



## **A theoretical analysis of public expenditure on education and agriculture sector growth nexus: Case of Uganda**

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### **ABSTRACT**

Uganda's economic development prospect is intertwined with agriculture sector growth. The country has 80% of the land, which is arable, but only 35% is being cultivated majorly using subsistence suboptimal methods. On the other hand, the country's population age structure is a paradox of its own. Census data indicates that close to 63% of the total population is below the age of 24 years and 50% below the age of 15 years. It is therefore imperative that the education expenditure as a proxy for human capital development should underpin policy and public investment choices. At the sector level, growth and prosperity are positively correlated to a reduction in rural poverty that is still a characteristic of rural households. This paper seeks to deepen the theoretical understanding of agriculture and education nexus and the low transformation of the agriculture sector in Uganda.

**Key words:** Agriculture Sector, economic development, education investment, human capital, Uganda

### **RÉSUMÉ**

Les perspectives de développement économique de l'Ouganda sont étroitement liées à la croissance du secteur agricole. Le pays possède 80% des terres arables, mais seulement 35% de ces derniers est principalement cultivé en utilisant des méthodes de subsistance sous-optimales. En revanche, la structure par âge de la population du pays est un paradoxe en soi. Les données du recensement indiquent que près de 63% de la population totale a moins de 24 ans et 50% a moins de 15 ans. Il est donc impératif que les dépenses d'éducation en tant qu'indicateur du développement du capital humain sous-tendent les choix politiques et d'investissement public. Au niveau sectoriel, la croissance et la prospérité sont positivement corrélées à une réduction de la pauvreté rurale qui est encore une caractéristique des ménages ruraux. Cet article cherche à approfondir la compréhension théorique du lien existant entre l'agriculture et l'éducation ainsi que la faible transformation du secteur agricole en Ouganda.

**Mots clés:** Secteur agricole, développement économique, investissement dans l'éducation, capital humain, Ouganda

## INTRODUCTION

Agriculture occupies conspicuous space in Uganda's development agenda due to increasing food insecurity and poverty that requires finding viable solutions to a number of complex technical, institutional, and policy issues. On the other hand, education raises people's productivity, creativity, promotes entrepreneurship and technological advancement of humanity (Bloom *et al.*, 2020). However, the lack of clarity on the interconnection between investment in education and agriculture sector growth is compelling. There is a firm consensus that education drives economic growth as well as fostering intellectual, cultural and trade links in an increasingly developing knowledge ecosystem and multi-lateral thinking (Attanasio, 2015; Ali *et al.*, 2018). Burgess, (2016) identifies critical policy domains through which education as a means of building human capital is critical. First, a country's stock of skills is central to its potential for economic growth in a highly competitive international environment. Second, the distribution of that human capital is a key determinant of income inequality, ever more important with a high wage premium for skills. Third, the link between a person's human capital and their background is a fundamental determinant of social mobility. In the agriculture sector, investment in human capital development contributes to generation of skilled labour force that provides the pre-requisite knowledge for production and activation of critical value chains that have the potential to advance the vibrancy of the entire national agricultural innovation system and spur growth (Bashir *et al.*, 2018).

The new Growth Theory" considers technological progress as an endogenous variable of economic growth and this is the real driving force of long-term economic development (Banerjee and Duflo, 2004; Chandra and Islamia, 2010). Economic development is a multidimensional process characterized by growth of systems that generate economic, technological, social and institutional changes to support wealth of nations and wellbeing of a society (Coccia,

2018). Recent studies reveal that most of sub-Saharan African countries are experiencing unprecedented growth underpinned by favourable macroeconomic trends that are likely to contribute to the much-needed economic transformation (AUC/OECD, 2019). The Rostow's stages and Harrod-Domar model of classical theories of economic growth have failed to clarify the economic development of poor nations, as the returns to high investments in physical capital are dismal (Osiobe, 2019). This is attributed to lack of other socioeconomic factors such as efficient higher education system and good governance (Jiranyakul, 2014).

Fundamentally, there is a plethora of evidence that alludes to the fact that investment in education enhances factor productivity, stimulates economic growth and promotes socio-economic development (Barro and Lee, 2013; Patrinos and Montenegro, 2014). Indeed, the registered improved economic performance in sub-Saharan Africa has been to some extent attributed to the rapid expansion of the tertiary education sub-sector (Darvas *et al.*, 2017). More specific to the agriculture sector, investing in education through training and research generates new technologies and innovations that potentially increase agricultural productivity and help solve some of the world food crisis and mitigate natural resources degradation (World Economic Forum, 2015). According to Mogues *et al.* (2015), the consistent and significant public investments in technology, infrastructure, and services supportive of agriculture sector growth, led to sustained and impressive agricultural productivity that we now refer to as the "Green Revolution" in Asia. Sadly, Africa is yet to witness such a transformation of its agri-food system.

## METHODOLOGY

This paper, therefore, seeks to provide insights into the education and agriculture growth nexus and stimulate policy conversations around education investment and agriculture sector growth. The synthesis applies a theoretical review of existing literature and take a descriptive reflection on longitudinal national statistical data for the period 1982-2017.

We hope that the synthesis provided will be relevant to emerging economies in sub-Saharan Africa that have a significant proportion of their population dependent on agriculture as well as contribute to the policy debates on agriculture transformation.

### **Theoretical Findings**

#### **Rationale for country specific analysis.**

There are underlying characteristics that are country-specific such as the prevailing policy framework, labour market dynamics and brain drain that render cross-national comparisons inaccurate and misleading to inform specific recommendations (Hamilton *et al.*, 2009; Kwon 2009; Liu, 2014). According to Von Brockdorff and Amaira (2017) this cross-sectional estimation of determinants of productivity fails to reflect the existing heterogeneity and differential effects in countries. The State superstructure is quite diverse across countries and has implications on productivity performance. This is the rationale for deeper theoretical investigation at country specific level as opposed to comparative study across countries.

#### **Economic returns to education investment**

Economic returns to education investment are significant. Recent evidence suggests that indeed education is a determinant of individual income and can produce public and private benefits, which are also termed as social returns (see Gyimah-Brempong *et al.*, 2006; Pegkas, 2014; Shao and Wang, 2018). According to Bloom *et al.* (2014) using data from UNESCO, sub-Saharan Africa's production level is about 23% below its production possibility frontier due to capacity gaps. They also established that a one-year increase in the tertiary education stock would raise the long-run steady-state level of African GDP per capita by 12.2% due to factor inputs. However, there is growing concern that returns to investment in education are diminishing in view of increased unemployment among the educated workforce, as a result of limited placements in public service and private sector to absorb the existing human capital. There is a negative relationship between unemployment and labour productivity

growth rate (Doppelt, 2018). This comes amidst fiscal difficulties facing national governments with the implication that education, as a factor of human capital will decrease returns.

The two recent Uganda National Household Surveys (UNHS) on labour market indicators of the working population aged between 14-64 years revealed that unemployment statistics are higher in urban than rural areas (Table 1). For instance, between 2013 and 2017, the proportion of the population employed in urban areas grew marginally from 23% to 24.3%, an increase of less than two percentage points over a period of five years. Whereas over the same period, there was a drop in the working population in rural areas from 77% to 75% of which 47% were employed in the agriculture sector. Similarly, the proportion of the working population in the agriculture sector among males declined from 37% to 31% while the employment rate for women remained stable at 47% on average. Overall, there is a high unemployment rate in urban areas approximated at 75% that need a critical reflection on despite the consistent upward trajectory of economic and wellbeing indicators. This level of economic exclusion poses a dilemma and may even reverse the gains made towards achieving the objectives of the Sustainable Development Goals (SDGs). Uganda's unemployment status cannot be looked at in isolation without looking at the trends in the education sector policy environment and performance metrics.

#### **Education policy environment in Uganda**

Prior to the advent of full implementation of the World Bank's Structural Adjustment Programme (SAP), the education sector like any other form of public service was free. The SAP consisted of conditional loans provided by the International Monetary Fund (IMF) and the World Bank (WB) to countries that experienced economic crises on condition that they put in place policies and reforms towards a market-oriented economy. These policy changes led the Uganda Government to abolish tuition subsidies in all tertiary education institutions and equally introduced private student sponsorship schemes in all public institution

of higher learning to support the resource allocative policy of realising universal primary education objectives (Bakkabulindi, 2006; Katunguka, 2015). Thus, the Government of Uganda introduced the Universal Primary Education (UPE), which almost tripled the net primary school enrolment, but with a catastrophic change in the public investment, landscape at both secondary and tertiary education levels whose effects are still being felt today (Figure 1). The same policy led to increased investment in the education sector by the private sector. According to the latest Annual School census of 2016, there is a total of 6,798 pre-primary schools 19,718 Primary schools and of these, 12,109 (61%) are government-owned whereas the rest are privately owned (UBOS, 2018).

Despite the increased enrolment, rates that were sustained beyond grade five with effects much large among girls in poor households; the education system is still facing challenges in terms of low internal efficiency and unequal quality of education (Huylebroeck and Titeca, 2015). Figure 2 shows education public expenditure for primary, secondary and tertiary education levels, respectively. The

universalisation of primary education in the mid-nineties led to irreversible increase in primary education expenditures and for the first time surpassing allocations to secondary education level which trend has remained so to date. The spike in secondary education expenditure from 2007 onwards was due to the introduction of Universal Secondary Education (USE), a new policy that introduced free secondary education in selected secondary schools whether private or public. The objective of USE was to support the poor but academically promising students to access secondary education.

According to the 2016 Ministry of Education and Sports, Annual School Census (2016), Uganda has 3,070 secondary schools of which 1592 (51.9%) are USE out of which 690 schools were private USE schools (Uganda Bureau of Statistics, 2017). The increase in resource allocation to tertiary education universities is largely attributed to an increase in the number of public tertiary institutions from four in 1982 to the current eight. The level of funding at tertiary education level does not reflect the aspirations of the second National Development Plan (NDPII). The NDPII demands that higher education funding through government should

**Table 1. Key Labour Market Indicators of Working Population (14-64 years) by sex and residence in Uganda**

Selected Labour Market Indicators	Male	Female	Rural	Urban	Total
UNHS 2016/17					
Working age population ('000)	8,965	10,139	13,803	5,301	19,104
Working population ('000)	7,397	7,656	11,395	3,658	15,053
% of working population	49.1	50.9	75.7	24.3	100
Subsistence agriculture ('000)	2,310	3,604	5,373	541	5,915
Percentage working in subsistence agriculture only	31.2	47.1	47.2	14.8	39.3
UNHS 2012/13					
Working age population ('000)	7,850	8,652	12,289	4,213	16,502
Working population ('000)	6,827	7,069	10,732	3,164	13,896
% of working population	49.1	50.9	77.2	22.8	100
Subsistence agriculture ('000)	2,517	3,493	5,345	664	6,009
Percentage working in subsistence agriculture only	36.9	49.4	49.8	21	43.2

Source: UBOS, UNHS 2012/13 and 2016/17; UNHS= Uganda National House Survey

be at least 1% of GDP, but the current funding level has stagnated at 0.3%. Further, the then envisaged revenue from the privatisation of higher education did not improve the balance sheet of most of the tertiary institutions. According to the Uganda budget monitoring and accountability unit under the Ministry of Finance, Planning and Economic Development, on average all public universities receive less than 50% of their budgeted capital development fund.

### Higher education output

The data on the number of graduate exit the higher education system for selected years are shown in Table 2. The data indicates there is disproportionate lack of skilled human capital to fully service the sector. Between the period 2004 -2011 less than 2% of all graduates enrolled in tertiary institutions in the country pursued agriculture as a discipline. (see Table 2). This percentage has remained the same despite an increase in tertiary education

enrolment and the expansion of post-secondary education system to cater for a large number of students that are annually qualifying to join tertiary institutions. This lack of adequate human capital makes all attempts by the public sector to implement policies supporting rural economic and institutional transformation processes led by local rural actors themselves to be ineffective, as the key actors do not have the prerequisite knowledge and skills to harness the dividends of technology and innovation in the sector (Ambrosio-Albalá and Bastiaensen, 2010). Higher education plays a crucial role as part of the triple helix model for innovation. Therefore, the future of productivity growth in the agriculture sector is dependent on abilities to maximise productivity gains, anchored on innovation and technical capacities of the citizens. The underpinning factor is the vital role agricultural graduates play as innovators to stimulate improvements and unlock the untapped potential in the respective value chains (OECD, 2016; Asadullah and Ilah, 2018).

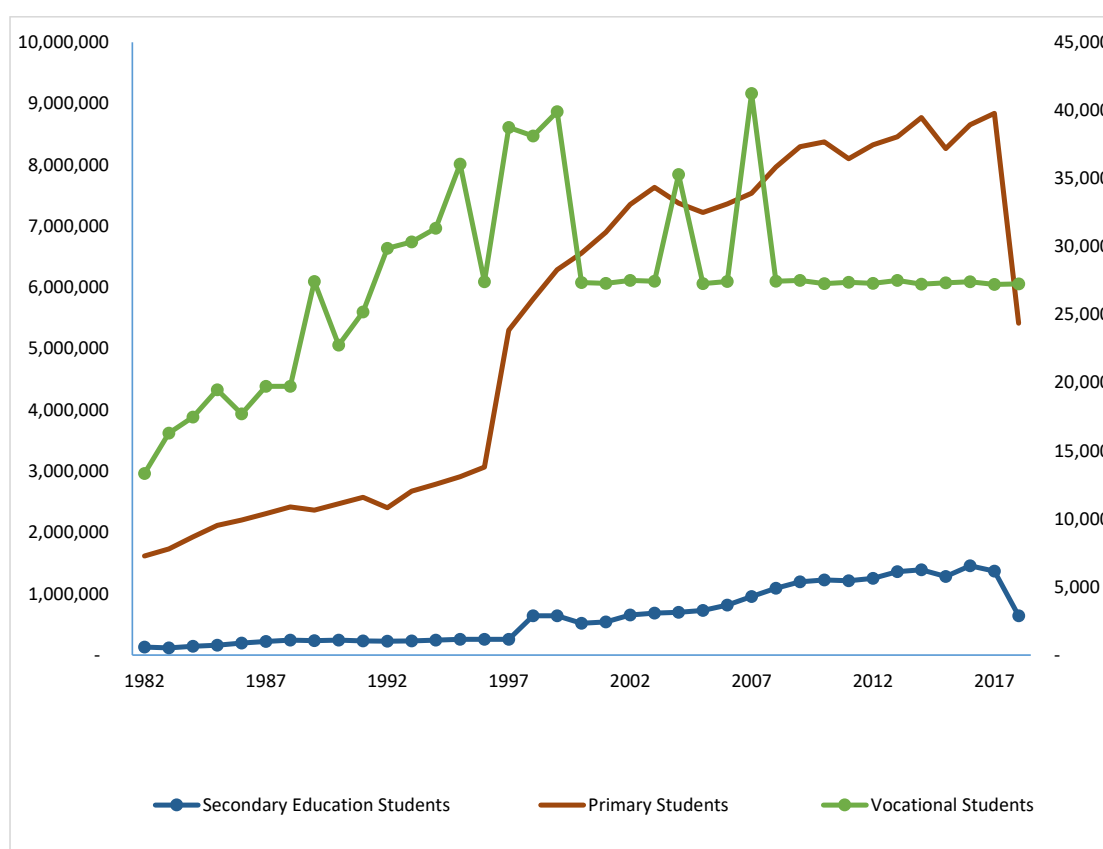
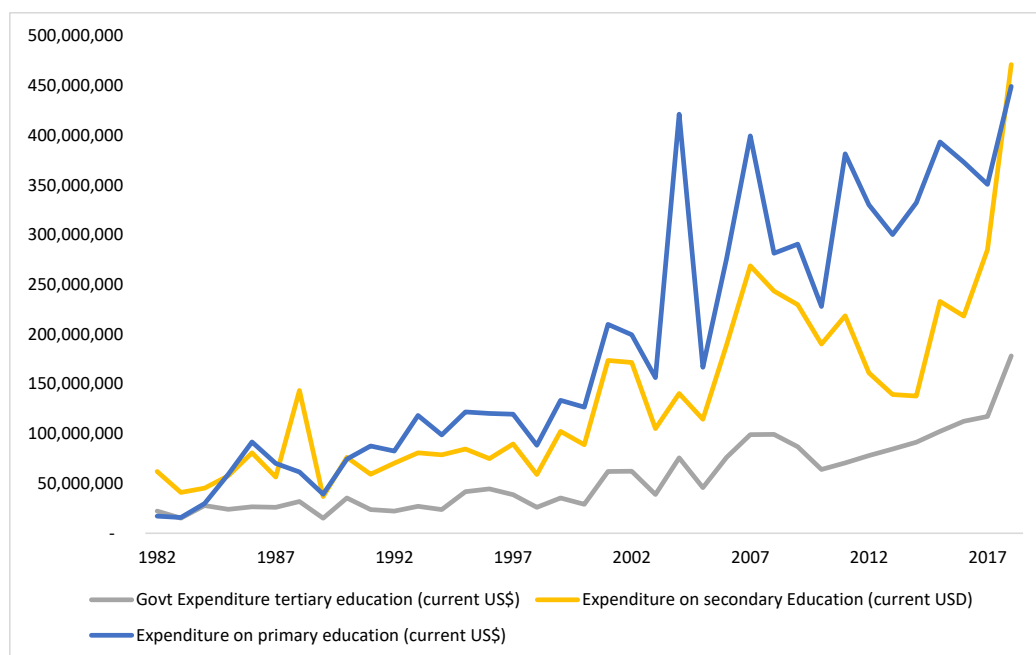


Figure 1. School enrolment between 1982-2018



**Figure 2. Public Expenditure in primary Secondary and tertiary Education, 1982-2018**

**Table 2. Number of graduates disaggregated by discipline**

Institution	2010	2010	2005	2005	2011
	Arts/Hum.	Science/Tech	Arts/Hum.	Science/Tech	Science/Tech
Universities and University Colleges	84658	45584	73204	19401	140,087
Technical Colleges	0	2941	0	1980	3250
Teachers Colleges	5542	2375	7757	3240	7842
Commerce/Business	14060	8617	11347	6834	348
Management/Social Development	5173	106	3841	315	5472
Health	0	6274	0	3132	7488
Agriculture/Fisheries/Forestry	0	1293	0	1651	1625
Theology	1580	0	1098	0	1597
Art and Design	175	20	0	0%	195
Media	729	891	472	1004	1620
Hotel and Tourism	23	203	0	143	226
Study Centres	639	0	604	0	640
Survey and Land Management	0	30	0		30
Law Development	800	0	800	0	
Aviation	0	147	0		147
Meteorology	0	39	0	39	39
Petroleum	0	0	0	0	
Cooperatives	443	23	328	0	348
Research Centres	0	0	0	0	

Data source: Uganda National Council of Higher Education (NCHE). Reconstructed by the author

**Table 3. Number of Bachelor graduates in agriculture and related courses from Makerere University for the period 2004-2018**

	Academic year														
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Academic Program															
BSc. Agribusiness Management	74	47	52	68	70	57	64	71	72	85	12	45	36	45	18
BSc. Agriculture and Rural Development	86	47	39	56	51	41	40								
BSc. Agricultural Engineering	17	23	25	18	27	19	16	25	15	21	17	7	9	18	8
BSc. Agricultural Land Use and Management	37	22	15	19	30	34	39	49	44	58	7	22	21	34	21
BSc. Agriculture	54	50	35	57	61	47	47	95	64	99	25	49	78	70	82
BSc. Animal Product Technology	28	21	17	6	13	21	27	12	16	10	2	15	13	20	
BSc. Development Economics	164	182	172	229	206	229	185	227	235	126	4	16	0	0	22
BSc. Development Studies	377	399	410	340	272	183	211	205	263	310	204	85	283	613	18
Total	837	791	765	793	730	631	629	684	709	709	271	239	440	800	169

Data obtained from the Directorate of Quality assurance Makerere University

As such, there is growing emphasis to invest in human capital development through training and research to generate technologies and innovations that will increase agricultural productivity to help solve some of world food crisis and natural resources degradation (World Economic Forum, 2015). There are indications that this is indeed a viable public investment option. (see Olowa and Olowa, 2014; Mogues *et al.*, 2015). This is the human capital stock that should be harnessed to cause desirable changes in the agricultural sector (Fox, 2015; Ragasa, 2016).

Thus, if human capital development is to be considered an investment option, the spillover should be felt in Uganda's agriculture sector, which still relies on low technology, limited diversification, employing low-quality labour. Chen and Dahlman, (2004) postulates four pillars through which education can be exploited in a productive way to achieve a fully functioning knowledge economy ecosystem. These are (a) an economic and institutional regime to provide incentives for the efficient use of existing and new knowledge and the flourishing of entrepreneurship; (b) an educated and skilled population to create, share, and use knowledge well; (c) a dynamic information infrastructure to facilitate the effective communication, dissemination, and processing of information; and (d) an efficient innovation system of firms, research centres, universities, consultants, and other organizations to tap into the growing stock of global knowledge, assimilate and adapt it to local needs, and create new technology. Therefore, both human capital and knowledge systems are critical in improving the productivity of agri-food systems while ensuring environmental sustainability (Zheng and Jun, 2013).

#### **Uganda's Higher education output**

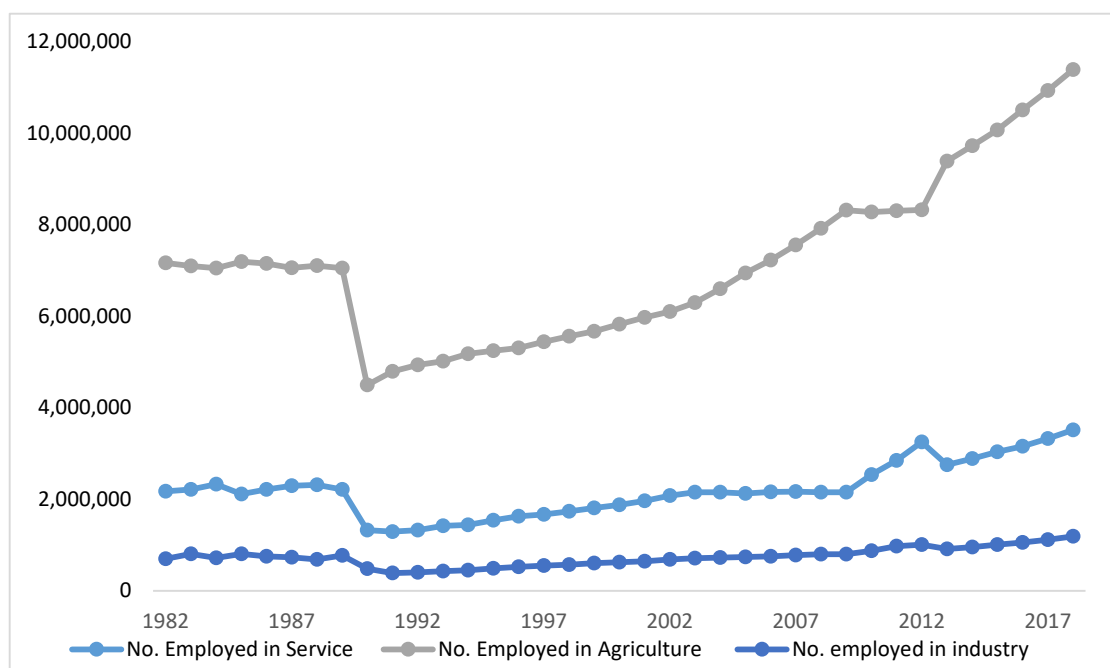
Uganda's economic development cannot be separated from the agriculture sector. The fertile agricultural land has the potential to feed 200 million people if the sector is fully exploited. The country has 80% of the land which is arable but only 35% is being cultivated majorly using subsistence suboptimal methods (Dietrich *et al.*, 2014). According to Uganda's Agriculture Sector Strategic Plan, the growth in the sector has been slow compared to the annual GDP growth rate. For instance, in 2010 growth in the sector declined from 2.6% to -0.2% in 2012, before eventually recovering to 3.6% in 2013 and 2.9% in 2014. The growth in the agriculture sector contrasts sharply with the annual GDP growth rate of 5.2% over the same period. The sector contributes close to half of all exports earnings, and about one-quarter of gross domestic product (GDP), the agri-food system remains largely untapped yet the demand for

agriculture commodities is on the increase as a result of urbanisation and changing dietary preferences that come with improvement in income and the associated lifestyle. According to the World Bank estimate, during the year 2050, Uganda will have a population of 102 Million people which is a huge market that will provide massive opportunities for the country's agriculture sector and wider agri-food system. Recent estimates argue that the value add of agriculture to GDP will increase if investments are in made higher-end value chain activities that include manufacturing and food processing (OECD, 2016).

The agriculture sector is of particular interest in growth analysis. The reasons are relevant both for practical relevance and theoretical arguments as permanent increases in agricultural output are of macroeconomic relevance (Bahigwa *et al.*, 2005; Diao *et al.*, 2010). In Uganda, the agriculture sector employs close to 70% of the population and growth in the sector is key to poverty reduction. The share of employment has consistently remained at close to 70% mark for the over the past two decades despite the doubling of the total force during the same period. This employment rate distribution across sectors has been stagnant for the entire

period of post-independence Uganda that is coming close to 60 years. The remaining 30% of the employed population is split between the service and industry sectors at 25% and 5%, respectively (Figure 1). The share of employment has consistently remained at close to 70% mark for the over the past two decades despite the doubling of the total force during the same period. This employment rate distribution across sectors has been stagnant for the entire period of post-independence Uganda that is coming close to 60 years. The remaining 30% of the employed population is split between the service and industry sectors at 25% and 5%, respectively (Figure 3).

Therefore, growth in the agricultural sector is key to poverty reduction and there is no doubt this growth can be stimulated from innovations emanating from the country's agricultural training and research innovation system. Based on the above, it can as well be argued that under-investment in higher education by many governments thus has been constraining development through lack of innovation and technological advancement contributing to increased youth unemployment, inequality and limiting inclusive economic growth (Mogues *et al.*, 2012).



**Figure 3. Number of employed in Uganda by economic Sector 1982-2018**



### **Education and Agriculture Sector growth pathways**

Whereas Gashu *et al.* (2019) argue that failures in agricultural policies, weak institutions, and poor governance are the root cause of growth stagnation of agriculture in Africa, there is a need for significant investment in creative innovation. A vibrant agriculture innovation system emerges from conscious integration of multi-disciplinary approaches to gain full understanding of the rural development challenge in low to middle-income countries. For instance, advances in the study of mind, neurological sciences, brain and cognition have significantly contributed to a better understanding and orientation of the teaching-learning process and a more effective organization of educational activities. Similarly, economists, sociologists and political scientists, too, have contributed substantially to the issues related to prioritizing investments and maximizing outputs of the system (Varghese, 2009). There are three major pathways to which higher education impacts on development, namely, that of teaching, research and innovation. The notion of teaching empowers individual learners to gain capabilities to be more innovative and productive and directly earn more. Despite the growing massification and differentiation of agriculture higher education as a factor of human capital development, Uganda's agricultural sector has dismally grown at a rate of 2% which is comparable to 1.8% growth rate across the sub-Sahara Africa and yet the sector accounts for over 70% of the labour force in agriculture (Diao *et al.*, 2010). It is argued that improvements in the stock of human capital will result in the generation of new technologies, innovations and new knowledge to unlock the current bottlenecks in value chains and would significantly increase agricultural productivity. Despite the concerted effort by the public to invest in the education as part of human capital development, the education pipeline is a very tightly funneled pyramid with less than 2% of the annual total multi-level school enrolment accessing tertiary education (see Figure 2). Of

these, on average less 20% complete secondary with over 75% not going beyond the primary level. According to the World Bank gross school enrolment at secondary level was reported at 23.24 % in 2015.

Bloom *et al.* (2014) argue that physical capital fails to flow in poor countries because of relatively poor endowments in complementary human capital, and factor accumulation. In the long-term, increases in agricultural productivity in the developed countries have been attributed to advances in knowledge and technology derivatives of human capital (Kassie *et al.*, 2011; Li *et al.*, 2013). Therefore, the extent to which the existing agricultural knowledge systems and human capital contribute to agricultural development need to been extensively studied. This argument has advanced by various authors, for instance, in China (Liu and Jiang, 2001), European regions (Sterlacchini, 2008) and Latin America (Torres and Schugurensky, 2002).

### **Uganda Human Development Complexities**

Uganda is experiencing rapid population growth and there are concerns of the dilution effect of population growth and unemployment rate on returns to human capital development especially as being experienced in most of sub-Saharan Africa ( Adil *et al.*, 2014; Bucci *et al.*, 2018). Further, long-run growth as a result of human capital accumulation is dependent on the efficiency with which resources available are deployed and utilised within the various sectors of the economy (Opeyemi *et al.*, 2017). Marginson (2017) perhaps provides the most controversial narrative that human capital theory fails the test of realism, due to weaknesses of method: use of a single theoretical lens and closed system modelling, inappropriate application of mathematical tools, and multi-variate analysis of interdependent variables that imposes a single linear pathway on the complex passage between heterogeneous education and work.

Uganda's education sector has been overly

criticised for compounding the problem of unemployment, with antiquated curricular that churns out not fit-for market graduates. Because of this realisation, there is emerging interest and attention to Vocational training. This education subsector is witnessing increasing public allocation of resources ostensibly to avert the current youth unemployment, which burden is afflicting the majority of countries in sub-Saharan Africa with potentially catastrophic outcomes for sitting regimes. As a result, the Government of Uganda developed the Business, Technical and Vocational Education and Training (BTJET) Strategic Plan 2011 – 2020 with a paradigm shift for skills development in Uganda. The strategy is embedded in the overall education policy framework and underpinned by the Government white paper (GWE, 1992) on education as well as the insufficient skills to propel the informal sector especially the non-farm informal sector. The non-farm informal sector, comprises mainly micro-enterprises, own-account workers and unpaid family workers, and has declined in recent years, but still accounts for 18% of total employment, and 58% of the non-agricultural employment. Hanushek and Woessmann (2016), observes that there are significant gains that accrue from providing universal basic skills. Returns to such investment is projected to be six times those of just providing universal access to schools. Datzberger (2020) in his quest for why education is not helping the poor in Uganda, observed that assimilative approaches as outlined in the policy implementation strategies of (a) increased access to education and retention; (b) improved quality of education; and (c) employment generation through education, had little impact on the political, economic and social structures that are the underlying causes of poverty.

## **CONCLUSION AND POLICY RECOMMENDATIONS**

Based on enrolment data at tertiary education level, the study recognises that there is still a challenge of attracting students to study

agriculture as a discipline. As a result, the sector has a deficit of critical mass of skilled and appropriate human capital to apply skills technology and innovation to unlock the critical value chains. Therefore, for the country to fully reap human capital dividends for the benefit of the agriculture sector, it will require a multifaceted approach with a sustained public investment, institutional reforms and policy implementation devoid of ambiguous and narrow-minded interventions such as the civil-military operation, the so-called operation wealth creation.

The current public finance model should take into account the returns to the investment approach and not merely look at as provision of social services. The fact that education improves people lives coupled with the increasing role of the service and industry sector economic output, this should be a rationale for investing in education to build a stock of sector-specific demanded skills that can be attained through individuals attaining formal education. Uganda like all countries, uses the cash-based national budget as a planning tool for public expenditure showing projected overall resource envelope for the medium and overall priority interventions including investment in the education sector. However, the cash-based budgeting system undermines the efforts to improve macroeconomic performance and commitment to budget discipline amidst competing for short term political gains versus long-term development goals. The protracted process of human capital development involves learning in a structured environment, which is only attainable in a formal education system. The emerging knowledge-based competition within a globalizing economy is indeed prompting a fresh consideration of the role of education in development and growth.

A country's human capital development success is dependent on policy and public investment choices underpinned by the demographic structure of its population. Uganda's age structure is a paradox of its own. Census data

indicates that close to 63% of the total population is below the age of 24 years and 50% below the age of 15 years. This young population demands purposive skilling and knowledge formation to enable them to find meaningful and inclusive engagement in the economy to circumvent potential unrest that is often a manifestation of exclusion of young and ambitious segment of the population from economic activity. Based on these demographic statistics, the country is characterised as “young”. Conventional wisdom dictates that countries with young populations with a significant proportion of the population under the age of 15 years, as for the case of Uganda, need to invest more in human capital development. In fact, for Uganda, developing human capital is critical if the country is to achieve the aspirations of vision 2040 “A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years”. It will be a futile attempt to realise this vision without according high priority to human capital development.

#### ACKNOWLEDGEMENT

Our appreciation goes to the Regional Universities’ Forum for Capacity Building in Agriculture for sponsoring this study.

#### STATEMENT OF NO-CONFLICT ON INTEREST

The authors declare that there is no conflict of interest in this paper.

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