public sector institutions are navigating the innovation landscape and contributing to improved public service delivery and governance outcomes. This study lays the foundation for understanding the drivers and barriers to innovation in the public sector in SSA, by drawing largely on insights and experiences from the ALT alumni who have had experiences working with PSOs in their home countries.

1.1 – Purpose and Objectives of the Study

This study was commissioned by the Canadian Bureau for International Education (CBIE) as part of follow-up studies on the impact the ALT program. As a flagship program of the Government of Canada in partnership with the Mastercard Foundation, the ALT scholarship scheme was designed to build the 'next generation' of public sector leaders who are expected to contribute to public sector performance in SSA using innovative and creative approaches to public sector management and administration in different fields such as public policymaking, public financial management and community engagement, among others. Between 2015 and 2019, the ALT Scholarship has supported 114 young men and women, and some of them have moved on to take up leadership roles in the public sector in their respective countries.

However, through CBIE's regular follow-up surveys, several ALT alumni have raised concerns about their inability to innovate due to environments that do not fully foster and support innovation nor offer spaces to make tangible recommendations to SSA governments. Thus, this study specifically seeks to:

- ▶ Analyze the drivers of and barriers to innovation and include examples of innovation where civil society organizations engage with government in developing/ implementing policies¹;
- ▶ Support the generation of knowledge on public policy and public sector innovation in SSA;
- ▶ Develop generalizable, cross-national lessons that are accessible to both academic and non-academic audiences

1.2 – Methodology

Data for this study was collected through a mix of both qualitative and quantitative methods. An online survey was designed and distributed to all the ALT Alumni using Qualtrics, an online survey platform. The survey was distributed in both English and French to cater for Alumni from both Anglophone and Francophone countries. The survey covered different issues such as how the ALT scholarship built the capacity of Alumni on public sector innovation, perceptions of Alumni on innovation cultures within their organizations and home countries more broadly, drivers and barriers on public sector innovation in SSA. Virtual interviews were also conducted with ten ALT Alumni. These Alumni were from Uganda, Ghana, Zambia, Rwanda, Ethiopia, Sierra Leone, Cameroon, and Togo. The interviews covered

1 Terms of Reference, Research on Public Policy in Africa, CBIE

many different aspects such as (a) public sector innovation context (e.g., existing organizational cultures, rules and regulations and the extent to which these foster or constrain innovation) (b) examples of innovations that ALT alumni have initiated, including the outcomes of such innovations (e.g. improved policy outcomes and enhanced governance), (c) enabling and disabling factors for public sector innovation in Sub-Saharan Africa, drawing on the experiences of ALT alumni working in diverse contexts. Discussions were also conducted with two officials from the African Association of Public Administration and Management (AAPAM). Primary data was complemented with the review and analysis of secondary data sources such as reports by organizations such as the Institute of Public Administration of Canada (IPAC), AAPAM, the World Bank, Open Government Partnership (OGP), Government Reports, and reports of civil society organizations working in different countries in SSA as well as peer reviewed academic papers.

1.2.1 – Ethical Considerations

High standards of research ethics were adhered to throughout the study. First, though the study drew heavily on insights from ALT Alumni, participation was voluntary. Informed consent was sought by asking participants to read and sign a declaration statement before their participation in the online survey and virtual interviews. Second, personal information about ALT Alumni and their perspectives on innovation in SSA was kept confidential, and only accessible by the Researcher and CBIE. These files were kept in password encrypted folder on the laptop of the Principal Researcher, which is not used by anyone except himself. Third, the responses of ALT Alumni in the final report are anonymized using labels such as ALT Alumni 1, ALT Alumni 2 instead of their real names.

2

FRAMING THE STUDY: THE CONCEPT OF PUBLIC SECTOR INNOVATION

There is no universally accepted definition of public sector innovation. The International Development Innovation Alliance (IDIA), which focuses on innovation in developing countries, defines innovation as “a new solution with the transformative ability to accelerate impact.” (IDIA, 2019:3). Innovation under this definition entails science-based and technological improvements, but also, improved, and different ways of collaborating with partners. It further comprises new social and business models or policies, creative financing mechanisms, and creative improvements on how public sector entities deliver essential services and products to communities. The crucial notion of this definition is that it accelerates lasting development impacts in the implemented settings.

The 2019 Organization for Economic Cooperation and Development (OECD) Report highlights that innovation is associated with either technological or digitally driven solutions. Innovation can also revolve around culture, leadership, finance, and governance. Public sector innovation has the following characteristics: (i) novelty, as innovations introduce new approaches in the context where they are adopted, (ii) implementation as innovations must be put into practice and (iii) impact, as innovations aim at better service delivery and (iv) cost reduction (OECD, 2019). The Observatory of Public Service Innovation (OPSI) argues that novelty in the public sector setting refers to entirely new approaches and introducing existing methods in new contexts (OPSI, 2018). This understanding means that initiatives are only viewed as innovation if implemented in a sector or context for the first time. IPAC (2015) highlights four approaches to innovation in the public sector (Table 1).

Table 1 – Approaches to Innovation in the Public Sector

| | |
|------------------------------------|--|
| Organizational Environments | <ul style="list-style-type: none">▶ The capacity of the public sector to create the 'right' organizational design and foster the 'right' organizational culture that will enable innovations to develop▶ Cooperation, knowledge diffusion, supportive cultures and rules and empowerment are seen as key enabling factors |
| Innovation as Infection | <ul style="list-style-type: none">▶ The ability of internal resistance systems to respond positively to innovations |
| Intrapreneurship | <ul style="list-style-type: none">▶ Relies on the existing but underutilized networks of innovators who exist in large numbers in bureaucratic structures. By triggering and fostering the emergence of these networks, the public sector can harness their potential and creativity▶ Intra-preneurs can bring innovative logics and practice to the public service while filtering them through their understanding of the 'administrative lens' |
| Adaptive Systems | <ul style="list-style-type: none">▶ These models rely on the development of a new narrative integrating in the public service's decision-making process the increasing number of stakeholders. The roles and goals of governments shift and broaden.▶ What the old model would have considered points of tension (the multiple sites of engagement) are seen as opportunities for open governance and knowledge creation. |

Source: IPAC (2015:3)

These dimensions by IPAC (2015) are important in this study because the ALT Alumni are operating in organizational environments which have different cultures and norms. The extent to which ALT Alumni can develop and implement innovative ideas is largely shaped by existing organizational cultures. The organizational environments also determine the extent to which the potential and creativity of ALT Alumni is harnessed and mobilized to devise and implement innovative approaches to public sector management, service delivery and governance.

Given the multiplicity of definitions and characteristics of innovation, this study adopted a broad definition of public sector innovation comprising of *new strategies and means that enables government entities to enhance public sector efficiency, essential service delivery, and responsiveness to the needs of their citizens* (OECD, 2019).

2.1 – Why Innovation in the Public Sector?

Public servants including those in SSA operate in highly dynamic and complex work environments; characterized by ever-changing citizen expectations, shrinking public resources, rapid technological changes which requires them to be innovative and creative when dealing with complex policy problems. Thus, innovation needs to be at the heart of the public sector's efforts to improve performance, develop new capabilities, new models, and new approaches in the delivery of public services. For example, governments around the world are using digital technologies to innovatively transform the way they operate, share information, make decisions, and deliver services, as well as to engage in participatory policy making (UN, 2020). In the Decade of Action for the implementation of the 2030 Agenda for Sustainable Development, public sector innovation holds the potential to break through some of the most complex challenges facing the world today. Innovation in the public sector provides opportunities to support the achievement of the 2063 Agenda and the Sustainable Development Goals (SDGs) by enhancing the efficiency and effectiveness of public service delivery and reaching those left behind (UN, 2020). Innovation has the potential to address several development challenges and redress issues of inequality and exclusion (IDIA, 2019).

2.2 – Measuring Public Sector Innovation

Measuring innovation in the public sector is complex because there are no standardized metrics (OPSI, 2020). Nonetheless, measuring public sector innovation remains critical for the following reasons: raising awareness, gaining a common understanding of what public sector innovation is, benchmarking both internationally and between organizations and public sectors, and informing general policy discussions (OPSI, 2020). Public servants also need data and signals about when innovation is needed and if resources are available to respond to that need. Thus, there are more specific demands on data. Examples here are research analyses (such as innovation cultures, knowledge transfer), and data needs for specific policy initiatives (e.g., innovative procurement, promoting public private cooperation, specific programmes). At the organization level, innovation data can also be seen as a management tool. The results of measurement may be used in evaluations, benchmarking, replication of good practices and initiatives – diffusion of innovation and also to improve the ability of public sector bodies to foster innovation. Table 2 shows the different approaches to measuring public sector innovation.

Table 2 – Different Approaches to Public Sector Innovation Measurement

| | Issues | Explanation and Examples |
|-----------------------------|---|---|
| Inputs/Enablers | Human resources -share of creative occupations | Innovation capability: leadership and culture; management of innovation; organizational enablers of innovation; expenditure on development and implementation of innovations. Research and Development activities (e.g., dedicated innovation unit); Driving forces (people, organizations and other factors that push organizations to innovate (e.g., new policy priorities, regulations, citizen feedback, staff, management) |
| | Quality and Efficiency of public services | Can include issues such as government effectiveness, regulatory quality, Increased efficiency of public services due to ICT, Online availability of public services |
| | Wider public sector conditions for innovation: incentives; financial resources autonomy; leadership and culture; enablers. | Role of ICT for public sector innovation. Barriers (political factors, bureaucracy, other internal conditions such as lack of incentives for staff to innovate, external conditions such as resistance of users to change |
| Activities/Processes | Capacities: Share of service innovations in-house; Share of process innovations in-house | Accessing new ideas; Selecting and developing ideas; implementing ideas; diffusing what works. In-house activities: in-house R&D; internal or external training and education of staff for innovation activities; other in-house innovation activities (e.g., planning and design; market research; feasibility studies, testing and other preparatory work for implementation of innovations; Organizing innovation: innovation strategy; the role of management; organizing innovation activities; and organizing competences. |
| | Drivers and barriers: Internal barriers to innovation; External barriers to innovation; Management involvement in innovation; Importance of external knowledge; Share of employees involved in innovation. | External activities: external R&D; other consultancy services; acquisition of external know-how (patents, licenses, etc.); acquisition of equipment/software. Perception of enablers and barriers to innovation. |
| Outputs | Innovators: Share of organizations in public administration with different types of innovation; Share of new services out of all services innovations; Public sector productivity. | Ongoing innovation projects, types of innovations, degree of novelty and scope of innovations (incremental vs radical innovation) |
| Impacts | Improvement in organizational key performance indicators; improvement in service evaluation; improvement in efficiency; improvement context. | Environmental conditions: User innovation; Supplier innovation; Wider public sector culture and leadership identified as drivers or barriers; External political and legislative factors identified as drivers or barriers; Leadership and culture; Public tolerance of risk. |

Source: Kattel et al., 2018.

Some of the metrics in table 2 were used in this study to collect both qualitative and quantitative data.

3

STUDY FINDINGS

3.1 – An Overview of the Public Sector Innovation Landscape in SSA

While innovation is still nascent within PSOs in SSA, some governments have been experimenting with innovative and creative ways to deliver public services, engage citizens and address complex policy problems. For example, the Voices of the People a survey launched and ongoing in Tanzania, and Uganda has been a significant move to aggregate and amplify citizens' voices within government. This survey is done by mobile phone which has high penetration rates in the region. The findings helped turn a regressive tax into a progressive one, secure access to free healthcare for children, nursing mothers and the elderly, and improve official communications on COVID-19 safety measures (Falconi and Witter, 2021). In Kenya, the Huduma centers (Kiswahili word for service) provides important learning points for public sector innovation in SSA (Box 1).

Box 1 – Transformation of public sector delivery through Huduma Kenya Centers

Developed in 2013, the Huduma Kenya programme aims to transform public service delivery in Kenya providing citizens access to various public services and information from One-Stop-Shop citizen centered service centres and through integrated technology platforms. This “One Stop Shop” approach enables citizens and customers to access various public services and information from a single location and through integrated service platforms; thereby eliminating unnecessary bureaucracy that is typically associated with public institutions. This programme represents a drastic shift from the centralization to devolution and getting services closer to the citizens of Kenya. The Huduma programme also emphasizes accountability, transparency, and trust in public service delivery. In 2015, the Huduma Kenya won both the United Nations Public Service Award (UNPSA) and AAPAM award for its exemplary work in serving Kenyans for improving the delivery of public services, which demonstrates transformational leadership in public service delivery. Despite its successes, the Huduma programme has also faced some challenges such as poor-quality staff, conservative, rigid staff that resist change. In some contexts, especially in rural communities, low internet and mobile connectivity disrupts service delivery. Nonetheless, the innovative service delivery through Huduma Centres has received many awards nationally and internationally for being a game changer and providing a good example on Integrated Service Delivery (ISD) for the rest of SSA.

Source: Kinyanjui and Waithaka (2019)

Rwanda has also been a leader in terms of implementing policies that stimulate development and improve service delivery. To stimulate innovation and creativity in Rwanda's public sector, the Government initiated the Imihigo programme (World Bank, 2018). As an innovation in the public sector, the Imihigo sets development targets to improve the performance of government agencies in

dealing with development challenges (Government of Rwanda, 2019). The focus of this innovative programme is to drive economic impact, address local priorities and connect national goals to global development frameworks. Another unique feature of the Imihigo is the emphasis on citizen engagement in development planning, providing them an opportunity to shape policies that directly impact on their lives. The ultimate vision is to facilitate the growth of self-reliant, innovative, and economic vibrant communities in Rwanda (Government of Rwanda, 2020). An evaluation conducted by the National Institute of Statistics of Rwanda in 2019 confirmed that there was high performance across economic transformation, social transformation, and transformational governance at the national level (Government of Rwanda, 2020). Similarly, high performance across these themes was recorded at provincial, district, and city levels, demonstrating that the Imihigo has been transformational in Rwanda's public sector.

In Southern Africa, South Africa has gained a reputation as a leader in the public sector innovation. The Centre for Public Service Innovation (CPSI), established by the Minister for Public Service and Administration, aims to improve the quality of public service through the development of innovative, sustainable, and responsive models. The CPSI promotes innovation in government by facilitating engagement between public, private, and non-governmental organizations (Lee et al, 2012). The South African Government has also shifted to smaller and more flexible program delivery arrangements and to decentralize authority so that government operations become more client-oriented and innovative in delivering public services (van der Walddt, 2017). These new models of delivering services and implementing policies have often resulted in relatively good outcomes such as improved citizen engagement (Table 3).

Table 3 – Examples of public sector innovations in South Africa

| Thematic Focus | Objectives of the Innovations |
|--|--|
| Public sector innovations to save public money | To improve the quality and/or speed of services at lower costs and/or simplifying processes to reduce costs |
| Innovative use of ICTs for effective service delivery | To improve the efficiency and effectiveness of service delivery with emphasis on the interface with citizens |
| Innovative service delivery institutions | To develop innovative solutions to persistent challenges faced by different public institutions |
| Innovative enhancements of internal systems of government | To create innovations that improve back-office systems and processes, both ICT and non-ICT |

Source: Republic of South Africa (2017)

There are some projects in South Africa that have previously received recognition for outstanding innovation. Examples of these projects include Limpopo Provincial Revenue Enhancement Strategy which scooped the CPSI's [2016 innovator of the year award](#); Digital pen for health (Department of Health, KwaZulu-Natal which received the Public Sector Innovation Award in 2014 and the Gauteng Department of Education's Secondary School Improvement Programme (SSIP) which won the [2014 United Nations Public Service Award](#) to mention but a few. These examples demonstrate the commitment of public institutions in South Africa to develop innovations that enhance the effective and efficient delivery of public services.

In Western Africa, Senegal for instance has a policy of rewarding excellence through the regular organization of the President's Grand Price for Science and the Grand President's Award for Innovation. An African exhibition of Research and Innovation in Senegal (SARIS) is regularly organized by the Agence Nationale de la Recherche Scientifique Appliquée (ANRSA) in partnership with all national components of research and innovation. The Senegalese Government has always believed innovation is important for social and economic development though the implementation of projects and programmes in organizations may face challenges such as limited technical capacity (Cissé et al, 2019). In Ghana, there has been progress in the digitalization of the public sector operations, which is helping in enhancing public sector efficiency and reducing corruption. Most government services have been digitized and are being offered online rather than manual. The government has also implemented the Ghana Strengthening Accountability Mechanisms (GSAM) with the aim of strengthening accountability in the public sector across different levels. There are some projects that have also been recognized for outstanding innovation in Ghana. For instance, the Ghana Library Authority (GhLA) won the prestigious [2021 UN Public Service Award](#) in the category, fostering innovation to deliver inclusive and equitable services for all through digital transformation. This project has enabled modem internet connections to the most remote and rural areas of Ghana, conducted technology classes in communities that have no, or very limited, access to ICTs . In fact, the GhLA is the first public sector organization in Ghana to win this prestigious award.

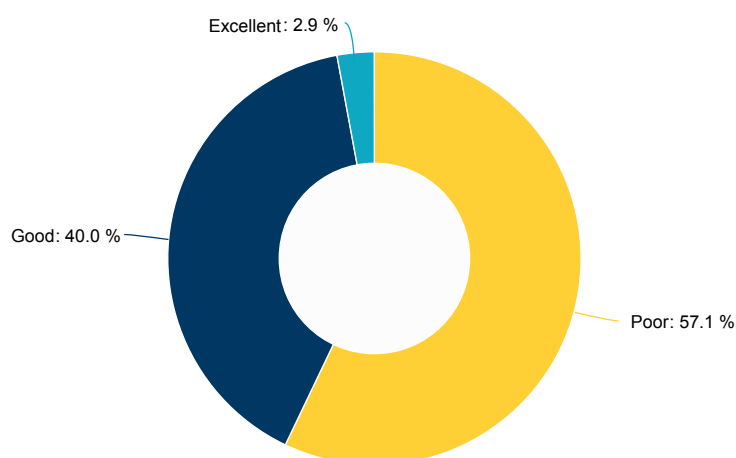
3.2 – Perspectives from ALT Alumni on Public Sector Innovation in SSA

This part of the report discusses the perspectives on ALT Alumni on public sector innovation in SSA. The first three sections focus on rating of innovation by ALT Alumni, the impact of the ALT scholarship on building innovation capacities and some of the innovations that have been championed by ALT Alumni in their respective organizations. This is followed by a discussion on the barriers and opportunities for innovation in the public sector in SSA.

3.2.1 – Rating of Public Sector Innovation in SSA

From the survey, majority of the of ALT Alumni (57.1 %) rate innovation within their organization as poor, while 40 % of them indicated that innovation within their organization is good (Figure 1).

Figure 1 – Rating of Innovation in PSOs in SSA



Source: Survey with ALT Alumni, 2021

The rating of public sector innovation as poor can be explained by the general lack of innovation initiatives. From the survey, 52.8 % of the participants indicated that there were no initiatives to support a culture of innovation within their organizations or departments. Additionally, about 58.8 % of the ALT Alumni confirmed that innovative ideas are not converted into organizational/departmental improvements. However, it is important to acknowledge that 40 % of the ALT Alumni believed that innovation within their organizations and departments is good. This is mainly because countries like Ghana, Kenya, South Africa, and Nigeria have implemented significant reforms to enhance public sector performance. Some of these developments include radical reorganization of the public sector, building smart partnerships with a variety of stakeholders; effective and efficient delivery of public services; performance management agreements with senior civil servants and institutional frameworks for public sector innovation (for example, the Center for Public Sector innovation in South Africa). The United Nations Public Service Awards Competition and the APAAM Public Sector management Award is a vivid illustration that public sector innovation is evolving and gradually taking shape in countries such as Rwanda, Kenya, and Ghana. This is despite some of the negative sentiments expressed by ALT Alumni. Given the current trends in some SSA countries, right support infrastructure and enabling environment will put public sector innovation on the right path.

3.2.2 – The Impact of the ALT Scholarship Program on Innovation Capacities

This section focuses specifically on the perceptions of ALT Alumni with respect to how the scholarship program build their capacity to foster innovation in the public sector. Figures 2 and 3 show the impact of the ALT scholarship on building the innovation capacities of ALT Alumni.

Figure 2 – Impact of ALT Scholarship on Innovation Capacity

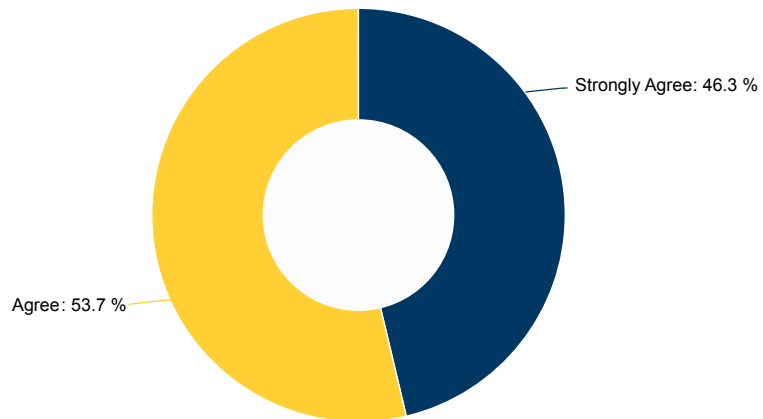
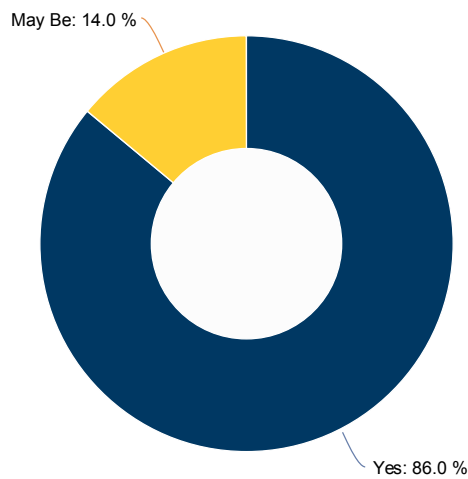


Figure 3 – Relevance of Skills and Knowledge to Public Sector Innovation in SSA



Source: Survey with ALT Alumni, 2021

As indicated in figure 2, 53.7 % of the alumni agreed that the ALT scholarship built their innovation capacity. At the same time, 46.3 % of the participants strongly agreed that the scholarship program adequately prepared them to initiate innovative ideas within their organizations and departments. About 86 % of the Alumni confirmed that the skills and knowledge they gained from their Masters programs are relevant to public sector innovation in SSA. The following quotations from ALT Alumni demonstrate how the program impacted their ability to foster innovation in the public sector:

“The study of Public Policy at the University of Calgary shaped and guided me in developing critical research, policy analysis and writing skills that are essential in disseminating policy information through policy briefs, reports, and consulting with stakeholders like the Government. Research skills acquired while in Canada have increased my understanding of research information and data especially in situations where it does not reveal enough information.

For example, my organization programmes and services may suggest that a programme or service is only servicing a small percentage of marginalized people. It may be feasible to better understand why this population is experiencing challenges in accessing the service by understanding the experience of clients for the specific programme or service. In such situations, I am able to come up with relevant policy alternatives that would be essential in ensuring the service reaches the intended beneficiaries" (ALT Alumnus 4).

"The program was helpful in understanding how policies are developed and I was involved in practicum on developing a green infrastructure policy for the city of corner brook and during the internship program, I interacted with different stakeholders involved in environmental sustainability and this offered me new perspectives on how to develop innovative environmental management initiatives" (ALT Alumnus 7).

The ALT scholarship program has equipped young African professionals with the necessary skills to drive innovations in the public sector. Though most of the Alumni still face critical challenges in navigating the innovation complexities within their organizations, there are some success stories which are documented in the next section.

3.2.3 – Innovations Initiated by ALT Alumni in SSA

Some of the interviewed ALT Alumni have applied their skills and knowledge to develop innovative ideas to deal with public sector challenges in their respective organizations. Box 2 summarizes one of the innovations that were initiated by one of the ALT Alumni in Uganda, particularly to ensure that people living with disabilities benefit from projects and programs.

Box 2 – Disability and Duty to Accommodate Program Developed by ALT Alumnus in Uganda

"After my return to Uganda, I realized that People with Disabilities (PWD'S) were in most cases excluded from vital development projects and activities that my organization implements, pushing many of the disabled into poverty. This is typical of many other Non- Profits operating in different regions of Uganda. Due to less, analytical, and instrumental policy formulation, donor and Government funded pro-poor programs do not prioritize inclusion of PWDs in the implementation. PWDs have thus not been empowered as they should for them to be at the forefront of their future. Exclusion faced by people with disabilities in my organization presented both a major argument and strategic opportunity for me to develop and promote a program on "Disability and duty to accommodate" through use of data visualization tool Tableau. The data collected from each project has been essential in assessing the impact of inclusion strategies adopted. The program was widely accepted and resulted into significant changes in all the organization programs. Looking back, there has been a great policy shift in my organization whereby the team has come to appreciate the importance of using data to design programs that respond to the needs of all socio-economic groups particularly the disadvantaged members of society such as People living With Disabilities".

Source: A written response from ALT Alumnus 4

Some ALT Alumni have also championed innovations to address the issues of weak interdepartmental collaboration and the culture of working in 'silos', which is common among public sector organizations in SSA. In Liberia, an ALT Alumnus introduced the annual maritime lectures, a platform that brings together all the stakeholders in the country's maritime sector to interact and share ideas to address common problems (ALT Alumnus 1). This is having an impact in terms of breaking silos and promoting stakeholder collaboration on issues of common concern. In Zambia, one of the ALT Alumni introduced the idea of the African Parliamentary Oversight Tool (AFricanPOT), which simplifies how research on public policy issues is done on behalf of Members of Parliament. This innovation has made it simple for MPs to access information, research outputs and wherever they are, as noted by the ALT Alumnus:

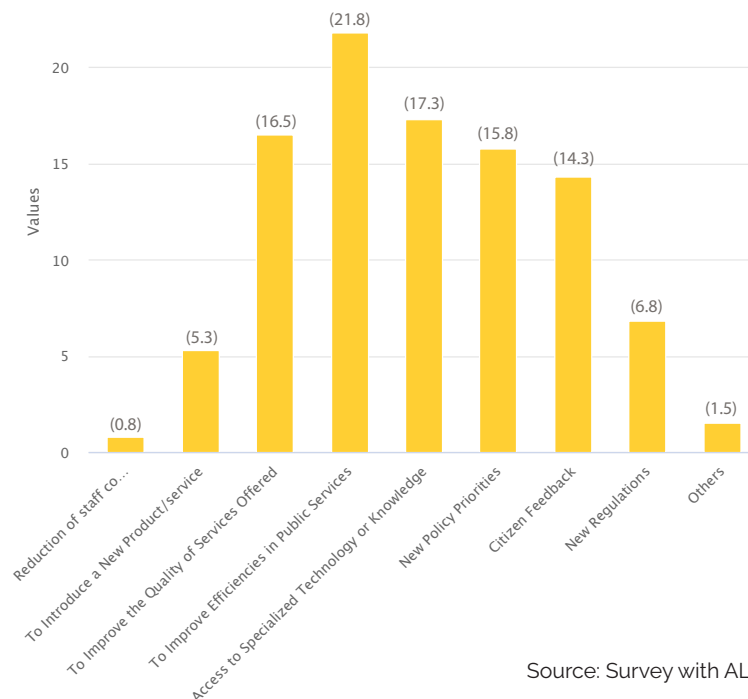
"This tool has improved the storage or management of information within our department. The application stores information in a repository. It enables users to do data analysis and shows the policy questions from the MPs" (ALT Alumnus 3).

The ability of ALT Alumni to initiative some innovations was influenced by various drivers and opportunities. However, most of the ALT Alumni noted that initiating new ideas, new practices in the public sector in SSA is not an easy endeavor. In the following sections, the different drivers, opportunities, and barriers to public sector innovation in SSA are discussed.

3.3 – Drivers and Opportunities to Innovation in the Public Sector in SSA

There are different drivers of public sector innovation that have been identified by ALT Alumni during the study (Figure 4).

Figure 4 – Main Drivers of Public Sector Innovation in SSA



Source: Survey with ALT Alumni, 2021

The need to improve the quality of services offered, efficiencies in public service delivery, access to technology and specialized knowledge, and new policy priorities are some of the key drivers of in PSOs in SSA. This indicates that there is clarity among public servants on the importance of innovation, and its potential to enhance public sector performance. There are also different opportunities for innovations to take place in some SSA contexts.

3.3.1 – Leadership and Management Practices

In some Public sector organizations, there is evidence of progressive leadership and management practices, that support new ideas as noted by one of the ALT Alumni:

"I was fortunate that I had a boss who has an academic background, and he was passionate about research on new ideas. So, I was fortunate to have leadership that supported innovation and creativity based on research" (ALT Alumnus 1)

Leadership practices were also identified as the most important factors influencing innovation in studies conducted in Kenya, Ghana, South Africa, and Rwanda. Transformational leadership is a very critical ingredient of public sector innovation. Leadership that is crucial to innovation seems to possess the following characteristics: support for creativity, encourages employees to come up with new ideas, encourages problem solving, openness to constructive criticisms, involves employees in decision-making, rewards positive behaviors (innovative ideas), tolerance for risk taking by employees, openness to change and puts employees' ideas into action (Agolla and Van Lill, 2016). Most of the leaders of SSA Countries that have been nominated and won the United Nations Public Service Awards exhibit these characteristics. Some of these leaders are commitment to enhance public sector excellence by encouraging new ideas to flourish through creating enabling environments.

3.3.2 – Increased Penetration of ICTs in SSA

The UN public service awards confirms that ICT is a key facilitator of public sector innovation in SSA. The proliferation of mobile phone networks and inexpensive handsets, and geospatial technologies in SSA presents an opportunity for data innovation in public sector institutions. New technologies, among other things, opened new possibilities for data collection to provide critical data to decision makers in a timely manner to gain further insights into plight of vulnerable persons. These new data collection avenues thus address shortfalls of traditional data sources such as household surveys (Hoogeveen and Pape, 2020). The presence of these ubiquitous technologies also enables governments to develop digital solutions to makes the delivery of basic services (energy, water, sanitation, and waste management) more efficient, accessible, and affordable (Bauer, 2020). For example, in 2017, the Kampala Capital City Authority (KCCA) launched a GIS-based mobile app that seeks to improve the faecal sludge management (FSM) system by tracking where faecal sludge is collected and dumped (i.e., linking pit emptiers with customers). This innovation resulted in improved service delivery and data collection for planning and policymaking (Nkurunziza et al., 2017). There are also examples of countries that have successfully pursued long-term, comprehensive, and ambitious plans to raise ICT infrastructure and competitiveness, such as Rwanda (African Renewal, 2014). In such contexts,

ICTs present an opportunity to adopt data innovation through open government initiatives.

3.3.3 – Dedicated Public Sector Innovation Units in Some Contexts

In SSA, there are cases that demonstrate the centrality of institutionalization in sustaining public sector innovation. For instance, Kenya's Huduma Programme and South Africa's CPSI are of the leading examples on how it is critical to institutionalize innovation in the public sector. The availability of dedicated units for innovation is also an important opportunity in other countries. Countries at different levels of economic development are devising innovation strategies, setting up innovation councils and designing programmes or initiatives aimed at strengthening innovation in their national contexts. A growing number of countries are establishing Ministries of Science, Technology, Research, and Innovation and, as of 2014, at least eight countries in Sub-Saharan Africa had national innovation strategies (Angola, Ethiopia, Ghana, Mozambique, Nigeria, South Africa, Uganda, Zimbabwe) (NEPAD, 2014). South Africa for example has taken steps to create the necessary institutions to drive the culture of innovation in the public sector (Box 3).

Box 3 – Centre for Public Service Innovation Programmes, South Africa

The Centre for Public Service Innovation (CPSI) is a Government Component which reports to the Minister for the Public Service and Administration. Established in 2001, the CPSI has a mandate of nurturing innovation in the public sector in South Africa. The CPSI runs different programmes such as the Annual Innovation awards, which aims to incentivize and promote innovation in the South African public sector. It awards innovation that has improved service delivery and thus made a difference in the lives of citizens or improved the efficiency of the public sector. The CPSI also creates platforms that exposes the public sector and its strategic partners to innovation opportunities and strategies, through sharing of related knowledge and experiences.

Source: www.gov.za/about-government/centre-public-service-innovation-programmes-0

3.3.4 – Continuous Capacity Development

The importance of human resources in any public organization, their value orientation and the associated competence and technical training of employees has been identified as a key driver of innovation. AAPAM has capacity development programmes that are dedicated to enhancing the culture of innovation in the public sector. This is done through capacity building workshops and exchange programmes where best practices are shared and how these can be localized in different contexts (interview with AAPAM officials). From the survey, 44.1 % of the participants confirmed that they have attended workshops on public sector innovation. About 55.7 % of the ALT Alumni indicated that these workshops have positively impacted on their ability to generate new ideas.

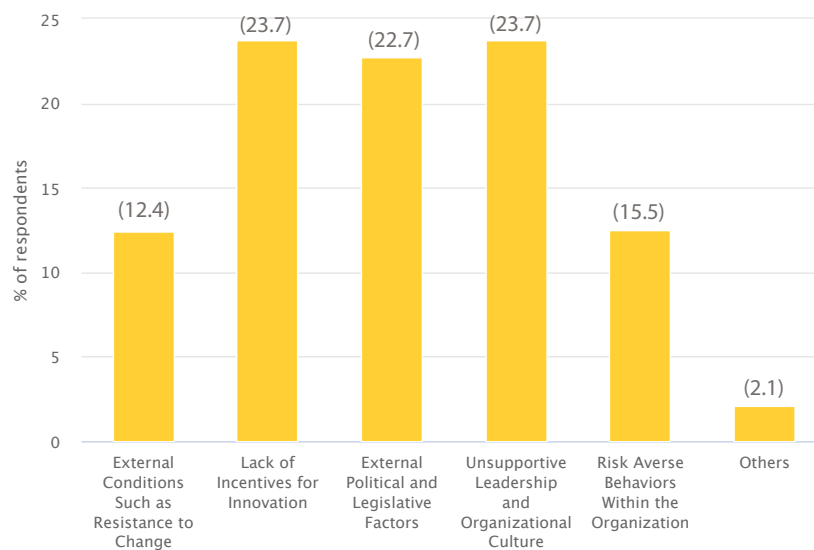
3.3.5 – Collaboration and Partnerships

In SSA, collaboration and partnerships are also key drivers and opportunities for public sector innovation through multi-actor alliances, bringing into play all relevant innovation assets in terms of knowledge, imagination, creativity, and transformative capacities. One area where collaborations and partnerships have been key drivers of innovation is informal settlement upgrading. For instance, in the informal settlement of Peace Island (Monrovia, Liberia), five-year collaborative program between local stakeholders and SDI, UN-Habitat, WIEGO and the World Bank realized critical infrastructures such as WASH facilities and solid waste management and empowered both residents and decision-makers. The innovative data collection through the Participatory Approach for Safe Shelter Awareness (PASSA) tool enhanced the successful alignment of residents' needs with prospects for the local economy and the production of [alternative construction material](#).

3.4 – Disabling Factors/Barriers to Innovation in the Public Sector in SSA

Data collected through an online survey and interviews with ALT Alumni revealed different factors that constrain innovation in PSOs in Sub-Saharan Africa. These factors include public sector inertia, unsupportive organizational leadership, and culture, limited technical and financial capacity, lack of incentives towards innovation. Figure 5 shows the main barriers to innovation that ALT Alumni indicated during the survey. Lack of incentives, external political and legislative factors and unsupportive leadership and organizational culture emerged as the key barriers to public sector innovation in SSA.

Figure 5 – Main Barriers to Public Sector Innovation in SSA



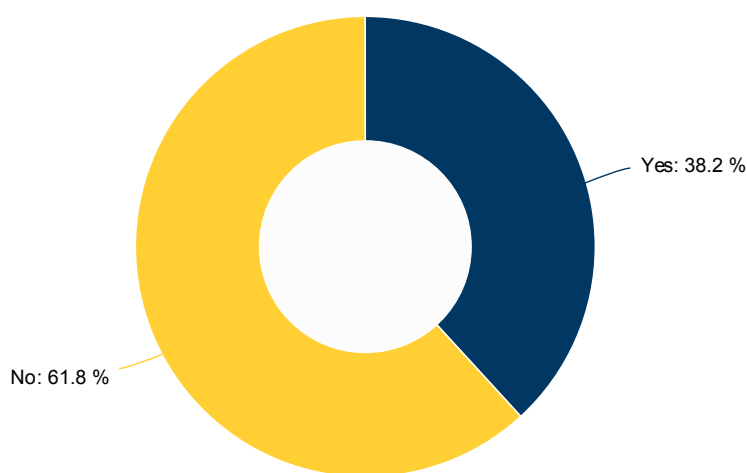
Source: Survey with ALT Alumni, 2021

In addition to the barriers represented in figure 5, others were also identified during interviews with ALT Alumni. These barriers are explained in the following sections.

3.4.1 – Public Sector Inertia and Unsupportive Organizational Culture

Public sector inertia and unsupportive organizational culture emerged as one of the most common barriers to innovation in public sector organizations in SSA. When asked whether they feel the culture within their organizations support new ideas, 61.8 % of the ALT Alumni said no while 38.2 % indicated yes (Figure 6).

Figure 6 – Do You Feel There is Culture to Support New Ideas Within Your Organization?



Source: Survey with ALT Alumni, 2021

Majority of the ALT alumni consulted during the study noted that most governments and public sector agencies in Sub-Saharan Africa are resistant to change and innovation. This resistance to change and innovation is due to a combination of overly bureaucratic processes and a culture of risk aversion. Below are excerpts from ALT Alumni on how public sector inertia disable innovation in the public sector:

"There will be those who do not accept new things and they will tell you that this is how everything is done. Non-acceptance of innovation is a key barrier in Sub-Saharan Africa (SSA). There is always no appetite for creativity and innovation in the public sector." (ALT Alumnus 1)

"There is laxity in the public sector. There is no edge to continue learning new and creative ideas. New entrants who would have experience elsewhere are forced to accept the old ways of doing things. What you find on ground is what you are likely to go with. The common statement is- this is how we always done it." (ALT Alumnus 2)

"There is always resistance to change, rigid procedural processes and traditions that remain unchanged despite the changing dynamics in the operating environment. Inertia to change is dominant in the public sector." (ALT Alumnus 3)

"There is a culture and traditional ways of doing things. It is not easy for people that have been working with the organization say for over 30 years to embrace change and new ways of doing things." (ALT Alumnus 6)

"Government is very slow and less amenable to change. Long processes and institutional barriers stifle innovations in public sector in Ghana." (ALT Alumnus 7)

"My country Togo is not open and responsive to innovation due to the systems of governance used and lack of flexibility of leadership and policy." (ALT Alumnus 8)

From the above sentiments, public sector organizations in SSA have entrenched a culture of conservatism based on old knowledge, past experiences, and traditional ways of doing things. This was also confirmed by APAAM officials who highlighted that, "the conventional bureaucratic system in most African countries is not geared towards innovation, it is very systematic and procedural, and is not very amenable to innovation" (interview with APAAM officials). In such environments, public sector managers are not amenable to change especially if it contradicts their organizational cultural orientations. In addition to these organizational cultural factors, public bureaucracies in SSA are characterized by complicated and inflexible organizational designs that are marred with increased red tape, dogmatic decision making mechanisms, and other rigid constructs that make innovation difficult and sometimes impossible. Thus, the old type of public administration in SSA is frequently incompatible with innovation due to lack of preparedness and will to embrace new challenges associated with innovation. Innovative ideas in SSA's public sector are seen by bureaucratic officials as disturbances to an otherwise ordered situation. Such ideas are therefore never "seen as a necessary life-giving element to an evolving, adaptive organization" (Maduabum, 2014:310). Public managers have entrenched a culture of unreflective defense of the status quo. In countries like Nigeria, studies have demonstrated how the dysfunctional and rigid bureaucracy negatively impacts innovation. In such contexts, the public service is characterized by a spirit of animosity and jealousy rather than of cooperation and teamwork (Maduabum, 2014). The animosity and jealousy become very high when a subordinate is perceived by his superior officer as being innovative and may supersede him. This was also confirmed by an ALT Alumnus from Uganda who noted that:

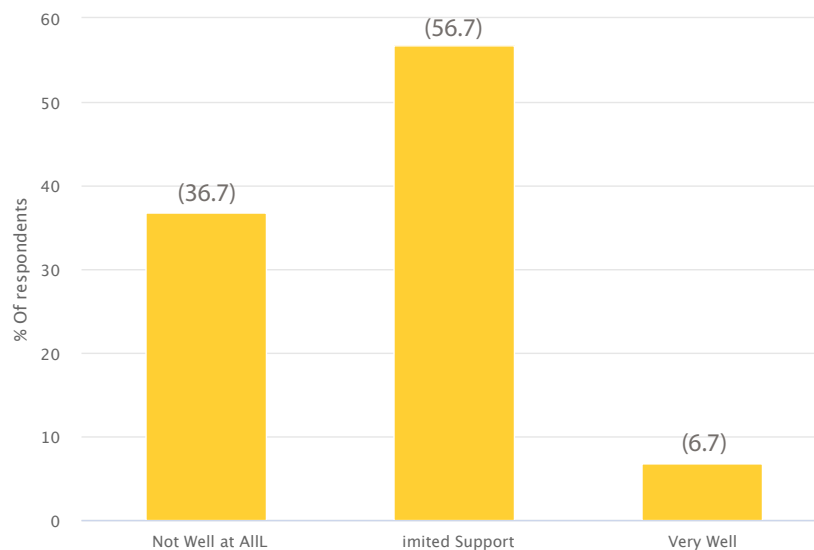
"There is selfishness, greed and competition in the public sector in Africa. Everyone feels that if you come up with an idea, you want to take their position. Some superiors feel threatened by young people coming up with new ideas." (ALT Alumnus 2)

From the above statement, it is evident that some superior officers employ the same bureaucracy as a means of scuttling the application of innovative ideas especially where such ideas emanate from their subordinates.

3.4.2 – Lack of Innovation Champions

Another factor related to the organizational environment and leadership cultures is the lack of innovation champions in PSOs. From the survey, 97.1 % of the ALT Alumni indicated that there are no innovation champions within their organizations. Only 2.9 % indicated that there are innovation champions within their organizations or departments. Innovation champions are important as they take risks in identifying, refining, and supporting innovations introduced by individuals, groups, and units within an organization. Innovation in the public sector needs champions because ideas are carried by people, and ideas are the rallying point around which collective action is mobilized. Without innovation champions in strategic leadership positions, it may be difficult to overcome the uncertainty and resistance to change in the public sector. In cases, where innovation champions exist, they receive limited support from their organizations (Figure 7).

Figure 7 – Organizational Support to Innovation Champions

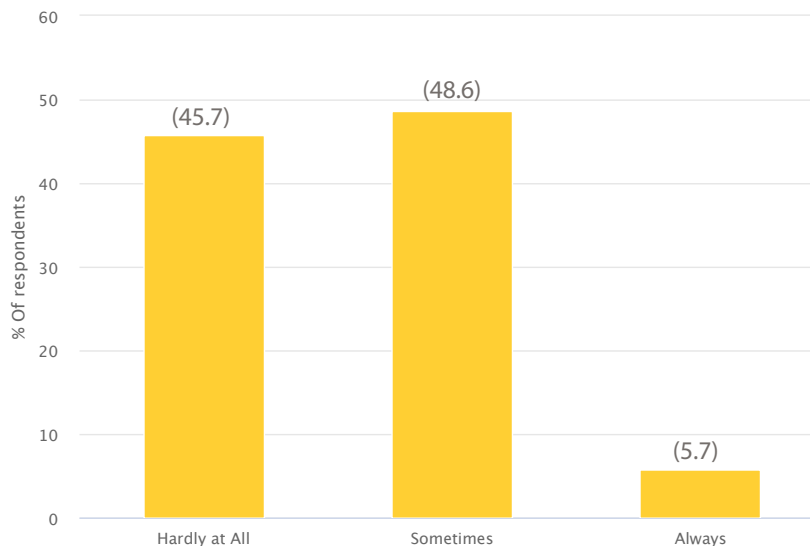


Source: Survey with ALT Alumni, 2021

3.4.3 – Lack of Incentives Towards Innovation

Another key barrier to innovation in the public sector in SSA is the lack of incentives for creativity and innovation (Figure 8). One of the ALT Alumni remarked that, "there are no incentives and rewards for innovation in the public sector in SSA." (ALT Alumnus 2)

Figure 8 – Incentives or Rewards for Innovation in the Public Sector



Source: Survey with ALT, 2021

As indicated above, 45.7 % of the ALT Alumni noted that innovations or new ideas are hardly rewarded or celebrated within their organizations, while 48.6 % said that new ideas are sometimes rewarded or celebrated. The culture of creating incentives or rewarding innovation and creativity has not been institutionalized in PSOs in SSA.

Without an incentive or reward system, it is difficult to motivate staff to develop new approaches, new ideas and commit to meet their set targets. The case of Rwanda demonstrates how important incentives are in the public sector. Rwanda's leadership incentivized local governments to improve their performance by fusing the traditional leaders' public pledge (known as imihigo) with a modern idea of performance contracts for high-level civil servants. The Government used powerful non-monetary incentives to get mayors across the country to set development targets for their districts and deliver on them, resulting in measurably better development outcomes at the district level (World Bank, 2018). In the context of Rwanda, the Imihigo has been institutionalized at national, provincial, municipal and district levels. It is the way of doing business in the public sector. Therefore, public servants have no choice, but to work based on the expectations of this innovative programme.

3.4.4 – Rigid Regulatory Environment

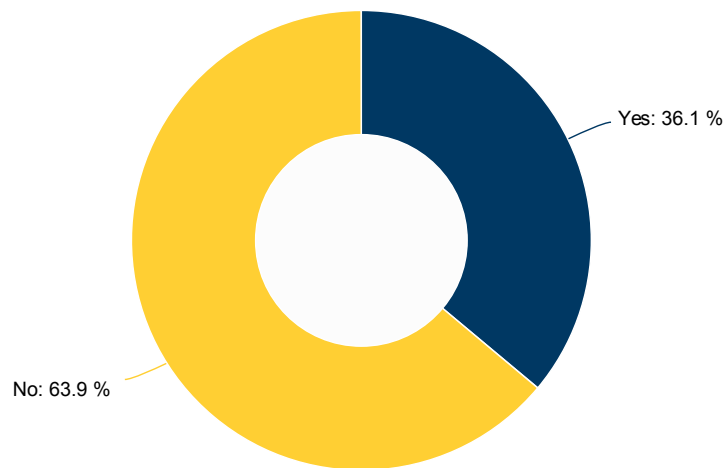
Public sector organizations in SSA operate within highly rigid and inflexible regulatory regimes; that constrain innovation in significant ways. Some of the ALT Alumni had this to say about how regulations stifle innovation:

"The regulatory environment is one of the main barriers to innovation in the public sector, the current legal frameworks are too inhibitive. A great deal of innovations cannot be done because you are restricted by law." (ALT Alumnus 2)

"For organizations like Parliaments, there is strong adherence to rigid rules and procedural processes, which remain largely unchanged despite the change in the operating environment." (ALT Alumnus 3)

The impact of the regulatory environment was also confirmed by survey participants (Figure 9). About 63.8 % of the ALT Alumni indicated that the current regulatory environment is not amenable to innovation.

Figure 9 – Is the Regulatory Environment Supportive of Innovation?



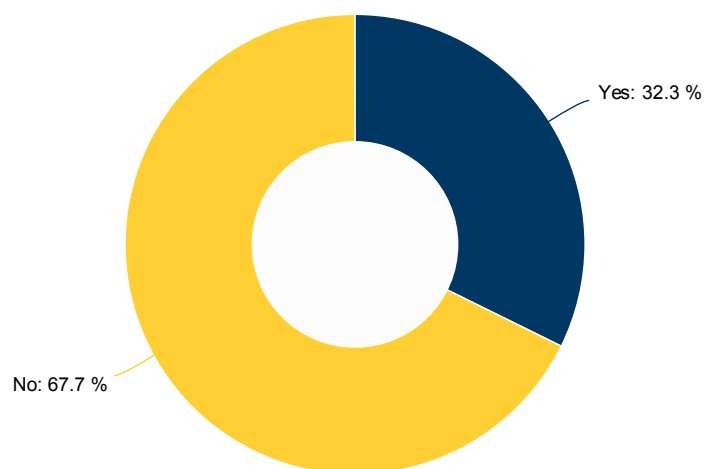
Source: Survey with ALT Alumni, 2021

In most SSA countries, governments still use colonial laws and regulations to guide public sector operations. These laws and regulations remain largely unchanged or have been marginally revised. Most departments in the public sector like town and country planning endure excessive adherence to laid down rules, regulations, procedures, and methods, which stifle innovation and creativity. However, rules and regulations are important for creating environments where innovations can thrive. The absence of effective rules and regulations can potentially stifle innovation in the public sector.

3.4.5 – Limited Priority for Research and Development (R&D)

Lack of priority for Research and Development has been identified as one of the barriers to innovation in the public sector in SSA. About 67.7 % of the survey participants indicated that there was no research being done within their organizations, while 32.3 % noted that there was some research being conducted (Figure 10).

Figure 10 – State of Research in PSOs in SSA



Source: Survey with ALT Alumni, 2021

The lack of research in public sector organizations in SSA was confirmed by ALT during interviews, as highlighted by one of the ALT Alumni:

"Innovation has to be backed up by research. For Sub-Saharan Africa's public sector, research is not a priority in the region." (ALT Alumnus 1)

Without adequate prioritization of R & D, it becomes impossible to generate new products, new services, and creative ideas to deal with contemporary policy challenges (Deloitte, 2016). In cases where research is conducted, it is rarely utilized to influence practice as noted by one of the ALT Alumni:

"Most times the organization would carry out research activities, make recommendations that would always end up on the paper but with minimal or sometimes no follow up mechanisms to ensure they influence both internal and external practice." (ALT Alumnus 4)

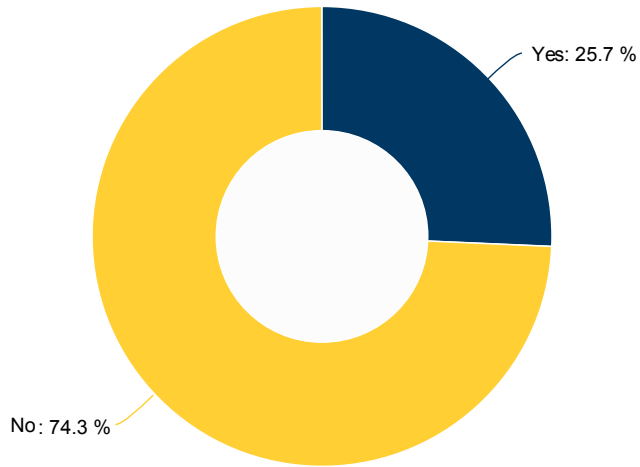
One of the challenges in most SSA countries is the lack of effective engagement between researchers and decision-makers, which constitute obstacles to the development of a transformative innovation policy to both foster and support transition to transformative change.

3.4.6 – Inadequate Infrastructure for Innovation

Inadequate infrastructure and technology costs is another key barrier of innovation in the public sector in SSA. The lack of adequate ICT infrastructure remains a major obstacle to data innovation in public sector organizations, especially in poor and fragile countries. Some government departments in SSA are unable to deploy new technologies because they lack appropriate ICT infrastructure, weak bandwidth, and low internet speed. The high costs associated with the deployment and application of new technologies constitute another serious challenge for local governments. The lack of financial resources for capital investment in new technologies can be a significant obstacle to the implementation of data innovations. Of the survey participants, 71.4 % noted that there is no sufficient infrastructure for innovation in the organizations that are

working or have worked with (Figure 11).

Figure 11 – Availability of Infrastructure for Innovation in the Public Sector in SSA



Source: Survey with ALT Alumni, 2021

3.4.7 – Limited or No Funding Towards Innovation

Another barrier is that there are no dedicated budgets for innovation in most PSOs in SSA. It is rare to see innovation as an item in public sector budgets as noted by one ALT Alumnus, "Innovation is not a priority, and no funds are allocated towards innovation. People will tell you there is no money for innovation, or any new ideas." (ALT Alumnus 3)

4

CONCLUSIONS AND WAY FORWARD

This study was commissioned by the Canadian Bureau for International Education to analyze the drivers and barriers to innovation in the public sector in SSA, against the background that ALT Alumni were confronted with unsupportive organizational cultures that made it difficult for them to initiate innovative ideas to improve public sector operations. In SSA, there are emerging best practices on public sector innovation. The Huduma programme in Kenya is good example of institutional reforms to deliver public services effectively and efficiently through ISD. The institutionalization of public sector innovation through dedicated units in South Africa demonstrates the commitment of governments to inculcate a culture of creativity and innovation. While there are promising examples in SSA, substantial challenges still exist.

First, the study has revealed that inertia and a culture of conservatism have become so entrenched in public bureaucracies in SSA. The rigid and inflexible organizational designs create a complex environment for young professionals like ALT Alumni to develop and operationalize innovative and creative ideas on service delivery, citizen engagement and other ways of managing public challenges. The culture of experimenting with new ideas has not been institutionalized in most PSOs in SSA because of pervasive risk averse behaviors among public servants. Risk aversion often leads to strong resistance from senior managers to innovative ideas, especially in situations where innovation is perceived to threaten the status quo. Second, public sector organizations in SSA tend to follow rigid and inflexible regulatory regimes, that create significant barriers for introducing new initiatives of developing and implementing policies and decisions. The regulatory instruments are rarely updated to reflect changes in the internal and external operating environments. Third, most PSOs in SSA have inadequate infrastructure such as Information and Communication Technologies (ICTs), which makes it difficult to implement digital innovations such as e-governance, e-participation, and e-planning. Though there has been progress in the digitization of public services in SSA, significant challenges still remain in most countries where manual systems of financial management are still in use instance. Fourth, research and development are not given priority by PSOs in SSA. Without investment in research development, there are limited discoveries on how to improve public sector performance in different dimensions. There is also lack of effective engagement between researchers and decision makers, leading to low uptake of research findings to inform public policy. Fifth, the lack of innovation champions in public organizations means that there is overall lack of organizational momentum in PSOs in SSA to drive innovation.

Nonetheless, the study acknowledges that there is huge potential for public sector innovation given the increased penetration of ICTs driven by the fourth industrial revolution, the growing population of 'tech-savvy' youth. For public sector innovation to thrive in SSA, the following recommendations are suggested:

- ▶ The organizational culture, leadership and management practices are key in influencing innovation in the public sector. The first step is to create an enabling environment that allows innovation to thrive. Politicians and public managers need to understand the potentials and risks of innovation, to rethink organisation structures, and to accommodate

organizational values, norms, and routines in coherence with innovation practices. This should be accompanied by comprehensive organizational reforms to reduce or eliminate unnecessary bureaucratic processes, streamline decision making processes and make innovation part of organizational practice. Crucial to all of this is creating a shared vision and setting a tone that encourages innovation. This will help in change the prevailing culture of conservatism that has discouraged innovation. When there is a shared vision and bold leadership committed to innovation, it can help to manage people's fears of change or failure. Public sector leaders can build the skills and capacity needed for innovation such as identifying latent talent, empowering emerging leaders like the ALT Alumni who might have strong collaborative skills and giving them opportunities to take initiative and experiment.

- ▶ Adaptive and transformative leadership culture within the public sector: As demonstrated in this study, the public sector operational context has become highly dynamic as new technologies, new concepts, and new ways of delivering public services continue to evolve. Public sector innovation requires strategic leadership that is willing to take the initiative to make incremental and even radical improvements to the existing systems, technologies, product portfolios, where necessary; to replace current products and processes with new ones. Thus, it is prudent for public sector organizations in SSA to institutionalize adaptive and transformative leadership styles that will embrace and nurture the culture of innovation.
- ▶ Emphasis and investment should also be placed on attracting and developing the leadership talent required to increase innovation in the public sector. This might include programs for developing transformational project managers and greater interchange between public, private, and civil society sectors to expand the capacity of PSOs to innovate.
- ▶ Incentives matter as a critical success factor for innovation in the public sector. This can be applied both at the institutional level (e.g., through governmentwide policy, creating systems and structures that shape institutional objectives, and program monitoring systems) as well as at the level of civil servants (e.g., through performance targets and reward systems).
- ▶ There is need to create Research and Development units within public sector organizations in order to develop a strong research ecosystem. Research and Development is key for informing public sector reforms, identifying, and troubleshooting inefficiencies in public sector management.
- ▶ Technology, while not a panacea is important. PSOs must invest in IT infrastructure tools, new software systems, and knowhow to their specific functional requirements. Furthermore, the technology application is rarely a stand-alone solution; rather, it is accompanied by policies and procedures to change behavior.

5

REFERENCES

- Agolla, J. E. and Van Lill, J. B. (2016) An empirical investigation into innovation drivers and barriers in public sector organizations, *International Journal of Innovation Science*, 8(4): 404-422
- Agolla, J.E. and Van Lill, J.B. (2014), "Assessment of innovation in Kenya's public sector organization", paper presented at the 9th European Conference on Innovation and Entrepreneurship, Belfast, 18-19 September, pp. 2049-1050.
- Bauer, G. K. (2020). Digital solutions to improve basic service provision to the urban poor. Special Issue 22 (116-124): *Water, Waste & Energy: Prospects for essential services in Africa*.
- CBIE (2018). Strengthening the public sector in Africa: Key takeaways from the 2018 IPAC Conference. <https://cbie.ca/strengthening-the-public-sector-in-africa-key-takeaways-from-the-2018-ipac-conference/> (accessed 09/08/2021)
- Cissé, F, Diémé, J, Sy, M, Daniels, C, and Diallo, M (2019). Developing a Transformative Innovation Policy Approach: the case of Senegal. *Transformative Innovation Policy*. Africa Hub. <https://www.tipconsortium.net/resource/developing-a-transformative-innovation-policy-approach-the-case-of-senegal/>
- European Investment Bank (2020) Africa's digital solutions to tackle COVID-19. [pdf] EIB. Available at: <https://www.eib.org/en/publications/african-digital-best-practice-to-tackle-covid-19>
- Falcon, S. M and Witter, L (2021) 4 ways leaders are driving innovation in the public sector and revolutionizing governance. *World Economic Forum*. <https://www.weforum.org/agenda/2021/04/4-ways-leaders-are-driving-agile-governance-in-the-public-sector-agile50/>
- Government of Rwanda (2020). Evaluation of 2019/2020 Imihigo Executive Report. <https://statistics.gov.rw/publication/imihigo-20192020-evaluation-executive-report>
- Hoogeveen, J and Pape (2020). *Data Collection in Fragile States. Innovations from Africa and Beyond*. Palgrave Macmillan. Cham, Switzerland.
- International Development Innovation Alliance, IDIA (2019). *Development Innovation Principles in Practice Insights and Examples to Bridge Theory and Action*. https://static1.squarespace.com/static/5b156e3bf2e6b10bbo788609/t/5f030f528b89c14abf51f8e0/1594036075203/8+Principles+of+Innovation_FNL.pdf (accessed 09/08/2021)
- IPAC (2015). *A Discussion on Policy Innovation in the Canadian Public Sector*. Institute of Public Administration of Canada
- Kattel, R., Cepilovs, A., Lember, V. and Tõnurist, P (2018). Indicators for public sector innovations: Theoretical frameworks and practical applications. *Halduskultuur (Administrative Culture)*, 19(1): 77-104.

- Kinyanjui, F and Waithaka, I (2019). Transformation in Public Service Delivery in Kenya: A Case of Huduma Kenya Centres. *International Journal of Research and Innovation in Social Science*, 3(2): 396-405
- Klingebiel, S, Gonsior, V, Jakobs, F and Nikitka, M (2019). Where tradition meets public sector innovation: a Rwandan case study for Results-Based Approaches, *Third World Quarterly*, 40 (7), 1340-1358
- Lee, S, M, Hwang, T and Choi, D (2012). Open innovation in the public sector of leading countries. *Management Decision*, 50(1): 147-162
- Maduabum, C.P. (2014). Bureaucracy: A Tool for Scuttling Application of Innovative Ideas in the Nigerian Public Service. *International Journal of Public Administration and Management Research*. 2(2), 11-21
- Nkurunziza, A. G., Bateganya, N. L., Byansi, J. Z., Rokob, J., Busingye, J. Leveraging FSM to Close the Urban Sanitation Loop in Kampala (2017). Published by the Bill & Melinda Gates Foundation.
- Observatory for Public Sector Innovation (2020). Observatory of Public Sector Innovation Measuring Public Sector Innovation Why, when, how, for whom and where to? OECD. <https://oecd-opsi.org/publications/lifecycle-5b/>
- OECD (2019). Embracing Innovation in Government. <https://trends.oecd-opsi.org/embracing-innovation-in-government-global-trends-2019.pdf> (accessed 09/08/2021)
- Republic of South Africa (2017). South African Science, Technology and Innovation Indicators. http://www.naci.org.za/wp-content/uploads/2018/07/South_African_Science_Technology_And_Innovation_Indicators_Report_2017.pdf
- UN (2020). E-Government Global Survey. Digital Government in the Decade of Action for Sustainable Development: [https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20\(Full%20Report\).pdf](https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20(Full%20Report).pdf)
- United Nations (2019). World Public Sector Report. Sustainable Development Goal 16: Focus on public institutions. <https://www.un-ilibrary.org/content/books/g789210041409> (accessed 09/08/2021)
- World Bank (2018). Improving Public Sector Performance Through Innovation and Inter-Agency Coordination. <https://documents1.worldbank.org/curated/en/833041539871513644/pdf/131020-WP-P163620-WorldBankGlobalReport-PUBLIC.pdf>
- World Bank (2020) Harnessing digital technology to fight the pandemic. [online] Available at: <https://www.worldbank.org/en/news/feature/2020/09/19/harnessing-digital-technology-to-fight-the-pandemic>
- World Economic Forum (2015). The Africa competitiveness report 2015, Available at <https://www.weforum.org/reports/africa-competitiveness-report-2015>



Canadian Bureau for
International Education