

## Uganda's Agricultural Sector at Crossroads: Is it a myth or a reality?

### Executive Statement

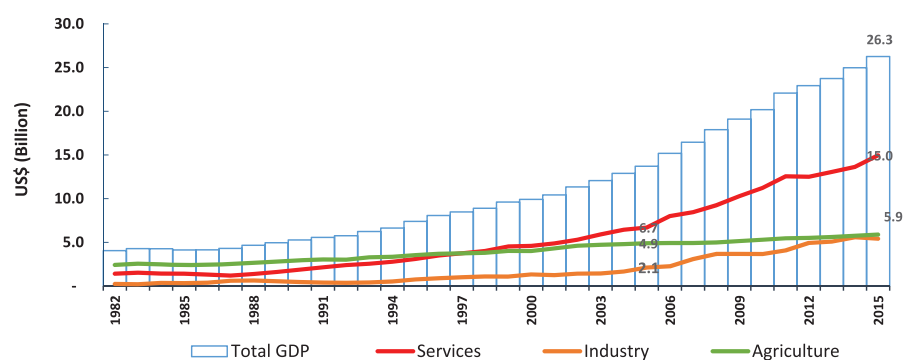
Uganda's agricultural growth has stagnated at about 2 percent for almost two decades yet the sector employs about 70% of the working population and contributes 40 percent of export earnings. On the other hand, Uganda's population growth rate remains very high, above 3 percent per annum, signaling the likelihood of food insecurity and increase in poverty incidence. It is thus clear that the current state of agriculture cannot support the country's target of attaining the lower-middle income status by 2020. A number of policies, programs and interventions have been implemented with no success in transforming the sector. These include: Structural Adjustment Programmes, Economic Recovery Program, Poverty Action Eradication Plan, and Plan for Modernization of Agriculture, among others. Indeed, the sector is at crossroads because while it is clear of what needs to be done to transform the sector, the current institutional set up seems weak and uncoordinated to effectively implement the required transformative interventions. Approaches that enhance institutional coordination, promote agricultural research and strengthen extension service provision would aid in revamping agricultural performance.

### Introduction

Agriculture is a vital sector of Uganda's economy as source of employment for 70 percent of the population. The sector also contributes 24 percent to the country's Gross Domestic Product (GDP) and 40 percent to export earnings and is essential for ensuring sustainable food security. The sector remains the most critical for Uganda to attain inclusive wealth creation and employment, and to achieve the 2040 Vision of "Transforming Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years". While Uganda's GDP per capita is US\$ 788 at the present, the country aspires to attain low middle income status by 2020, with a GDP per capita of US\$ 1,033 which requires an annual growth of 6.3 percent.<sup>1</sup> By 2040, Uganda aspires to attain a GDP per capita of US\$ 9,500, which requires the country to grow at 8.2 percent per annum during 2013-2040. To achieve this ambitious vision, the government of Uganda has since the 2010 implemented various policies and programmes targeting agriculture. However, the sector

has performed poorly compared with other sectors. For example, in the last 10 years (2005–2015), agriculture expanded by only US\$ 1 billion against US\$ 3.8 and US\$ 8.3 billion for the industry and services sectors, respectively (see Figure 1).

Figure 1: Trends in GDP (Billion US\$) by Sector, 1982-2015



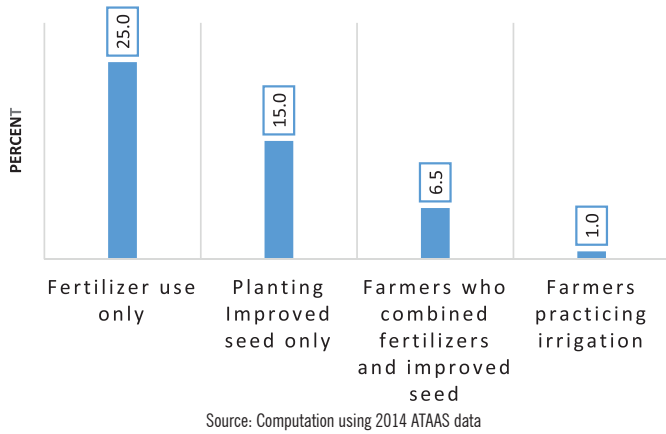
Source: UBoS Statistical Abstract (2016)

There exists a number of impediments that have constrained the transformation of the agriculture sector in Uganda. These include;

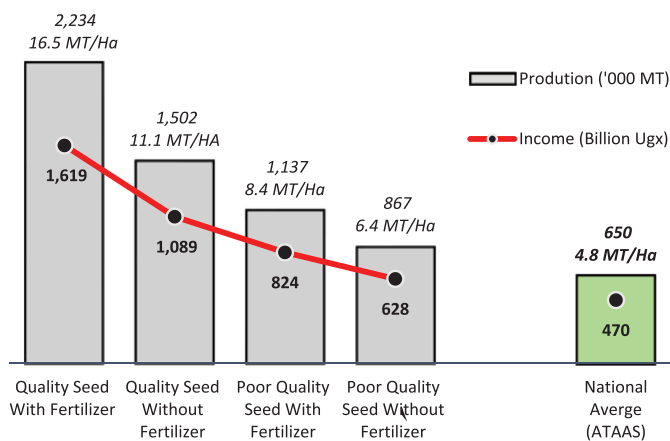
**A. Limited Technology Use**

Despite government’s efforts to scale up input distribution to smallholder farmers through the Operation Wealth Creation (OWC), huge gaps still exist in the adoption of improved agricultural technologies by farmers. According to the UBOS survey 2014 (Figure 2), only 6.5 percent of farmers in Uganda used both fertilizer and improved seed while only one percent practiced irrigation. The low technology uptake and use of a single input rather than the package, affects yields and hence revenue to farmers. Indeed, Mbowa and Mwesigye (2015) reported that potato farmers in Uganda would achieve an output of 16.5 MT/Ha worth UGX 1,619 Billion if they applied a full package of quality seed and fertilizers (Figure 3).

**Figure 2: Percentage of Farmers Applying A Production Technique**



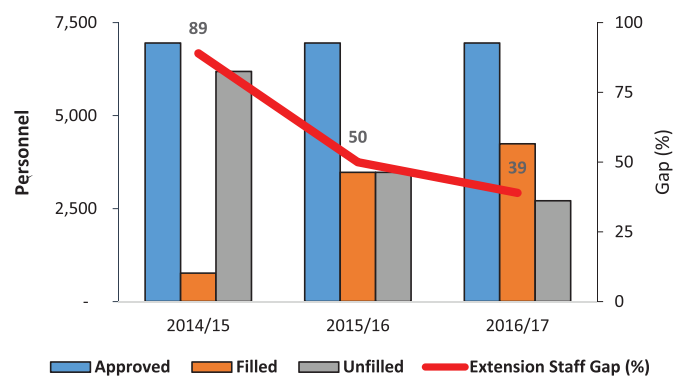
**Figure 3: Indicative National Irish Potato Productivity and Income without and with intensification**



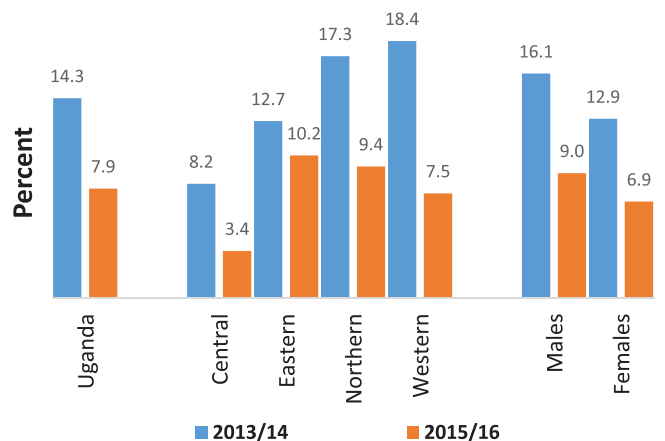
**B. Institutional challenges that impede effective extension delivery**

Uganda’s agriculture sector still grapples with low levels of technology promotion and dissemination. The strides made by NARO in generating new technologies are thwarted by the weak research-extension-farmer nexus. There exists a gap between the approved and filled positions for extension staff (Figure 4). Indeed, the share of farmers with access to public extension services continues to decline at both national and regional levels albeit the restructuring of the extension system into single spine (Figure 5).<sup>2</sup> The observed decline in access to public extension services could have emanated from policy volatility which restructured NAADS and shifted its mandate to procurement of agricultural inputs and returned coordination of extension service delivery to the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).

**Figure 4: Approved, Filled and Extension Staff Gap (2014/15-2016/17)**



**Figure 5: Share (%) of farmers with Access to Public Extension Services**

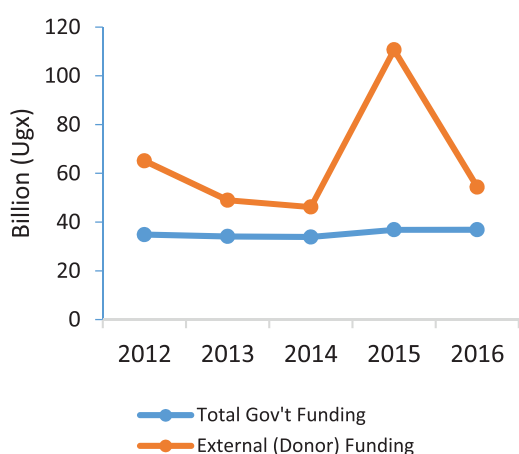


Source: Adopted from EPRC (2017). Strategic Review of SDG 2 in Uganda report

### C. Challenges with Closing the Gap between Research and Policy

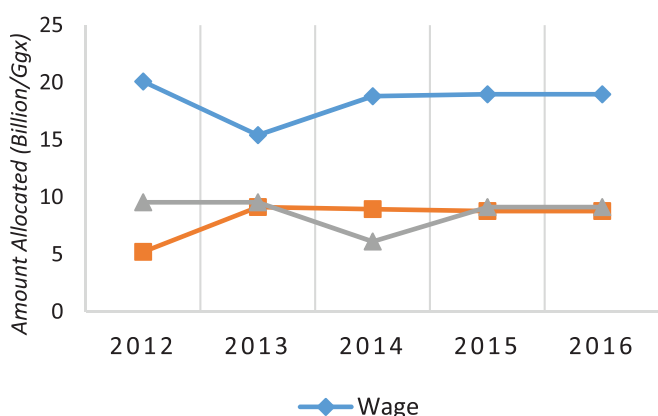
Uganda ranks high in regards to agricultural research spending in Africa. However, much of the funding comes from external sources (donors) (Figure 6) whose research interests may differ from the national research priorities. Additionally, the little funding from government is used to pay for wages, leaving very little funds for research activities (Figure 7). The country's dependence on donor funds is unsustainable and undermines both the effectiveness of research outputs in impacting on society and performance of the national agricultural research system (CSBAG, 2014).

Figure 6: Sources of NARO funding



Source: Authors computation using the background to the budget figures (2012-2016)

Figure 7: Allocation of Government Funding to NARO (2012-2016)



Source: Authors computation using the background to the budget figures (2012-2016)

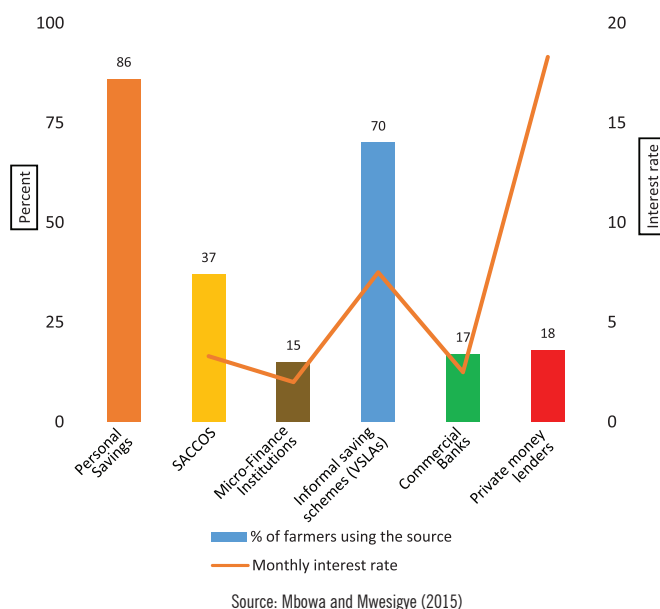
### D. Institutional constraints limiting the supply of quality production inputs

Additionally, farmers have not fully benefited from agricultural research because of the existence of unscrupulous agro-input dealers on the market especially for fertilizer and seed. Indeed, a study by Bold *et al.*, (2015) found that hybrid maize seed on the Ugandan market contains less than 50% authentic seeds while 30 percent of nutrient is missing in fertilizer.<sup>3</sup> These results are similar to that of Mbowa *et al.*, (2015) which reported that fertilizers on the Ugandan market contained less than the acceptable moisture content limits of 0.5 -1.5 percent.<sup>4</sup> The existence of poor quality inputs impedes technology adoption.

### E. Inadequate Agricultural Financing

Despite government's effort to provide agricultural finance through the Agricultural Credit Facility (ACF), majority of smallholder farmers still grapple with access to loans for agricultural production. Indeed, a study of potato farmers in south western Uganda revealed that 86 percent of farmers relied on personal finance while 70 percent sourced their agricultural credit from informal savings schemes (Figure 8).<sup>5</sup> A paltry 17 percent accessed finance from commercial banks while 18 percent obtained financing from private money lenders whose monthly interests are as high as 19 percent per month.

Figure 8: Sources of finance for potato production and interest rates



Source: Mbowa and Mwesigye (2015)

**Recent Policy Briefs**

"Education, Marriage, Fertility and Work Choices of Young Women in Uganda"  
No. 94 July 2017  
Gemma Ahaibw

"Facilitating financial inclusion through promoting the use of mobile money as a saving avenue"  
No.93 July 2017  
Annet Adong & Musa Mayanja

"Healthcare coverage and equity – Towards Universal Health Care in Uganda"  
No. 92 June 2017  
Tonny Odokonyero & Francis Mwesigye

**About the Author**

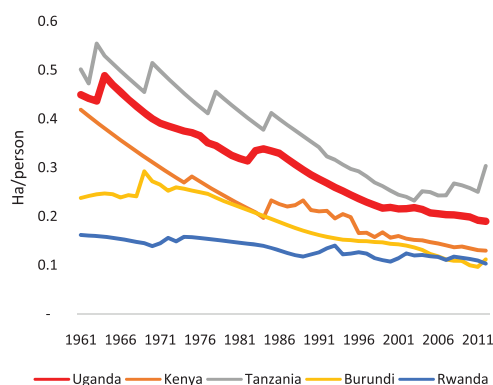
**Francis Mwesigye** is a Research Fellow at the Economic Policy Research Centre, Kampala, Uganda.

**Brian Sserunjogi** is a Research Fellow at the Economic Policy Research Centre, Kampala, Uganda.

**Swaibu Mbowe** is a Senior Research Fellow at the Economic Policy Research Centre, Kampala, Uganda.

**F. Land Conflicts and degradation**

Despite the fact that land is a critical factor in stimulating investment in the agricultural sector, issues of tenure insecurity, and land fragmentation are worsening in Uganda. Indeed evidence shows that the high incidence of land conflicts in Uganda is affecting productivity (Mwesigye and Matsumoto, 2016).<sup>6</sup> Uganda has also registered a persistent decline in arable land due (Figure 9) to rapid household formation, high population growth, elite capture and inadequate planning between land for agriculture, urbanization and human settlement.

**Figure 9: Trends in Arable Land per Person**

Source: Authors' computation from the World Development Indicators database

**Conclusions and Policy Actions Recommendation**

This brief highlights the status of agricultural sector and the major institutional factors impeding its transformation through increased production and productivity. We recommend the following policy actions to facilitate transformation of the sector.

- A leaf should be borrowed from the village agent model, and success stories of private sector driven coffee extensions models such as NUCAFE to draw lessons on addressing the challenge of weak public extension.
- Step up government funding for research and development to NARO to build capacity for required quality seeds.
- MAAIF's Crop Protection Department needs to be empowered to curb the challenge of fake agro-inputs on the market and to ensure seed and fertilizer policy are implemented.
- Scale up recruitment and facilitation of extension staff at all government level to facilitate effective technology dissemination and uptake.

**Endnotes**

- Uganda Vision 2040
- Adopted from EPRC (2017). Strategic Review of SDG 2 in Uganda report.
- Bold, T., Kaizzi, K. C., Svensson, J., & Yanagizawa-Drott, D. (2015). Low Quality, Low Returns, Low Adoption: Evidence from the Market for Fertilizer and Hybrid Seed in Uganda. International Growth Centre. Working paper.
- Mbowe, S., Luswata, K. C., & Bulegeya, K. (2015). Are Ugandan Farmers Using the Right Quality Inorganic Fertilizers? Economic Policy Research Centre. Policy Brief, Issue no. 56.

- Mbowe, S and F. Mwesigye ((2016). "Investment Opportunities and Challenges in the Irish Potato Value Chain Uganda". EPRC Research Report No 14.
- Mwesigye, F and T. Matsumoto (2016) "The Effect of Population Pressure and Internal Migration on Land Conflicts: Implications for Agricultural Productivity in Uganda" World Development Vol 79: No.1: 25-39.

The views expressed in this publication are those of the authors and do not necessarily represent the views of the Economic Policy Research Centre (EPRC) or its management.

Copyright © 2017

Economic Policy Research Centre

The Economic Policy Research Centre (EPRC) is an autonomous not-for-profit organization established in 1993 with a mission to foster sustainable growth and development in Uganda through advancement of research –based knowledge and policy analysis.

Learn more at:

[www.eprcug.org](http://www.eprcug.org)

TWITTER: @EPRC\_official

[www.facebook.com/EPRCUGanda](https://www.facebook.com/EPRCUGanda)

[eprcug.org/blog](http://eprcug.org/blog)

Address:

Economic Policy Research Centre  
51, Pool Road, Makerere University Campus,  
P. O. Box 7841 Kampala, Uganda  
Tel: +256414541023/4 Fax: +256414541022  
Email: [eprc@eprcug.org](mailto:eprc@eprcug.org), Website: [www.eprc.or.ug](http://www.eprc.or.ug)