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## Beyond input distribution: Requirements for agricultural transformation in Uganda

### Executive Summary

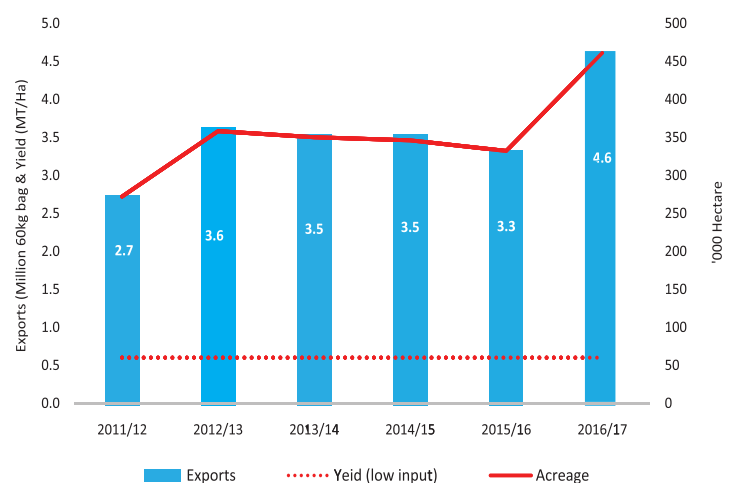
Government has responded positively to the need to increase production and productivity of priority agricultural commodities by committing more public funds for distribution of planting materials. Results are already observable for coffee. However, some major inconsistencies have emerged that could slow the effectiveness of the planting programme. These include; (a) large and significant shifts of public financing from technology generation to input distribution (b) mismatch between quantity of planting materials distributed and what is required, and (c) unreliable extension support system. Consequently, there is a need to refocus the input distribution programme to include the following: prioritizing and increasing public funding to research and development; increasing the per household volume of planting materials distributed by Operation Wealth Creation; and facilitation of extension staff to effectively deliver extension services.

### Introduction

In a bid to accelerate the agricultural transformation in Uganda, a number of strategies have been implemented to increase production and productivity of priority crops. Key among the strategies was commitment of public resources for input distribution especially planting materials, spearheaded by National Agricultural Advisory Service (NAADS) and Operation Wealth Creation (OWC). In the short term, the programme has yielded some dividends for coffee. Figure 1 shows a recent surge in the volume of coffee exports—from 3.3 million 60kg bags in 2015/16 to 4.6 million bags in 2016/17 (worth \$544 million),<sup>1</sup> which could largely be attributed to expansion in area under coffee. However, over the same period, we observe key inconsistencies which are likely to slow down the transformative agenda. This policy brief highlights the key policy inconsistencies associated with; (a) skewed public financing to input distribution; (b) mismatch in quantity of planting materials distributed, and (c) unreliable extension services. This will enable strengthening of the program by

redirecting public finance towards technology development as well as quantity of planting materials to be distributed

**Figure 1: Uganda Coffee Export Performance (2011/12-2016/17)**



Source: UCDA Annual reports (2011/12-2016/17)

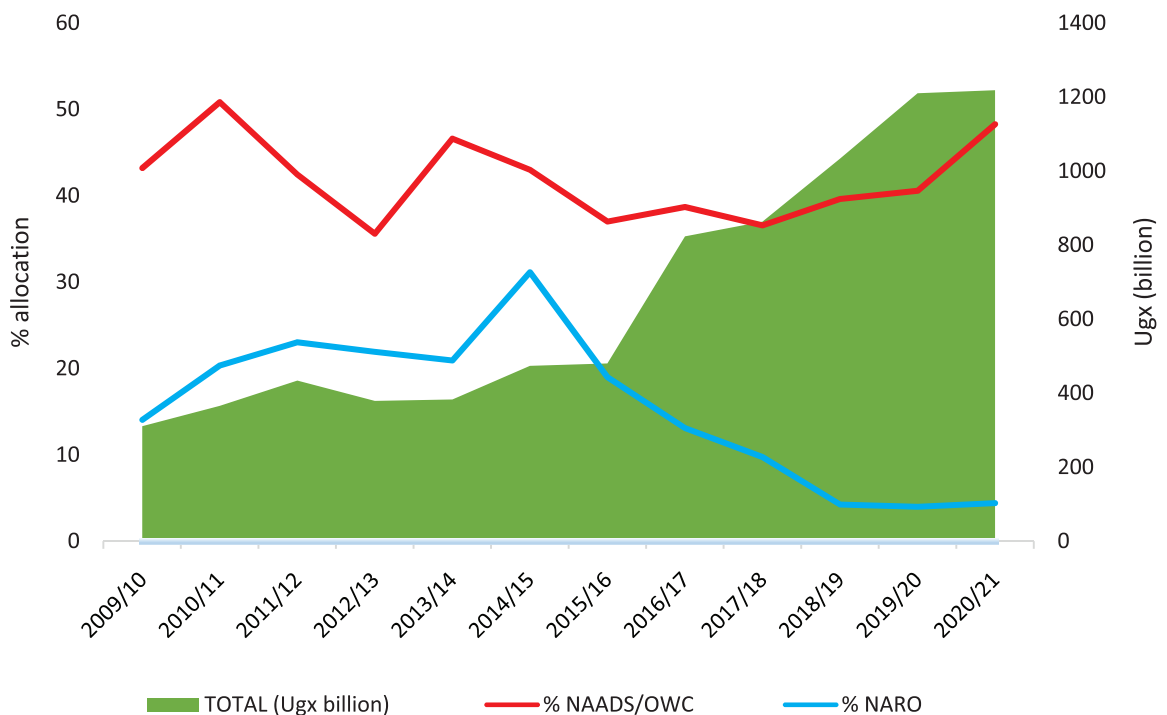
### Skewed public financing on input distribution and less on technology generation

Over the period, there has been an increase in government budget allocation to agriculture (Figure 2). However, within the same budget, there was relatively more stable allocation to NAADS/OWC as compared to research and development. Public financing to technology generation through the National Agricultural Research Organization (NARO) has been declining. Projections indicate that public financing for NARO are likely to decline further to 4 percent by 2020/21. The reductions in budget allocation to research is likely to curtail the role of NARO in development of improved seeds, breeds and stocking materials. The under resourcing of NARO may also constrain the input distribution programme by NAADS/OWC in the long run, given that many planting materials distributed depend on the quality and the timeliness of research and development.

### Mismatch between planting materials distributed and recommended seed rate

Although budget allocations have emphasized input distribution, there is a mismatch between the quantity of planting materials distributed and what is actually required (Table 1). According to Agricultural Technology and Agribusiness Advisory Services (ATAAS) study commissioned by NAADS in 2014, an average farmer cultivates 1 acre of maize which calls for a seed requirement of 10 kg. However, under the OWC distribution programme, each household received only 2.5Kgs of maize to plant during the two cropping seasons of 2015/16. As for cassava, an average farmer would need 7-10 bags of cassava cuttings to plant on an acre. Yet, they received only 0.2 bags of cuttings during the study period. The programme needs to bench mark the required planting materials to achieve the required target in production by 2020.

Figure 2: Medium Term Expenditure on the Agricultural Sector and Budget Projections (2009/10 – 2020/21)



Source: MoFPED: Background to the budget (FY 2009/10 -2017/18)

**Table 1: Planting materials distributed under OWC versus the recommended seed rate**

Crop	Quantity distributed <sup>a</sup>	Target households <sup>a</sup>	Land allocated to crops per season (acres) <sup>b</sup>	Amount received per household <sup>a</sup>	Recommended amount per acre (seed rate) <sup>c</sup>
Maize Seed	2,771 Mt	1,108,324	1.00	2.5 kg	10kg
Bean Seed	2,234 Mt	224,448	0.84	10.0 kg	30-35kg
Soya Bean Seed	164 Mt	16,422	0.77	10.0 kg	35-40kg
Rice Seed	12 Mt	960	1.01	12.5kg	15-20kg
Cassava Cuttings	76,672 Bags	438,130	0.94	0.2 bags	7-10bags
Banana	291,111 Suckers	12,946	0.89	22.5 suckers	500-600 suckers

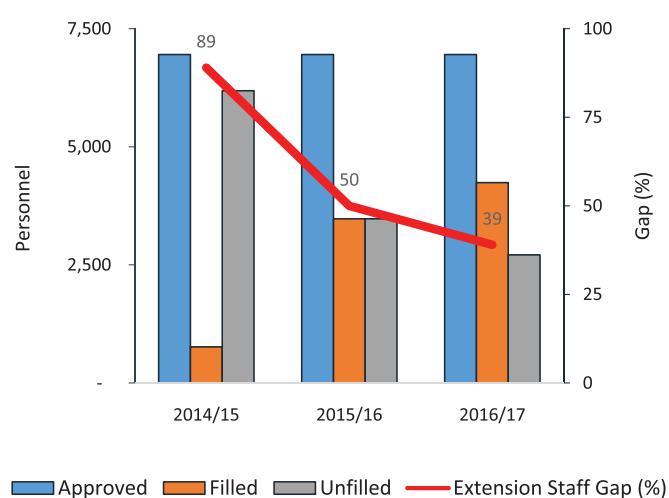
Source: <sup>a</sup> MoFPED: Background to the budget FY 2016/17; <sup>b</sup> ATAAS 2014 data; <sup>c</sup> National Crops Resources Research Institute<sup>2</sup>

### Unreliable extension system to support input distribution

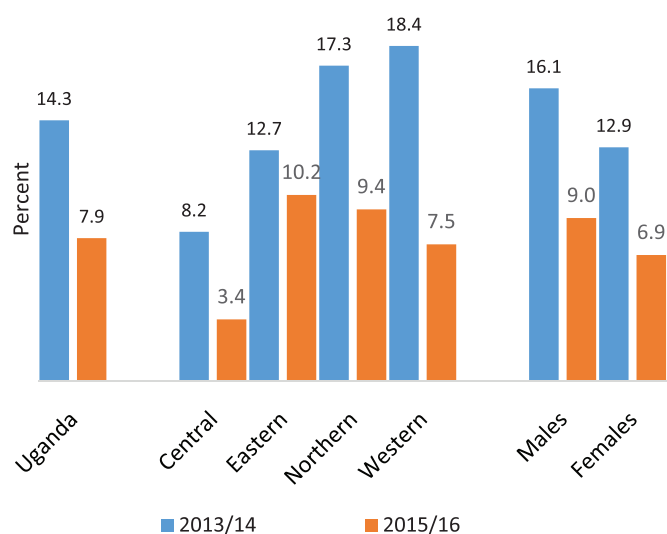
While the distributed planting materials should find farmers who are well equipped with required extension advice given the increasing trend in recruitment of extension staff (figure 3), results (Figure 4) shows the proportion of farmers with access to public extension have declined at both national and regional levels. Before restructuring of NAADs (2013/14), 14 percent of farmers accessed public extension, but following the recruitment of extension workers under the single spine system

(2015/16) to nearly 50 percent of the approved positions (figure 3), the situation worsened with only 8 percent of the farmers accessing public extensions services. This could have resulted from recruitment of extension staff without thorough consideration of their facilitation to carry out their duties. In addition, while majority of farmers (82 percent)<sup>3</sup> are women, only 7 percent female as compared to male (9 percent) have access to extension services. Thus, access to public extension remains limited which implications on proper utilization of the distributed planting materials.

**Figure 3: Approved, Filled and Extension Staff Gap (2014/15-2016/17)**



**Figure 4: Farmers with access to public extension**



Source: Adopted from Towards Zero Hunger: A strategic Review SDG2 in Uganda (2017)

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### Conclusion and policy recommendations

There are various inconsistencies along the technology pathway that are likely to undermine the agricultural transformative agenda. These are largely related to skewed funding towards input distribution, mismatch in planting materials and unreliable extension services. We recommend the following policy actions to facilitate agricultural technology uptake.

- a) Given the complementarity between technology distribution on one hand, and technology generation on the other, government should prioritize and increase government funding to NARO to
- b) Recruitment of extension staff at all government levels should be complimented by facilitation to enable staff execute their duties effectively. This will facilitate effective technology dissemination and uptake.



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### Endnotes

- 1 Uganda Coffee Development Authority (UCDA). Monthly report for September 2017
- 2 Grey literature from National Crops Resources Research
- 3 Towards Zero Hunger: A strategic Review SDG2 in Uganda (2017)

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