



**FOSTERING THE FUTURE AND LIVELIHOOD OF YOUNG PEOPLE
IN UGANDA THROUGH SCIENCE, TECHNOLOGY, AND INNOVATION**

**African Technology Policy Studies Network (ATPS)
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African Technology Policy Studies Network (ATPS)



The African Technology Policy Studies Network (ATPS) is a transdisciplinary network of researchers, policymakers, private sector actors and the civil society promoting the generation, dissemination, use and mastery of Science, Technology and Innovations (STI) for African development, environmental sustainability and global inclusion. In collaboration with like-minded institutions, ATPS provides platforms for regional and international research and knowledge sharing in order to build Africa’s capabilities in STI policy research, policymaking and implementation for sustainable development.



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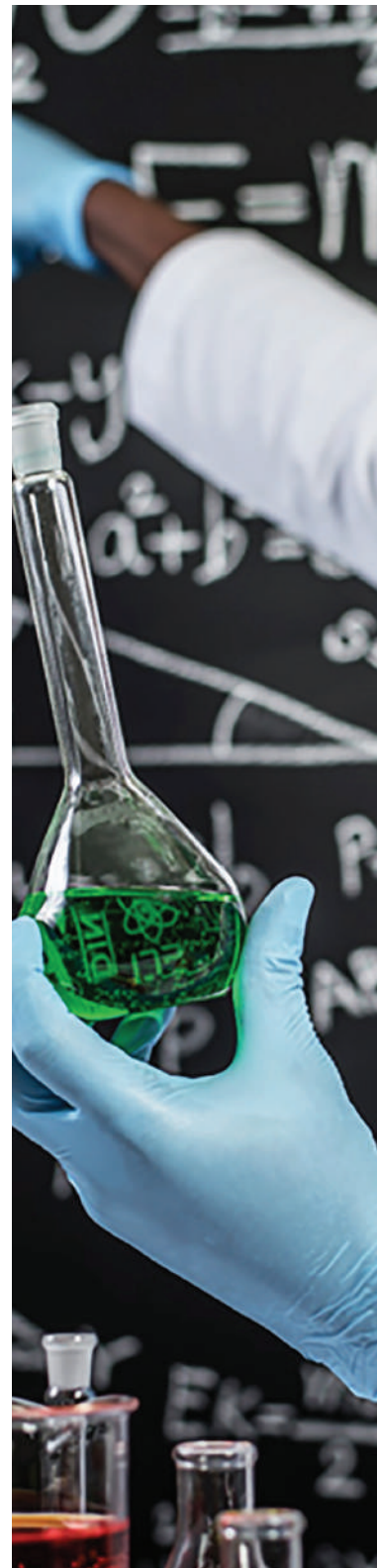


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About the Project

This project was launched amid Africa’s burgeoning youth population, offering immense potential for productivity and inclusive economic growth. However, a significant portion of this demographic faces unemployment challenges exacerbated by the COVID-19 pandemic, necessitating sustainable solutions through effective policy interventions and institutional strengthening. Focusing on Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Senegal, Uganda, and Zimbabwe, the initiative reviews Science, Technology, and Innovation (STI) policies to understand the current landscape, identify successes and failures, and provide evidence-based insights for decision-making in critical sectors for youth employment and wealth creation. Aligned with continental strategies such as the Agenda 2063 and initiatives such as the Mastercard Foundation’s Young Africa Works strategy and the Afreximbank’s campaign for young people’s participation in the implementation of the African Continental Free Trade Area (AfCFTA) and youth mainstreaming in policy engagements and cross-regional dialogues among others, the project aims to inform policymaking and foster stronger linkages among stakeholders to address youth unemployment, skills development, and entrepreneurship. Through rigorous research and stakeholder engagements, the project is catalyzing evidence-based policy discussions and contributing to the formulation of effective strategies for job creation and youth empowerment across Africa.

About Africa Technology Policy Studies Network (ATPS)

The African Technology Policy Studies Network (ATPS) is a transdisciplinary network of researchers, policymakers, private sector actors and civil society promoting the generation, dissemination, use and mastery of STI for African development, environmental sustainability and global inclusion. ATPS has over 5,000 members and 3,000 stakeholders in over 51 countries in 5 continents with institutional partnerships worldwide. We implement our programs through members in national chapters established in 30 countries (27 in Africa and 3 Diaspora chapters in Australia, the United States of America, and the United Kingdom). In collaboration with like-minded institutions, ATPS provides platforms for regional and international research and knowledge sharing in order to build Africa's capabilities in STI policy research, policymaking and implementation for sustainable development.

Acknowledgement

The African Technology Policy Studies Network (ATPS) takes this special opportunity to thank the Mastercard Foundation, Afreximbank and other national partners for partnering with us and supporting this study. The ATPS and partners also wish to appreciate all the respondents led by the ATPS National Chapter Coordinator for Uganda for their contributions to this study.

Key Messages

- To bridge the skills gap and promote effective skills development, the Ministry of Education and Sports (MoES) and industry actors must collaborate closely. Industry should contribute by identifying skills needs, aligning curricula, and providing practical opportunities. MoES must set standards, allocate funding, and ensure curriculum relevance, driving impactful skills development together.
- The government, in partnership with financial institutions, should prioritize financial literacy programs in schools and youth groups. Financial literacy courses should be integrated into the curriculum, and financial services providers can offer training and mentoring to youth loan applicants. This will enhance financial literacy and responsible financial behaviour among young people, promoting economic growth.
- Both the government and private sector have roles to play in fostering entrepreneurship and innovation among young Ugandans. The government should create a supportive policy environment, including incentives for R&D investment and simplified regulations for STI businesses. Private sector participation in R&D and innovation activities can create jobs and address societal challenges.
- Development partners should increase scholarships and financial aid for STEM students to enhance youth employability and entrepreneurship. Limited financial resources often hinder access to quality STEM education. Targeted scholarships can also help close the gender gap in STEM fields, making education and employment opportunities more inclusive and diverse in Uganda. Collaboration with African organizations can facilitate the implementation of such initiatives.

1. Introduction

Uganda occupies an area of 241,551 Km² and has a population of 43.8 million people (Uganda Bureau of Statistics [UBOS], 2020). Uganda boasts the world's second-youngest population, with over three-quarters (78%) of its citizens being under the age of 35. It is anticipated that this youthful demographic will double in size over the next 25 years¹. The country is guided by Vision 2040 and the National Science, Technology, and Innovations (STI) Policy of 2009 which aims to strengthen the national capacity to generate, transfer, and apply scientific knowledge, skills, and technologies that ensure Uganda transforms from a peasant country to a modern and prosperous country. Its overarching goal is to strengthen the national capacity to generate, transfer, and apply scientific knowledge, skills, and technologies that ensure the sustainable use of natural resources for the realization of Uganda's development goals, such as youth employment. Due to a lack of necessary skills, young Ugandans are more prone to unemployment, holding unstable and unsatisfying jobs, or engaging in informal employment. (Kempner, 2020). Although informality does not always imply poor job quality, there is a strong correlation between the two in Uganda.

Subsistence farming employs 41% of the total working-age population, implying that a sizable proportion of the workforce neither generates income nor participates in markets (Allen et al., 2016). The situation becomes particularly pertinent for Uganda's youth, as they constitute 60.2% of the workforce engaged in subsistence farming (National Service Delivery Survey, 2021). This demographic challenge highlights that a considerable proportion of young people may not be generating income or actively participating in formal markets. Consequently, the strong correlation between informality and job quality in Uganda can significantly impact the employment prospects and economic well-being of its youth. Overall, the prevalence of informality skews

¹ <https://www.unicef.org/uganda/what-we-do/u-report>

the unemployment rate, resulting in an inaccurate reflection of Uganda's labour market realities (Kempner, 2020). As a result, it is crucial to consider employment quality and develop interventions to combat underemployment and poor job quality as well. With many Ugandans employed in near-subsistence agricultural or informal low-productivity household enterprises, where jobs are precarious and low-paying, Uganda's main challenge is to address the country's growing lack of decent jobs. Strategic investments in STI can play a pivotal role in transforming these sectors, potentially fostering a brighter future and more sustainable livelihoods, especially for the youth.

2. Rationale for STI application in Youth Employment

Uganda remains one of the world's poorest countries in the world, with a Gross Domestic Product (GDP) per capita of US\$760 in 2021 (World Bank, 2022). Vulnerability persists, with approximately 7 million Ugandans living below the poverty line. The country's vulnerability is exacerbated by the growing number of youth, who make Uganda the world's second youngest population (United Nations Population Fund [UNFP], 2022). There have been previous attempts to create jobs, but with a rapidly growing labour force, only a small fraction is entering productive employment, leaving the majority of labour in low-value-added activities, particularly in agricultural, informal, and household enterprise sectors of services or manufacturing. STI provides a pathway for Ugandan youths to develop their skills by providing access to modern tools, knowledge, and training that are essential for thriving in an increasingly technology-driven job market in order to adequately address the huge skills gap between what the job market requires and what the youths have (African Development Bank, 2018).

As a result, embracing STI holds the promise of transforming Uganda into a prosperous nation with an economically empowered youth population. Nevertheless, there has been a lot of innovation and technology development and adoption taking place in Uganda, including youth-led initiatives such as the creation of mobile applications like "FarmConnect" for agricultural information dissemination and digital payment solutions like "PayUg" tailored to local needs. This innovative momentum needs to be maintained to sustain and further accelerate progress in the country's technological landscape.

3. Methodology

This policy brief was developed from a comprehensive study that delved into STI policies, institutions, stakeholder mapping, and an analysis of youth employment within the realm of technological innovation, skill enhancement, and entrepreneurship development. The study was conducted across seven Sub-Saharan African (SSA) countries, namely Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Senegal, and **Uganda**. The study adopted a mixed-methods approach, which enabled the collection of both qualitative and quantitative data. The data-gathering process commenced with thorough desk studies of existing literature and secondary data. Subsequently, key informant interviews (KIIs) were conducted, involving 20 carefully selected respondents, to obtain primary data that encompassed both qualitative and quantitative aspects. To further enrich the dataset and cross-verify information obtained through other methods, focus group discussions (FGD) were carried out.

The study engaged participants from a diverse range of stakeholder categories, including government officials and policymakers, representatives from the private sector and industry, members of civil society and non-governmental organizations (NGOs), researchers, development partners, and individuals from the media. Special attention was given to ensuring inclusivity and gender balance in the selection of respondents, with a particular focus on representing the voices of youth and other marginalized groups.

4. Major Findings

This section highlights the key policies, programmes, institutions, best practices, challenges, and opportunities in fostering youth's future and livelihood, youth employment, skills development, and entrepreneurship in Uganda.

4.1 STI Policies and Programmes Contributing to Youth Employment in Uganda

Uganda's STI ecosystem has played a critical role in increasing youth employment in the country. Uganda has fostered innovation, skill development, and entrepreneurship among its youth through a range of policies, programs, and initiatives. For instance, since its inception in 2018, the Presidential Initiative on Skilling the Girl Child (PIG) has been training over 8000 beneficiaries annually with most of them now gainfully employed². The National Science, Technology, and Innovation Policy of 2009 is a critical component of Uganda's STI ecosystem. This policy establishes a comprehensive framework for promoting and leveraging STI for long-term development. It has achieved awareness creation, research development, and infrastructure improvements, fostering an innovation culture. However, it faces challenges in funding, commercialization, coordination, inclusivity, and monitoring, highlighting the need for renewed commitment and improvements to fully harness STI's potential.

Uganda has implemented several programmes and initiatives aimed at increasing youth employability and encouraging entrepreneurship. One such programme is the Presidential Initiative on Science and Technology Innovations established in 2010. The initiative has made significant strides in promoting and supporting STI in the country. It has facilitated increased investment in R&D, fostering

² <https://kampalapost.com/content/over-8000-presidential-initiative-skilling-girl-child-beneficiaries-graduate>

collaborations between academia and industry, and providing a platform for innovation-driven enterprises to thrive. However, challenges such as limited funding allocation, bureaucratic hurdles, and the need for stronger linkages between research outputs and practical applications remain areas that require further attention and improvement. Uganda has also established 30 innovation hubs and incubation centres throughout the country (Global System for Mobile Communications Association [GSMA], 2020). These hubs provide a venue for young entrepreneurs to gain mentorship, training, networking opportunities, and financial assistance. They foster an environment in which young innovators can turn their ideas into viable businesses; thereby creating job opportunities for themselves and others.

Furthermore, the Ugandan STI ecosystem recognises the importance of gender inclusivity and women's empowerment in driving innovation and economic growth. The Gender in STI Policy Framework of 2021 recognises the distinct challenges that women face in the field of STI and seeks to address them through a variety of strategies. For instance, data from the Ministry of Education could show a 20% rise in the number of female students pursuing engineering degrees. Uganda aims to unlock women's potential in the STI sector to boost equal opportunities, job creation, and economic development. For instance, economic data reveals that there has been a 15% increase in the average income of women working in technology-related startups. The convergence of these policies, programmes, and initiatives within Uganda's STI ecosystem has resulted in measurable outcomes in terms of youth employment and women's empowerment. The emphasis on skill development, technological innovation, and entrepreneurship has given young people the tools and opportunities they need to create their own jobs and contribute to the economy. Uganda has been able to harness the potential of its youth and women in driving economic growth and sustainable development by cultivating an innovative culture and providing the necessary support structures and enabling environment.

In Uganda, while affirmative action has increased female enrolment in higher education, participation in STEM programs at 37% is still low (NCHE 2019). While Uganda's representation of women in STEM courses is relatively low, it still outperforms some neighbouring countries like Kenya, where the percentage of women in STEM courses falls between 30% and 35%³. At Makerere University, the country's largest and premier university in Uganda, only 28% of academic and research positions are occupied by women, with similar situations exhibited in all 46 universities (Ibid). With only four female Vice Chancellors, the gender equity status in Uganda can benefit from the mentorship and grooming of female academic leaders (Nakayiwa, 2020). It is therefore imperative that Uganda can further improve youth employment opportunities and empower women in the field of STI by continuing to prioritise STI and implementing supportive measures, resulting in long-term economic growth and development in the country.

4.2 STI Institutional Framework for Youth Employment in Uganda

Several institutions have been established in Uganda to improve youth employability, entrepreneurship, and job creation. The Ministries, Departments and Agencies (MDAs) have recognized the vast potential of human capital quality that the youth have and have fronted policies and launched programmes that encourage the youth to take up innovative ventures and generate employment opportunities. As a result, they have commissioned policies that promote youth employment and launched programmes that have helped operationalize the policies in place. For instance, the Uganda Women Entrepreneurship Program (UWEP), the Presidential Initiative on Skilling the Girl Child (PIG), and the Youth Venture Capital Fund (YVCF) have provided entrepreneurs with education and capital to start businesses while repaying loans regularly. Table 2 highlights key institutions that support youth skill development and employment.

³ <https://theconversation.com/why-fewer-kenyan-women-are-choosing-or-completing-stem-courses-91706>

The Ministry of Science, Technology, and Innovation (MSTI) and the Uganda National Council for Science and Technology (UNCST) jointly contribute significantly to youth employment and job creation through their roles in fostering STI development. MSTI's formulation of policies, strategies, and programs aligns STI with national development priorities, creating an environment conducive to scientific research, technological advancement, and innovation. UNCST, on the other hand, plays a vital role in facilitating policy implementation and collaboration among stakeholders. It actively promotes research and innovation, offers funding mechanisms, and advises on intellectual property rights and technology transfer. The synergy between MSTI and UNCST has been instrumental in empowering Uganda to leverage STI for socio-economic transformation and sustainable job growth.

To tackle the challenge of developing a shared understanding of the significance of innovation in STI processes and its entrepreneurial nature, as well as the need for a robust national innovation system (NIS), it is crucial to link these efforts with youth employment and job creation. This can be achieved through capacity-building programs, workshops, and public awareness campaigns highlighting how innovation contributes to economic growth and job opportunities. Additionally, the establishment of platforms like national innovation forums can foster collaboration and dialogue among various stakeholders, including young people, enabling Uganda to forge a unified vision for innovation within its STI policy framework, thereby promoting youth employment and job creation as integral components of its innovation agenda.

To enhance youth employment and job creation, it is imperative to actively involve young people and the private sector in the formulation and execution of STI policies. Recognizing the youth as pivotal drivers of innovation and employment opportunities is crucial. To achieve this, initiatives like youth innovation challenge programs, mentorship schemes, and regular consultations should be introduced to seek their perspectives. Furthermore, the private

sector should not merely serve as financiers but as active partners. Reports from various youth voices have demonstrated the private sector's potential to impact Uganda's job market significantly when collaborating with other stakeholders. For instance, the Coca-Cola Company, in partnership with the government, established the Coca-Cola Youth Empowerment Programme, offering training, skills development, and access to finance and markets to empower young entrepreneurs. Engaging entrepreneurial innovators can provide valuable insights into emerging trends, market demands, and practical solutions. This necessitates the creation of a supportive environment that encourages collaboration, offers incentives for private sector engagement, and ensures that the voices of young people and entrepreneurs are not only heard but also considered in policy-making processes, ultimately contributing to youth employment and job creation.

Breaking down institutional silos is a vital step in enhancing policy implementation and, consequently, youth employment and job creation. The fragmentation and lack of coordination among various institutions often hinder effective communication and collaboration. To address this issue, mechanisms should be established to facilitate interagency collaboration, information sharing, and joint decision-making. Inter-ministerial task forces, regular coordination meetings, and shared platforms and databases can serve as effective means to achieve this. Notably, some organizations are already making strides in this direction. For instance, the YouthConnekt Uganda program, a partnership between the government of Uganda, the Mastercard Foundation, and other entities is actively working to break down silos between different government agencies, private sector firms, and civil society organizations.

By adopting a similar approach, Uganda can optimize resource utilization, streamline policy implementation, and enhance the overall effectiveness of its STI policies, ultimately contributing to youth employment and job creation.

Engaging in an inclusive and participatory public dialogue is essential for aligning STI policies with the needs and aspirations of Uganda's population, ultimately contributing to youth employment and job creation. This dialogue can take various forms, including town hall meetings, public consultations, and the involvement of civil society organizations and community leaders. For example, the government is leveraging platforms like Twitter (now X) and Facebook to disseminate information about STI policy and gather feedback from young people. The objective is to develop and implement policies that are inclusive and participatory. By actively involving citizens, especially those from marginalized communities, and seeking their input, Uganda can ensure that STI policies effectively address their specific needs and promote equitable development. Prioritizing open communication, building trust, and engaging stakeholders throughout the policy cycle are crucial steps in this process.

To solve the persisting issues in Uganda's STI policy landscape, it is necessary to promote a common understanding of innovation, engage young people and the business sector, eliminate institutional silos, and engage in a broad public dialogue. By implementing these recommendations, Uganda may increase the effectiveness of its STI policies, stimulate innovation, and create an enabling environment for young employment, entrepreneurship, and sustainable development.

4.3 Challenges and Opportunities for Youth Employment in Uganda

Youth employment in Uganda faces significant challenges due to slow economic growth and small formal labour markets. In recent years, the country's economy has grown at a rate of around 5% per year on average, but the slow growth has limited the creation of new job opportunities, resulting in a scarcity of formal employment options for the youth. This scarcity of openings limits their ability to secure stable and well-paying jobs, exacerbating the problem of unemployment. This is exacerbated by the small size of formal labour markets. With fewer formal job openings, competition among

young people seeking work heats up, making it even more difficult for them to find suitable work. Many young people are drawn to the informal economy due to a lack of opportunities in the formal sector, which is characterised by low wages, poor working conditions, and limited social protections. Furthermore, slow economic growth and small formal labour markets feed a cycle of poverty and limited social mobility. Breaking free from this cycle is especially difficult for young people, especially those with limited education or vocational skills. Their economic contributions remain untapped, impeding overall national development and prosperity. To address these challenges, comprehensive strategies that promote economic growth and job creation are required. Policies should focus on fostering a business-friendly environment, encouraging entrepreneurship, and improving vocational training programmes. Furthermore, investment in infrastructure, technology, and sectors with high potential for job creation can help stimulate economic growth and expand formal labour markets, ultimately providing better opportunities for Uganda's youth.

Youth employment and entrepreneurship are critical drivers of Uganda's economic development. However, one significant challenge that hampers youth in these areas is the lack of financial literacy. Many young Ugandans lack the necessary knowledge and skills to manage their finances effectively and make informed decisions about investments and savings (Mpaata et al., 2021). This limited financial literacy restricts their ability to access credit, plan for business ventures, or navigate the complexities of the financial market. Without a solid understanding of financial concepts and practices, young entrepreneurs often struggle to secure funding for their startups or manage their businesses efficiently. This, in turn, hinders their potential for growth and job creation. Furthermore, the absence of financial literacy among youth contributes to a high rate of business failure, as they may mismanage their resources, fail to budget effectively or make poor financial decisions (Akileng et al., 2018). In some cases, young entrepreneurs may fall victim

to fraudulent schemes or predatory lending practices due to their limited financial knowledge. These setbacks not only deter youth from venturing into entrepreneurship but also perpetuate a cycle of financial vulnerability and instability. To address this challenge and harness the potential of youth in job creation and entrepreneurship, Uganda must prioritize financial literacy education and training programs. These programs should be integrated into the formal education system and supplemented by targeted initiatives that reach out to young people who may not have access to traditional schooling. Additionally, partnerships between government, financial institutions, and civil society organizations can play a vital role in promoting financial literacy among youth. Such efforts should encompass basic financial principles, budgeting, saving, investment, and risk management, equipping young Ugandans with the tools they need to make sound financial decisions and drive economic growth through entrepreneurship and job creation.

4.4 Best Practices and Impacts for Youth Employment in Uganda

With 85% of the population living in rural areas, agriculture is usually the main economic activity that sustains livelihoods⁴. Consequently, Uganda took full advantage of the situation to try and create opportunities for the youth. As a result, Uganda developed the National Strategy for Youth Employment in Agriculture (NSYEA) has demonstrated success in Uganda by creating over 150,000 jobs, particularly in agribusiness and value-added agriculture sectors. This strategy has not only generated employment opportunities for youth but has also contributed to the growth and transformation of the agricultural industry especially in the rural areas of the country⁵. The strategy recognizes the significant potential of the rural sector in driving economic growth and reducing unemployment rates among these demographics. By targeting rural areas specifically, the strategy aims to address the unique challenges faced by young people and women in these regions, such as limited access to

⁴ <https://www.asiafarming.com/agriculture-in-uganda-types-importance-crops-and-statistics>

⁵ <https://nsyea.trailanalytics.com>

education, skills training, and formal employment opportunities. One key aspect of the strategy is the promotion of agriculture as a viable source of employment for youth and women in rural areas. The government has implemented various initiatives to enhance agricultural productivity, including providing access to agricultural inputs, financial services, and modern farming technologies. These efforts have helped to transform agriculture into a more attractive and profitable sector, creating employment opportunities and income generation for young people and women engaged in farming activities. Furthermore, the strategy recognizes the importance of entrepreneurship and the need to support youth-led enterprises in rural areas. The government has established programs to provide entrepreneurship training, access to credit, and business development services to aspiring young entrepreneurs. By fostering a supportive ecosystem for entrepreneurship, the strategy encourages the creation of new businesses and self-employment opportunities, thereby stimulating job creation in rural areas. Another significant component of the strategy is the emphasis on gender equality and women's empowerment. It recognizes the unique challenges faced by women in accessing employment and entrepreneurship opportunities in rural areas. Consequently, the strategy includes specific measures to address gender disparities and promote women's economic participation, such as providing targeted training programs and financial support to women entrepreneurs.

Kiira Motors, a state corporation has played a significant role in creating job opportunities for Ugandan youth and women. It has not only contributed to economic growth as an innovative and forward-thinking enterprise but has also prioritised inclusivity and empowerment. For starters, it has actively engaged with the youth by creating job opportunities in a variety of fields. In 2020, Kirra motors created jobs for 14,000 youths, 2000 on direct employment and 12,000 were directly employed by the agency⁶. The company has advocated for gender equality and women's empowerment in

⁶ <https://www.monitor.co.ug/uganda/news/national/kiira-motors-to-employ-14-000-workers--1776812>

the traditionally male-dominated automotive industry. Women have been actively recruited and promoted in a variety of roles at the company, including engineering, design, administration, and management. It has empowered women to pursue careers in a sector where they have historically been underrepresented by breaking down gender barriers and providing equal opportunities. It has also contributed to skill development and knowledge transfer in addition to direct job creation. The company has facilitated training programmes, workshops, and research projects through collaborations with universities and research institutions. It has helped develop a skilled workforce capable of contributing to the growth of the automotive sector by actively involving academia. This emphasis on skill development has not only created job opportunities but has also encouraged innovation and technological advancements in the industry.

The fronting of partnerships in development initiatives allows for the pooling of resources, expertise, and networks to achieve greater impact. The example of the Youth Forward Initiative in Uganda demonstrates the effectiveness of such partnerships. Supported by the Mastercard Foundation and implemented by a consortium consisting of Restless Development, GOAL Uganda, and the International Youth Foundation, the initiative leverages the unique strengths and experiences of each partner. The Mastercard Foundation brings financial support and a global network, while the implementing partners contribute their on-the-ground presence, technical knowledge, and understanding of local contexts. This collaborative approach ensures a holistic and comprehensive approach to youth empowerment, combining training, mentorship, and access to financial services. By combining efforts and resources, these partnerships maximize the reach and effectiveness of the initiative, fostering sustainable economic growth, poverty reduction, and social inclusion. The success of the Youth Forward Initiative underscores the value of such partnerships in driving positive change and creating lasting impact in communities.

Vocational practice has emerged as a best practice for youth employment in Uganda. With a high youth unemployment rate of around 13.3%, vocational training offers a practical solution to equip young people with the necessary skills for employment⁷. According to the Uganda Bureau of Statistics, in 2020, only 5.6% of youth aged 15-24 were engaged in wage employment. Vocational training programs provide specialized skills in areas such as agriculture, construction, mechanics, and hospitality, aligning with the needs of the labour market. An example of a vocational training programme that has proved to be impactful is the Skilling Uganda Initiative (SIU) which has trained over 100,000 young people in a variety of skills, including tailoring, carpentry, welding, and mechanics. Of these high number of trained youths, 7 out of 10 get employed in agriculture, construction, mechanics, and hospitality sectors within 6 months after completing training⁸. Data shows that youth who undergo vocational training have higher chances of finding employment compared to those without such training. For instance, a survey conducted by the Ministry of Gender, Labor, and Social Development revealed that 67% of Technical Vocational Education and Training (TVETs) graduates secured employment within a year of completing their training. Additionally, vocational training contributes to economic growth by fostering entrepreneurship among young people, leading to job creation and income generation. The government of Uganda, in partnership with international organizations, has invested in expanding vocational training centres across the country to address the youth unemployment challenge. These efforts have shown promising results, making vocational practice a recognized best practice for youth employment in Uganda.

⁷ <https://thepalladiumgroup.com/news/Youth-Unemployment-in-Uganda-Has-Been-Misdiagnosed->

⁸ <https://open.enabel.be/en/UGA/2142/1294/u/the-support-to-skilling-uganda-initiative.html>

Table 1: A summary of key STI Policies and programmes, their roles and impacts on skills development and youth employment in Uganda

STI Policies and Programmes	Roles in skills development and youth employment	Impact on skills development and youth employment	Remarks
Vision 2040	<ul style="list-style-type: none"> - Creates a conducive environment for job creation for youths - Promotes entrepreneurship and provides access to finance and business development services. - Creates a supportive regulatory environment for small and medium-sized enterprises. 	<ul style="list-style-type: none"> - There has been an increase in the budget allocation for education and skills development programs. For example, in the 2021/2022 financial year, the budget was increased by 5.5% compared to the financial year 2020/2021 to fund projects and programmes aimed at achieving Vision 2040. 	<ul style="list-style-type: none"> - Government agencies working with employers from the private sector to identify the skills needed in the job market and align the education system could enhance the chances of achieving this vision.
National STI Policy of 2009	<ul style="list-style-type: none"> - Increases awareness of the importance of STEM education and training and led to some improvements in its quality. 	<ul style="list-style-type: none"> - Created new opportunities for skills development and employment for the youth through the establishment of Science and Technology Parks, which have served as incubators for start-ups and technology-based businesses. 	<ul style="list-style-type: none"> - The government and the private sector should increase funding for STI research and development by enhancing partnerships between them and development partners. - Industry stakeholders should be involved in the design of training programs and regularly participate in updating the curricula to keep up with changing trends.

<p>Presidential Initiative on Skilling the Girl child (PIG)</p>	<ul style="list-style-type: none"> - Provides girls with opportunities to acquire skills in areas such as ICT, entrepreneurship, and vocational training which help to address the skills gap in the country. 	<ul style="list-style-type: none"> - Over 12,651 girls have benefitted from the vocational skills provided for by the programme. 	<ul style="list-style-type: none"> - The programme should provide more support for girls in rural areas, and work to address cultural and societal barriers that may prevent girls from participating in vocational and technical education. - The programme can also leverage private sector partnerships to provide more job opportunities for girls and women who have acquired new skills through the initiative.
<p>Uganda Women Entrepreneurship Program (UWEP)</p>	<ul style="list-style-type: none"> - Provides training and mentorship to women entrepreneurs, helping them to develop their business skills and knowledge. - Provides financial support to women entrepreneurs, enabling them to start or expand their businesses. 	<ul style="list-style-type: none"> - Over 166,295 women have benefitted from the funds which many women may not have had access to traditional sources of finance. - Promoted gender equality and social inclusion by providing support to women entrepreneurs, therefore challenging traditional gender roles and stereotypes. 	<ul style="list-style-type: none"> - Programme managers should create more awareness and conduct training to ensure beneficiaries are well-appraised with the relevant business documentation needed to access the funds. - The programme should consider automating the award-granting systems to help solve the politicization of the program.

<p>Buy Uganda Build Uganda (BUBU)</p>	<ul style="list-style-type: none"> - Promotes the development of new industries and the growth of existing ones. This has created new job opportunities for young people, especially in the manufacturing and agricultural sectors. - Increases demand for skilled labour, which has led to increased investments in vocational training programs. 	<ul style="list-style-type: none"> - Increased demand for locally produced goods and services leading to the growth of local industries, particularly in sectors such as agriculture, manufacturing, and construction for instance number of SMEs in Uganda increased from 530,000 in 2013 to over 1.2 million in 2019. 	<ul style="list-style-type: none"> - Decentralize BUBU department across all ministries to spur innovation and consumption of local products from all sectors of the economy.
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Table 2: Summary of key institutions, their roles and impact on youth employment in Kenya

STI Institutions	STI Institutions Roles in skills development and youth employment	Impacts on skills development and youth employment
Government: Ministries, Agencies and Departments (MDAs)		
Ministry of Education and Sports	<ul style="list-style-type: none"> - Create policies and programs that facilitate the development of an education system that produces competent, skilled, and knowledgeable graduates who can succeed in the global job market. 	<ul style="list-style-type: none"> - In 2018 and 2020, over 500,000 youths were trained in various technical and vocational skills in TVETs. - Collaborated with other government agencies, private sector organizations, and development partners to create job opportunities for young people. This has been achieved through initiatives such as skilling.
Ministry of Gender, Labour and Social Development	<ul style="list-style-type: none"> - Responsible for developing and implementing policies and programs aimed at promoting gender equality, creating decent work opportunities, and reducing poverty and vulnerability. 	<ul style="list-style-type: none"> - Provided youths with access to loans, grants, and skills training to start or expand their businesses through initiatives such as the Youth Livelihood Program (YLP). For instance, by 2017, YLP had disbursed US\$17.38 million. - Works with employers and trade unions to promote decent work opportunities for young people, such as by improving working conditions and enforcing labour laws.
Uganda National Council for Science and Technology	<ul style="list-style-type: none"> - Promotes the development and application of science and technology in Uganda, with the goal of promoting sustainable economic growth and social development. 	<ul style="list-style-type: none"> - Works with educational institutions, industry, and other stakeholders to promote STEM education and to ensure that young people have the skills and knowledge needed to succeed in STEM-related fields. - Through initiatives such as the Presidential Initiative on Science and Technology Innovation Fund, it has

			provided funding and support to young innovators and entrepreneurs. For instance, the fund supported Makerere's University Faculty of Technology to the tune of UGX25 Billion, to continue working on the electric vehicle project.
Private Sector			
Uganda Manufacturers Association (UMA)	- Promotes growth and development of the manufacturing sector in Uganda, which is a key driver of economic growth and job creation.		<ul style="list-style-type: none"> - Works with educational institutions, industry, and other stakeholders to promote vocational and technical education and to ensure that young people have the skills and knowledge needed to succeed in the manufacturing sector. - Promoted investment in the manufacturing sector and created a conducive business environment for manufacturers.
Innovation Village	- Promotes youth skills development and employment by providing a platform for young people to develop their skills, network with industry experts and investors, and access resources and support to grow their businesses.		<ul style="list-style-type: none"> - Has provided training and mentorship to thousands of young entrepreneurs in the technology and innovation space. - Has provided a platform for young entrepreneurs to network with industry experts, investors, and other stakeholders with the aim of creating new business ventures and employment opportunities.
Civil Society Organizations (CSO's)/ Non-Governmental Organisation (NGOs)			
American Chamber of Commerce in Uganda (ACCU)	- Provides a platform for young entrepreneurs and professionals to network with industry experts, investors, and other stakeholders.		- Advocated for business-friendly policies and regulations that have led to job creation and economic growth.

Development Partners		
Japan International Cooperation Agency (JICA)	- Supports the development of vocational and technical education.	<ul style="list-style-type: none"> - Provided funding and technical assistance for the construction of vocational training centres and the development of training programs aimed at equipping young people with the skills needed to succeed in the job market. - Has provided funding and technical assistance to SMEs, which can lead to the creation of new jobs and employment opportunities for young people.

5. Conclusion

Uganda has made commendable efforts in establishing policies and institutions aimed at fostering innovation and addressing youth unemployment. These initiatives have yielded some positive outcomes, yet there remains room for improvement. To better address the youth unemployment challenge, it is essential to enhance the translation of these policies into tangible employment opportunities. This can be achieved through increased collaboration between government bodies, the private sector, and civil society, along with a heightened focus on vocational training and tailored support for youth-led entrepreneurship. By refining and implementing these policy recommendations, Uganda can further enhance its commitment to youth employment and entrepreneurial development.

6. Policy Recommendations

To enhance youth employment and foster the future and livelihood of young people in Uganda, the following policy recommendations are proffered.

Recommendation 1: Strengthen collaboration between industry actors and TVETs to improve skills development and address skills mismatch: To strengthen collaboration between industry actors and TVET institutions for improved skills development and addressing skills mismatch, both the Ministry of Education and Sports (MES) and the industry actors need to play vital roles. The industry actors have the responsibility of identifying the industry's skills needs and ensuring vocational training institutes' curricula are aligned accordingly. Their input on curriculum development guarantees relevance and up-to-date training. Moreover, the private sector contributes to implementation by offering internships, apprenticeships, and practical opportunities for students. On the other hand, the MES plays a crucial role in setting standards for vocational training institutes, ensuring consistent quality across all institutions. They provide essential funding to these institutes, ensuring the availability of necessary resources. Additionally, the Ministry monitors and evaluates curriculum implementation to ensure its effectiveness and responsiveness to students' and employers' needs. By synergizing the efforts of both actors, collaboration can drive impactful skills development and bridge the skills gap in the workforce.

Recommendation 2: Support financial literacy training among youth by providing supplemental training and mentoring services: Initiating financial literacy programs in elementary schools and youth groups should be considered by the government and other key stakeholders especially those who offer financial services in the private sector. Key government institutions such as the MES can ensure students benefit from financial literacy courses at all levels of

education, from elementary to tertiary by enforcing this through the curriculum. Additional assistance can be provided by the actors from the financial services to youth groups who apply for loans to ensure that the funds are not misappropriated. This will greatly help the youth develop their financial literacy, even in programs like the Youth Venture Capital Fund, where some youth have slowed the revolving fund model by delaying loan payments; making it difficult for others to access the loan to help their businesses.

Recommendation 3: Both the government and private sector stakeholders need to promote entrepreneurship and innovation among young people:

Both government and private actors must do their part to promote entrepreneurship and innovation among young people. Uganda's government must create a more favourable policy environment for the STI sector. This includes tax breaks for businesses that invest in R&D as well as simplifying the regulatory environment for STI businesses. The private sector, on the other hand, should assist the government by investing in R&D activities in the country. Increased R&D investments aid in the creation of new jobs in both the formal and informal sectors. It can also help Uganda address its most pressing issues, such as poverty, disease, and environmental degradation.

Recommendation 4: Development partners can provide more scholarships and financial aid for youthful students studying STEM courses:

Increasing access to scholarships and financial aid for STEM students is a critical step towards improving youth employability, entrepreneurship, and job creation. Students' ability to enrol in quality STEM programmes is frequently hindered by limited financial resources, thereby limiting their potential to acquire the necessary skills and knowledge for employment in technology-driven industries.

Furthermore, STEM education scholarships and financial aid will help to close the gender gap in STEM fields. Due to socioeconomic barriers, women are frequently underrepresented in science and

technology-related disciplines. Development partners can encourage and empower more young women to pursue STEM education by earmarking scholarships specifically for female students, resulting in a more inclusive and diverse talent pool in Uganda. This can be achieved through partnerships with African organizations which work directly with multiple stakeholders including universities, private sector actors, civil society, and policymakers among others.

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