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AGRICULTURAL FINANCE YEAR BOOK

2019

Development Financing for Agro-industrialisation

MOFPED#DoingMore

MINISTRY OF FINANCE, PLANNING AND ECONOMIC DEVELOPMENT

THE REPUBLIC OF UGANDA

EPRC

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Any enquiries can be addressed in writing to the Executive Director on the following address:

Economic Policy Research Centre
Plot 51, Pool Road, Makerere University Campus
P.O. Box 7841, Kampala, Uganda
Tel: +256-414-541023/4
Fax: +256-414-541022
Email: eprc@eprcug.org
Web: www.eprcug.org

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Foreword

The 2019 Agricultural Finance Yearbook, which is the ninth edition in the series and coincides with the 10th anniversary of Agricultural Credit Facility (ACF), offers an in-depth analysis of the trends in the sector performance, with particular emphasis on interventions to promote agro-industrialisation.

Chapter One of the book examines the trends in agriculture lending by both government and private financial institutions, the performance and implementation of the Bank of Uganda managed Agriculture Credit Facility over the last ten years; progress and lessons from the Agriculture Insurance Scheme; the rationale for an agriculture finance policy and the implication of the Tier-4 regulatory framework for agriculture finance.

A key lesson drawn is that implementation challenges notwithstanding, the uptake of agriculture credit facilities offered by government and partners has steadily increased. This is reflected in portfolio of loans disbursed under ACF amounting to UGX 331 Billion, extended to 525 projects across the country, as at March 2019, as well as provision of complementary financial products by private institutions.

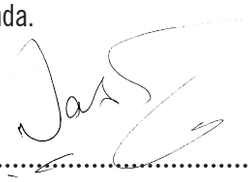
Chapter Two of the book critically analyses the innovations that have impacted on the sector with a view to accelerating financial inclusion, such as the introduction and operationalisation of digital payments across the agriculture value chain, easing access to agriculture loans through agent banking, developments in collateral financing through the Warehouse Receipts System. In addition, the book chronicles unique innovations like Centenary Bank's CenteSupa Woman club as well as interventions to encourage Agricultural Small Medium Enterprise (SME) lending.

In the third chapter, evidence is provided using case studies, to examine the financing of agricultural value chains. This includes the role of Public-Private Producer Partnerships in the case of oil palm; financing the country's integration in the global value chain referring to the case of cotton and textile industry, modalities employed by the development partners and private actors in financing the coffee value chain as well as looking at the development partners perspectives in the case of maize value chain financing in Uganda.

Chapter Four assesses the opportunities for equity investments in the agriculture sector, use of credit guarantees to finance agriculture, capacities and institutional governance of Savings and Credit Cooperatives Associations Organisation—all aimed at boosting investments in agriculture sector.

I appreciate EPRC's role of fostering sustainable growth and development of the Ugandan economy by advancing the role of research in policy processes. The Ministry of Finance, Planning and Economic Development shall continue to ensure that financing of agriculture is a priority.

I highly recommend this insightful book to all stakeholders working in, or with an interest in, the agricultural sector in Uganda.



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Matia Kasaija (MP)
Minister of Finance, Planning and Economic Development.

List of Abbreviations and Acronyms

AACF	African Agricultural Capital Fund
ABC	Agent Banking Company
aBi Trust	Agribusiness Initiative Trust
ACE	Area Cooperative Enterprise
ACF	Agricultural Credit Facility
ADB	African Development Bank
AFD	Agence Francaise de Developpement
AFYB	Agricultural Finance Year Book
AGMs	Annual General Meetings
AGRA	Alliance for a Green Revolution in Africa
ALG	Agribusiness Loan Guarantee
ALGC	Agribusiness Loan Guarantee Company
APA	APA Insurance company
ASPS	Agricultural Sector Program Support
ASSP	Agriculture Sector Strategic Plan
BDS	Business Development Services
BMGF	Bill and Melinda Gates Foundation
BoU	Bank of Uganda
BPL	Biyinkiza Poultry Limited
BUBU	Buy Uganda Build Uganda
CBMFIs	Community based microfinance institutions
CDO	Cotton Development Organisation
CGSs	Credit Guarantee Schemes
CIs	Credit Institutions
CM	Collateral Management
CMA	Capital Markets Authority
CMAs	Collateral Management Agreements
CMFIs	Community Microfinance Institutions
COMESA	Common Market for East and Southern Africa
CPSP	Cotton Production Support Programme
CRB	Credit Reference Bureau
CSAF	Council on Smallholder Agricultural Finance
CSCGs	Community Savings and Credit Groups
DANIDA	Danish International Development Agency
DCA	Development Credit Authority
DFID	Department for International Development
DFIs	Development Finance Institutions
DFS	Digital Financial Services
DLT	Digital Ledger Technology
DRC	Democratic Republic of Congo
EAC	East African Community
EADB	East African Development Bank
EARS	Environmental Analysis and Remote Sensing
EBO	Ebirungi Birig'Omutuutu
EIB	European Investment Bank
EPRC	Economic Policy Research Centre
EU	European Union
FY	Financial Year
FFBs	Fresh Fruit Bunches
FIA	Financial Institutions Act
FICO	FICO Insurance company
FIs	Financial Institutions
FO	Farmer Organisation
FSD	Financial Services Development
FSPs	Financial Service Providers
FTE	Full Time Equivalent
G	Generation
GAPs	Good Agricultural Practices
GDP	Gross Domestic Product

GIZ	Deutsche Gesellschaft fur Internationale Zasammenarbeit
GoU	Government of Uganda
GVCs	Global Value Chains
HRBA	Human Rights Based Approach
ICTs	Information and Communications Technology
ID	Indentification
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IPs	Implementing Partners
IRA	Insurance Regulatory Authority
IT	Information Technology
ITC	International Trade Centre
KfW	Kredinsalt fur Wiederaufbua
kg:	Kilogram
KOPGA	Kalangala Oil Palm Growers Association
KOPGT	Kalangala Oil Palm Growers Trust
KPMG	Klynveld Peat Marwick and Goerdeler
KYC	Know Your Customer
LGS	Loan Guarantee Scheme
LMB	Lint Marketing Board
Ltd	Limited
M&E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDIs	Microfinance Deposit Taking Institutions
MFI	Microfinance Institutions
MM	Mobile Money
MM4P	Mobile Money for the Poor
MNOs	Mobile Network Operators
MoFPED	Ministry of Finance, Planning and Economic Development
MSCL	Microfinance Support Centre Limited
MSMEs	Micro Small and Medium Enterprises
MT	Metric Tonnes
MTIC	Ministry of Trade, Industry and Cooperatives
MTN	Mobile Telecoomunication Network
MVC	Maize Value Chain
N/A	Not Applicable
NARL	National Agricultural Research Laboratories
NARO	National Agricultural Research Organisation
NASECO	Nalweyo Seed Company
NBFIs	Non Bank Financial Institutions
NDMFIs	Non Deposit Taking Microfinance Institutions
NDPs	National Development Plans
NGOs	Non Governmental Organisations
NIC	National Insurance Company
NOPP	National Oil Palm Project
NOVA	NOVA Insurance Company Limited
NPA	National Planning Authority
NRI	National Resources Institute
NSSF	National Social Security Fund
NUCAFE	National Union of Coffee Agribusiness and Farm Enterprises
Nytil	Nyanza Textile Industries Limited
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OPM	Office of the Prime Minister
OPP	Oil Palm Project
OPUL	Oil Palm Uganda Limited
OSSUP	Oil SubSector Uganda Platform

p.a	Per annum/ year
PAR	Portfolio at Risk
PCP	Pearl Capital Partners
PE	Private Equity
PFIs	Participating Financial Institutions
PHH	Post Harvest Handling
PMA	Plan for Modernisation of Agriculture
PoS	Point of Sale
PPP	Public Private Partnerships
PPPP	Public-Private Producer Partnerships
PTA	Preferential Trade Area
SACCOs	Savings and Credit Cooperatives Organisations
SDG	Sustainable Development Goal
SER	Social Environmental Responsibility
SHGs	Self Help Groups
SMEs	Small and Medium Enterprises
SNV	Netherlands Development Organisation
SSA	Sub Saharan Africa
TDC	Textile Development Centre
TEXDA	Textile Development Agency
UAA	Uganda Agribusiness Alliance
UAIS	Uganda Agricultural Insurance Scheme
UAP	UAP Insurance company
UBOS	Uganda Bureau of Statistics
UCA	Uganda Cooperative Alliance
UCC	Uganda Communications Commission
UCCFS	Uganda Central Cooperative Financial Services
UCDA	Uganda Coffee Development Authority
UCE	Uganda Commodity Exchange
UCSCU	Uganda Cooperative Savings and Credit Union
UDB	Uganda Development Bank
UDC	Uganda Development Corporation
UGCEA	Uganda Ginners and Cotton Exporters Association
UGX	Uganda Shillings (also UShs)
UIA	Uganda Insurers Association
UIA	Uganda Investment Authority
UMRA	Uganda Microfinance Regulatory Authority
UNCDF	United Nations Capital Development Fund
UNECA	United Nations Economic Commission for Africa
UNIDO	United Nations Industrial Development Organisation
UNMA	Uganda National Meteorological Authority
UOs	Umbrella Organisations
URSB	Uganda Registration Services Bureau
US$	United States Dollar- also USD
USD	United States dollars
USE	Uganda Securities Exchange
UWRSA	Uganda Warehouse Receipt System Authority
VAT	Value Added Tax
VC	Value Chain
VCAs	Value Chain Actors
VCD	Value Chain Development
VODP	Vegetable Oil Development Project
VSLAs	Village Savings and Loan Associations
WBES	World Bank Enterprise Survey
WFP	World Food Programme
WHT	Withholding Tax
WIB	Women in Business
WITS GVC	World Integrated Trade Solutions Global Value Chain
WRS	Warehouse Receipts System

CHAPTER

POLICY AND STRATEGY

1.1 TRENDS IN AGRICULTURAL LENDING

Brian Sserunjogi [1]

1.1.1 Background

This article discusses the trends in advances to the agriculture sector by regulated financial institutions (RFIs) for the period 2015 to 2017.[2] Similar information on the trends in advances to the sector by RFIs was compiled and presented in the previous Agricultural Finance Yearbooks.[3] The 2015-2017 trends presented in this 9th edition of the Yearbook, are compared with the trends in the 8th edition, which was published in 2015.

This article examines trends in the; volume, level of participation of RFIs; and deepening of agricultural lending as reflected by the numbers of participating RFIs and the disbursements made. The article also analyses the cost of credit (interest rates) to agricultural value-chain actors.

As in previous Agricultural Finance Yearbooks (AFYBs), the analysis tracks new advances to the agricultural sector rather than the outstanding portfolio. This approach provides a more dynamic view of the developments in lending to the sector. However, unlike the previous four editions, trends in leases to the agricultural sector are not discussed due to the lack of data. Instead, an analysis of lending rates is done.

In Section 2, the article focuses on; trends in total agricultural lending and RFI participation. Discussions of the share of RFI lending to total agricultural lending; and lending by activity are presented in Section 3 and 4 respectively. The article ends with Section 5 where there is an analysis of agricultural lending rates, and a presentation of conclusions and policy options.

1.1.2 Trends in total agricultural lending

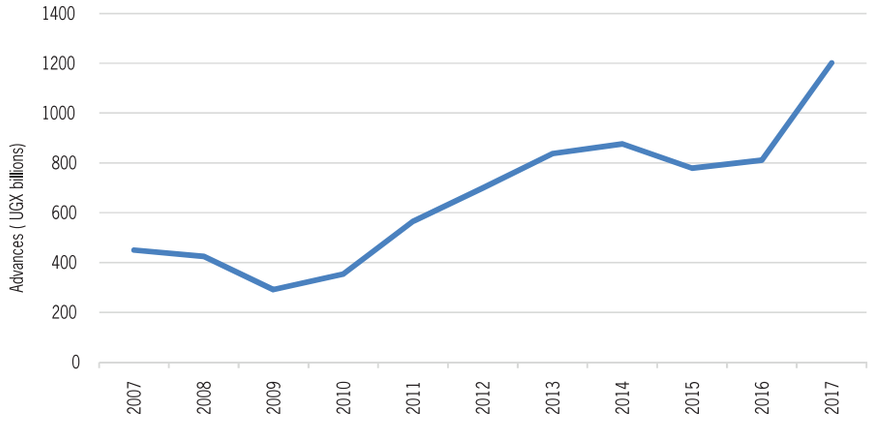
Growth in agricultural lending during 2014-2016 was more modest compared to the period 2011-2013. Figure 1, shows that between 2011 and 2013, total agricultural lending increased from UGX 566 billion to UGX 837 billion. This is in contrast to a 7.4 percent decline in total agricultural lending from UGX 876 billion in 2014 to UGX 811 billion in 2016.

The rapid growth in the overall agricultural lending in the 2009-2014 period emanated from various sources. First, the establishment of the Agricultural Credit Facility (ACF), in 2009 —with the budget allocation towards the Facility increased from UGX 20.5 billion in 2009/10 to UGX 30 billion in 2014/2015.[4] Secondly, in the same period, the number of Tier-1 institutions (commercial banks) increased from 21 in 2009 to 25 in 2015.[5] Commercial banks contribute the largest share to total agricultural lending; and the licensing of four new banks between 2009 and 2014 could have positively impacted total agricultural loans disbursed during the period. Lastly, between 2012 and 2015, Tier 1 commercial banks significantly increased their outreach through agents from 1766 to 2053[6].

On the other hand, Figure 1 shows that total agricultural loans declined between 2015 and 2016 before recovering again in 2017. The decline in total agricultural lending resulted from the tight monetary policy stance adopted by the Bank of Uganda (BOU) in a bid to control inflation in the buildup to the 2016 general elections. An analysis of the Central Bank Rate (CBR) between July 2011 and December 2017 reveals that, the CBR eased by 7 basis points from an average of 18.2 percent in 2011 to 11.2 percent by end of 2014.[7] Thereafter, the CBR increased to 14 percent in 2015 before increasing further to 14.9 percent in 2016. After 2016, the policy rate consistently

1 Research Fellow, Economic Policy Research Centre, Makerere University (bsserunjogi@eprcug.org)

Figure 1: **Total agricultural lending, 2007-2017**



Source: Author's computation based on BOU data, Supervision Department

Table 1: **Number of regulated financial institutions (RFIs) in Uganda**

Year	Tier-1	Tier-2[8]	Tier-3[9]	Total
2007	14	5	4	23
2008	20	5	4	29
2009	21	4	3	28
2010	22	3	3	28
2011	23	3	4	30
2012	24	3	4	31
2013	26	3	3	32
2014	25	4	4	33
2015	25	4	4	33
2016	24	4	5	33
2017	24	4	5	33
2018	24	4	5	33

Source: Bank of Uganda, Supervision Department (2019)

declined to 10.4 percent in 2017 and 9.3 percent by end of 2018. These changes in the CBR subsequently impacted the commercial bank rate and affected total lending accordingly. In addition, in October 2016, one of Uganda's largest commercial bank—Crane Bank—was closed, affecting the entire financial system and the total loans advanced to the agriculture sector during this period.[8]

1.1.3 Trends in regulated financial institutions in Uganda

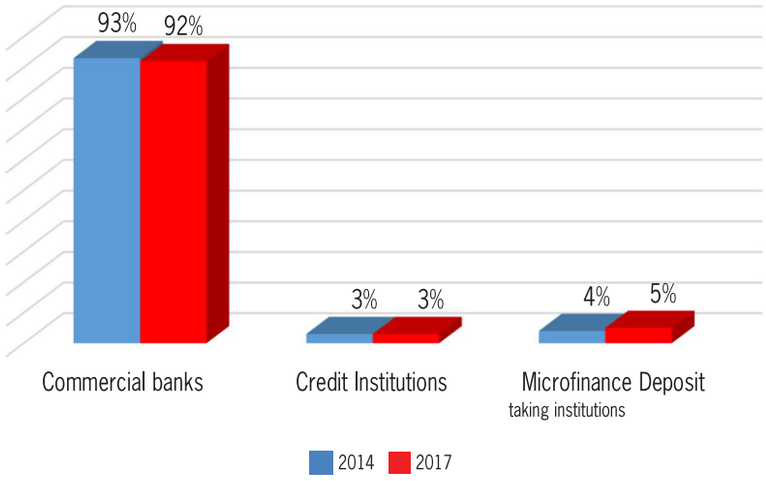
During the past four years, the number of RFIs has stagnated. Table 1 shows that between 2015 and 2016, the number of Tier 1-commercial banks reduced from 25 to 24 due to the closure of Crane Bank as earlier mentioned. Also during this period, the central bank granted a Tier 3 license to Yako Microfinance Limited. This increased the number of Tier 3 FIs from 4 in 2015 to 5 in 2016.

1.1.4 Agricultural lending by regulated financial institutions

An analysis of lending by category of RFIs reveals that commercial banks remain the biggest contributors (accounting for 92 percent) to agricultural lending in Uganda (Figure 2).

Commercial banks are followed by Microfinance Deposit-

Figure 2: **Share of lending by RFI category as a percentage of total agricultural lending**



Source: Author's Computation based on BOU Supervision Department data

taking Institutions (MDIs) and in third place are the credit institutions. Although commercial banks have the advantage of greater ability to mobilise deposits for lending, EPRC (2018) reported that commercial banks target mainly large agricultural farms and firms involved in commodity processing. In addition, commercial banks have stringent loan requirements and limited outreach beyond urban areas. This implies that majority of smallholder farmers' are left to access credit from non-RFIs such as Savings and Credit Cooperative (SACCOs), Rotating Savings and Credit Associations, Community-Based Organisations, moneylenders and family members.

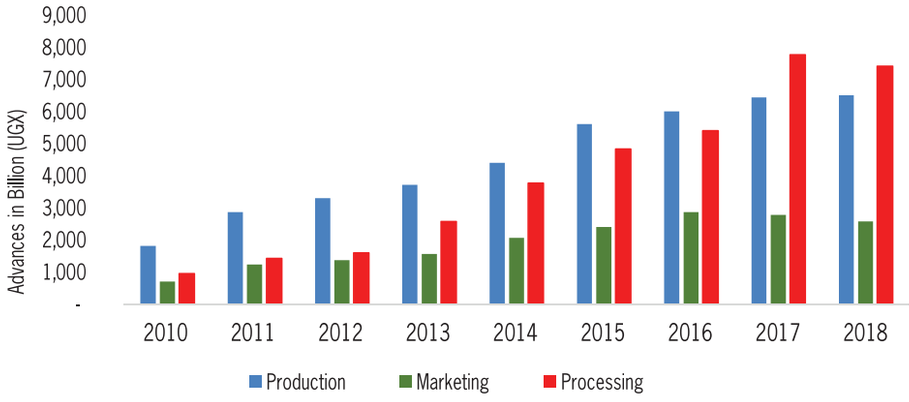
Therefore, increasing credit access to the sector requires a multipronged approach since Tier-4 institutions that operate in close proximity to agricultural value chain (AVC) actors are constrained by limited institutional capacity and financial resources. The approach should; (i) address the factors (legal, structural etc) that hinder RFIs from reaching more AVC actors; (ii) provide support so that RFI can offer products and services that are better suited to the needs of AVC actors; (iii) strengthen operations of AVC actors so that they are more bankable; (iv) strengthen more Tier-4 institutions to offer a wider range of agricultural finance products and services[9].

1.1.5 Lending to agricultural value chains

Agricultural lenders have over time, prioritised processing and production finance over marketing. Figure 3 reveals that between 2015 and 2017, processing finance increased by 60 percent from UGX 4.8 trillion to UGX 7.7 trillion before slightly reducing to UGX 7.4 trillion in 2018. Similarly, production finance increased by 17 percent between 2015 and 2018—from UGX 5.6 trillion in 2015 to UGX 6.5 trillion in 2016. On the other hand, marketing finance declined from UGX 2.8 trillion in 2016 to UGX 2.5 trillion by 2018. The large share of processing finance can be explained by the impetus that came with the prioritisation of commercialisation of agriculture through value addition supported under the ACF. Indeed, as of March 2019, a total of UGX 149.6 billion (about 45.1% of total disbursement) had been disbursed for agro processing and agribusinesses for value addition.[10] This was in contrast to UGX 80 billion (24.1%) disbursed by the same Facility for on-farm production activities and UGX 71.8 billion (21.7%) allocated for financing working capital for grain trading.[11].

The low prioritisation of agricultural marketing can be explained by limited government support towards the upper segment of the value chain. EPRC (2018) reported that over an eight-year period (2006/07-2015/16),

Figure 3: **Total outstanding loans by agricultural activity (2010-2018)**



Source: Author's computation based on BOU Supervision Department data

public expenditure has largely supported infrastructure development, particularly the construction of rural community roads to improve market access. Additionally, the ACF does not provide working capital for trading of agricultural commodities, with the exception of grain trading.[12]

1.1.6 Agricultural lending rates

Lending to the agriculture sector traditionally attracts higher interest rates compared to those offered to other sectors. The higher interest rates that agricultural loans attract are due to the risks associated with the type of agriculture predominantly practices in Uganda, and its associated risks. Between 2015 and 2018, only UGX 900 million was lent out by RFIs to agriculture at an interest rate of 8 percent per annum (Figure 1), compared to UGX 2.1 billion and 3.6 billion disbursed to the manufacturing and trade sectors respectively (See Annex Figure 1). Yet more loans at interest rates of 30 percent and above (Figure 4) were advanced to agriculture (UGX 329 billion) compared to UGX 31.9 billion and UGX 287.9 billion advanced to the manufacturing and trade sectors respectively. The agricultural sector, even when financed, tends to attract short and medium term loans at high interest rates, a practice that limits the long term investments needed to transform the sector.

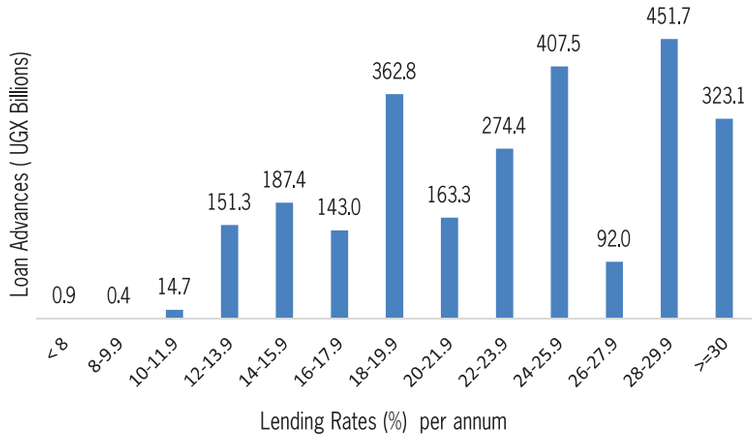
1.1.7 Conclusion and policy implications

Overall, new advances to the agriculture sector increased since 2015, partly supported by the ACF and a reduction in the CBR. With respect to new advances by RFIs, commercial banks still contributed the largest share of new advances though there was a slight increase in the contribution of MDIs.

While marketing is an important segment of the overall agricultural value chain, particularly for the financing of the sector, available data indicates that most agricultural lenders continue to prioritise financing of agricultural production and processing. This could mean that either agricultural marketing figures are bundled up with those of trade finance or that this segment of the AVC continues to suffer higher financing deficit compared to other parts of the AVCs.

With regards to interest rates, advances to agriculture largely attract high interest rates, signaling the high perceived risk that lenders have towards lending to the sector. Again two conclusions can be made here. One, inadequate capacity of lenders render them unable to establish the correct risk profiles of the agricultural enterprises they lend to, so they overestimate the risk. Or, the risks have remained high and in some cases increased. Whatever the case, de-risking AVCs remains top on Uganda's agricultural finance agenda.

Figure 4: **New advances to the agricultural sector by lending rates (2015-2018)**



Source: Author's computation based on BOU Supervision Department data

In light of the above, the following policy changes are proposed;

a) The discussion on how to transform Uganda's agriculture needs to move from increasing production/volumes to improve productivity from a de-risking perspective. Some of the key actions include; sharing information/analyzing of select AVCs, preparing the risk profiles of these AVCs and discussing with lenders and investors, the most cost-effective and bankable ways of reducing risks along the AVC;

b) Reduction of interest rates is a medium to long term goal and short and medium term measures need to be undertaken for the short term, government should identify sources of patient capital to boost lending to agriculture at lower rates (like the ACF). Such patient capital source should include lending for trading of agricultural commodities, not only the grain segment;

c) In the medium term, both government and private sector need to address the drivers of interest rates which include; high government borrowing (crowding out private sector lending), high risk in AVC arising from poor extension services, lack of records, low productivity farming methods, poor post-harvest handling, lack of market information and inability to penetrate markets.

d) At the Tier-4 level, improving savings mobilisation and loan use requires improved governance and institutional structures of both deposit and non-deposit taking microfinance institutions, to attract capital for on-lending but also to build public confidence among users;

Reference

EPRC, (2018). Fostering a Sustainable Agro-Industrialisation Agenda in Uganda. Economic Policy Research Centre, pp 85-94 Kampala, Uganda

Endnotes

2 The cooperation of the Bank of Uganda and the RFIs, in providing the data on which this article is based, is greatly appreciated
3 2007, 2008, 2009, 2010, 2011, 2012 and 2013-14 editions
4 https://www.bou.or.ug/bou/rates_statistics/statistics.html
5 Tier-1 are regulated financial institutions or commercial banks, which are regulated by the Bank of Uganda and whose minimum capital requirement, as of 2010, was UGX 25 billion
6 Diagnosing Agriculture Finance in Uganda, Uganda Agribusiness Alliance (2017)
7 https://www.bou.or.ug/bou/rates_statistics/statistics.htmlv
8 Tier-2 institutions are Credit Institutions, whose minimum capital requirement is UGX 1 billion as of 2004
9 Tier-4 institutions are non-deposit taking institutions such as the credit-only NGOs and MFIs as well as Savings and Credit Cooperatives (SACCOs)
10 Agricultural Credit Facility, Progress Report, March 2019-unpublished
11 ibid
12 https://www.bou.or.ug/bou/bou-downloads/Agricultural-Credit-Facility/Brief-to-Clients-on-the-ACF-V.pdf

1.2 TEN YEARS OF THE AGRICULTURAL CREDIT FACILITY

Rosette Bamwine[1]

Photo by EPRC

1.2.1 Background

The Agricultural Credit Facility (ACF) is now in its tenth year of operation since its establishment by the Government of Uganda (GoU) in 2009. GoU partnered with Participating Financial Institutions (PFIs), i.e. Commercial Banks, Microfinance Deposit-Taking Institutions (MDIs), Credit Institutions (CIs) and Uganda Development Bank Limited (UDBL) to deliver the ACF to the target users. This article[2] describes how over the 10 year period, the ACF has responded to the needs of agricultural stakeholders. It focuses on the recent developments that the Facility has undergone since its last update in 2018 and the challenges that it continues to face.

1.2.2 Accessing the agricultural credit facility

The key objective of the ACF is to facilitate the provision of medium and long term loans to projects engaged in agriculture commercialisation, agro-processing on more favourable terms than is usually available from financial institutions.

Eligible projects

Eligible projects include almost all the activities along the agricultural value chain such as; acquisition of agricultural machinery and equipment, post-harvest handling equipment, storage facilities, agricultural inputs (including pesticides and fertilizers, land opening, and paddocking), biological assets (e.g. banana suckers, fruit seedlings, fish fingerings chicks, piglets, cows and goats) for restocking the farm, agro processing facilities, irrigation facilities and other agricultural and agro-processing related activities along the value chain as well as working capital for grain trading. Working capital required for operating expenses does not exceed 20 percent of the total project cost for each eligible borrower. The maximum loan amount to an eligible borrower for biological assets does not exceed UGX 80 million.

Procedure for accessing the facility

All ACF loan applications are channelled through the PFIs. The PFIs analyse the loan requests basing on their credit policies, which ascertain existence, viability as well as conformity with ACF eligibility requirements. Though BOU administers the ACF, the PFIs are responsible for appraising the applications without BOU interference. On approval, by both the PFI and BOU, the PFIs disburse their own funds to the approved projects and thereafter, request

1 Bank of Uganda (rbamwine@bou.or.ug).

BOU to reimburse (or refinance) them. The reimbursement is also referred to as the GoU contribution.

1.2.3 Evolution of the facility

The withdrawal by almost all the PFIs from participating in the ACF during Phase II was occasioned by the reduction in GoU guarantee from 50 percent to 33.3 percent (BOU, 2018) PFI withdrawal signaled that the 33 percent cover was inadequate for them to risk lending to agriculture, despite a two percent increase in interest rate. The dismal performance in Phase II prompted the GoU and the PFIs to sign an addendum that came into force during ACF Phase III. The addendum reinstated the interest rate and GoU guarantee back to ACF Phase I levels - 10 percent per annum to 50 percent respectively.

From the experience in Phase II, GoU/BOU have, with every ACF phase introduced changes that are aimed at making the Facility more attractive to PFIs and the end users. The focus has been on filling the gaps in the ACF and to bring specific segments and agricultural activities on board as follows;

a) Agricultural SMEs - reducing the minimum loan tenure from 24 to six months to allow for small borrowers requiring small loans; introducing the block allocation /wholesale option of up to UGX 1.5 billion so that PFIs can on-lend to agri-SMEs (without submitting the individual applications to BOU); allowing loan facilities of up to UGX 20 million to be advanced without PFIs asking for physical collateral
b) Production and Inputs – Eligible purposes were expanded to include production activities land opening, improved seedlings and breeds of cattle, agricultural inputs like fertilizers and pesticides; and
c) Grain Trade - introducing the grain facility to provide working capital for purchase of grain whose prices had bottomed-out due to a bumper harvest in most parts of the country.
d) MDIs and CIs - increasing the reimbursable percentage of the GoU contribution for the MDIs and CIs to 70 percent up from 50 percent. MDIs and CIs usually mobilise deposits of shorter term nature (compared to commercial banks). The higher reimbursement enables them to manage liquidity better and to reduce their cost of funds.
e) Monitoring of the ACF-funded projects being taken on by the Budget Monitoring and Accountability Unit under the Ministry of Finance Planning and Economic Development (MoFPED).

Table 2 presents the detailed account of the ACF's evolution over the past 10 years. The ACF phases are mainly defined by the changes in the eligibility criteria as well as lending conditions, particularly the loan period. ACF Phase I and ACF II lasted 9 and 12 months respectively. Subsequent phases were of a relatively longer duration i.e. 20 months for ACF III, and at least 30 months for ACF IV and ACF V. In Phase V, the Grain Facility, a complementary fund to the ACF, was introduced (to provide working capital for grain trade) but with different eligibility and loan conditions.

Changes to minimum and maximum loan sizes was aimed at widening the coverage of the Facility to include those who wished to borrow more or less than what was initially envisaged. The minimum amount per borrower was initially UGX 250 million (Phase I and II). In phase III, the minimum amount was lowered to UGX 10 million but by phase IV, this requirement was removed and no lower limit set. Instead a lower limit for a PFI's application amount was set at UGX 10 million, implying a PFI could aggregate many small loan requests to make up the UGX 10 million. On the maximum side, the initial maximum amount allowed per borrower was UGX 2.1 billion. This amount was, in Phase II, increased to UGX 5 billion and in the following phases, made flexible and adjustable upwards on a case-by-case basis as long as the project was eligible and would add significant value to the agricultural sector and the economy as a whole

Initially capped at 10 percent per annum (Phase I) ACF interest rate to PFIs rose to 12 percent in phase III and II), back to 10 percent and then held stable at 12 percent (Phases III, IV, V and VI). On the other hand, the Grain Facility (GF) interest rate is capped at 15 percent per annum because unlike the ACF, the GF targets grain trading activities, which require both working capital and capital item financing. For the GF working capital loans in particular, a lower maximum period was set (24 months) implying that such activities have a shorter gestation period compared to agricultural production and processing, for which a maximum period of 96 months is allowed.

Apart from phase II when the ACF guarantee cover was lowered to 33.3 percent, the level of cover has remained at 50 percent in the rest of the phases. What has changed has been the GoU contribution for MDIs and CIs which was increased to 70 percent to attract them to participate in the ACF. Prior to this offer (phases I to III), CIs and MDIs had declined to participate alleging that the cost of funds for GoU contribution was high given that most of them rely on borrowed funds acquired at a higher interest rate. In spite of the increase in government contribution, MDIs have still declined to participate in the ACF.

Block allocation of up to UGX 5 billion opened up an avenue for SMEs to benefit from the ACF since PFIs were no longer required to submit each application individually. This change was introduced in phase III but a minimum reimbursable amount set at UGX 10 million to avoid submission of very small block allocation requests. Though the Block Allocation did not initially take off (under Phase III when it was introduced), it is now active under the current MoA signed in year 2018. Further SME-enabling conditions were introduced in phase VI, including; allowing unsecured lending of up to UGX 20 million per individual and the purchase of tractors for hire to agri-SMEs

Agricultural production activities were accepted into the ACF in phase V when land opening, purchase of agricultural inputs and biological assets became eligible activities under the Facility. To ensure that the focus of the ACF (agriculture commercialisation and agro-processing) was not overtaken by financing demands for production activities, the amount to each eligible borrower was capped at UGX 80 million.

Initially limited to 10 percent of the total project cost, working capital limit was increased to 20 percent. This helped the borrowers to meet costs associated with inputs like purchase of fertilizers, pesticides, animal drugs, mulching and other overhead costs associated with the ACF borrowing.

Table 2: **Evolution of the ACF –(2010 to 2019)**

Phase	Period	GC and GG	Interest Rate	Min Loan / Borrower UGX	Max Loan / Borrower UGX	Loan Period	Changes made to Eligibility Criteria
P-1	Oct 2009 - June 2010 (9 months)	50% - all PFIs	10% per annum	250 million	2.1 billion	Min: 24 months Max: 96 months	
P-II	July 2010 - June 2011 (12 months)	33.3% - PFIs	12% per annum	250 million	2.1 billion, adjus -table to 5Billion	Min: 24 months Max: 96 months	
P-III	July 2011 - Feb 2013 (20 months)	50% for all PFIs (as in P-I)	10% per annum	10 million Working Capital Limit increased from 10 to 20%	Similar to P-II	Min: 6 months Max: 96 months	Block allocation of UGX 5 billion to cater for SMEs. PFIs remit applications in batches of UGX 10 million (Minimum reimbursable amount UGX 10 million)
P-IV	March 2013 - Oct 2015 (32 months)	50% for CBs & UDBL 70% for MDIs & CIs	12% per annum	No lower limit, especially under block allocation	Similar to P-II	Min: 6 months Max: 96 months	
P-V	Nov 2015 to April 2018 (30 months)	50% for CBs & UDBL 70% for MDIs & Cis . GC for Grain Facility is 50% for all the PFIs	Grain Facility (GF) introduced ACF: 12% p.a. GF: 15% p.a.	No lower limit	Similar to P-II	ACF Min: 6 months, ACF Max: 96 months GF Min: 6 months, GF Max - 24 months (working capi-tal) or 96 months (capital items)	Was expanded to include: land opening, 100% of Agricultural inputs and biological assets were included and capped at UGX 80 million to each eligible borrower.
P-VI	Current Phase (May 2018 – to date).	50% for CBs & UDBL 70% for MDIs & CIs	ACF: 12% p.a. GF: 15% p.a.	10M to the PFI, but no lower limit for final borrower	Upper Limit Adjustable		Alternative collateral for up to UGX 20 million. Purchase of tractors for hire to SMEs Block allocation that allows unsecured lend-ing of up to UGX 20 million per individual

Source: Bank of Uganda

Note: Abbreviations in Table 1: Agriculture Credit Facility (ACF); Commercial Banks (CBs); Credit Institutions (CIs); Government Contribution (GC); Government Guarantee (GG), Grain Facility (GF); Microfinance Deposit-Taking Institutions (MDIs); Participating Financial Institutions (PFIs); Uganda Development Bank Limited (UDBL)

Table 3: **ACF Loan portfolio (projects disbursed as at March 31st 2019)**

Funded Activity	No of Projects	%	Contribution in UGX		Total Amount Disbursed
			PFI	GoU	
On-Farm Activities	327	62.2	39,002,176,313	41,035,042,938	80,037,219,251
Working Capital for Grain Trade	35	6.7	35,908,870,000	35,908,870,000	71,817,740,000
Livestock	29	5.5	2,798,699,900	3,076,299,900	5,874,999,800
Post-harvest Management	37	7.1	11,556,990,863	12,164,133,263	23,721,124,126
Agro-processing /Value Addition	93	17.7	74,571,564,307	75,055,154,447	149,626,718,754
Other (Block Allocation)	4	0.8	154,100,000	302,900,000	457,000,000
TOTAL	525	100.0	163,992,401,383	167,542,400,548	331,534,801,931

Source: BOU, 2019

1.2.3 Performance of the agricultural credit facility

Fund utilisation capacity

Performance of the ACF has varied over the ten year period. ACF Phase I was relatively successful, given that more than 99 percent of the UGX 60 billion fund was disbursed and an additional projects worth UGX 51 billion were in the pipeline. Phase II however had less than one percent of the UGX 90 billion fund under disbursed. Only 22 loan applications were received in Phase II and a paltry UGX 2.5 billion disbursed, representing 8.5 percent of the total GoU contribution. ACF III performed fairly well with disbursements totaling UGX 21.238 billion under that phase. Total disbursements under the ACF IV amounted to UGX 141.252 billion. Phase V performance declined with total disbursements amounting to UGX 127.625 billion

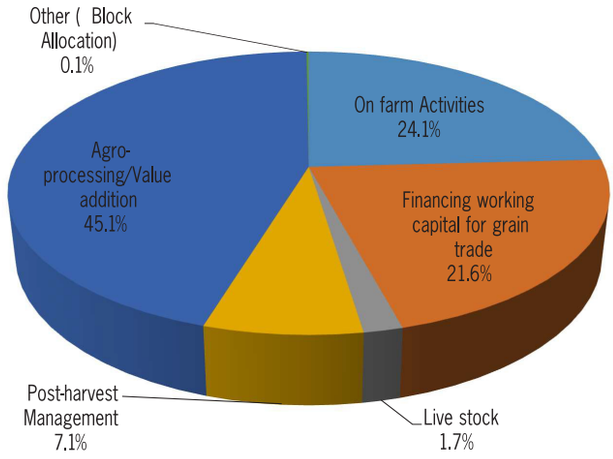
Total disbursements

As at March 31, 2019, total ACF disbursements amounted to UGX 331.5 billion, extended to 525 eligible projects; of which GoU contribution amounted to UGX 168 billion (Table 3). An additional UGX 60.1 billion had been committed for projects pending proof of disbursement from the respective PFIs.

Repayments under the ACF (end March 2019)

As at March 31, 2019, a total of UGX 107.8 billion or 64.2 percent of the amount refinanced had been repaid by the PFIs. In addition, UGX 16 billion was remitted by PFIs during the quarter thus reducing the arrears to UGX 313.79 million. An amount of UGX 59.8 billion or 35.7 percent of the total disbursed remained outstanding but not yet due. A recent report by the Budget Monitoring Unit of the Ministry of Finance established that the overall perfor-

Figure 5: **Activities funded under the agricultural credit and grain facilities as at 31st March 2019**



Source: BoU (2019)

mance of the ACF in FY 2018/19 was good, rated at 76.2 percent compared to the overall agriculture sector rating of 61.8 percent. Out of the 525 projects financed, fifteen (15) loans were due for write-off as at March 31, 2019. These accounted for UGX 9.48 billion or 2.86 percent of the total ACF loan portfolio.

As highlighted in Figure 5 and Table 3, UGX 149.6 billion or 45.1 percent of the total amount disbursed went to agro-processing and value addition projects. Of the 45.1 percent, agro-processing with 93 projects, accounted for only 17.7 percent of the total 525 projects financed. Working capital for grain trade accounted for UGX 71.81 billion or 21.7 percent of the total loan portfolio implying a fairly high average loan size in this segment. Farm based projects, which include acquisition of farm machinery and equipment, purchase of biological assets, acquisition of water supply systems and bush clearing among others, accounted for UGX 80.04 billion representing 24.14 percent of the total amount disbursed. This segment absorbed the second highest amount of funds disbursed under the Facility and the highest number of projects funded, which resonates with the ACF's objective of commercialising, mechanising and modernising agriculture. The end-users under this segment are mainly smallholder farmers whose loan sizes vary between UGX 10 million and UGX 50 million. This further gives credence to the fact that the ACF has contributed to increased access to credit by the micro and smallholder farmers.

Table 4 presents the cumulative disbursements and commitments under the Facility, grouped according to loan size. It reveals that a total of 278 SMEs received financing of up to UGX 100 million each, representing 47.2 percent of the total number of projects financed under the Facility.

1.2.5 Continuing challenges to ACF operations

Despite the achievements that have been narrated in the previous sections, the ACF is still experiencing a number of challenges, which limit its performance. Key challenges and issues that continue to affect its smooth implementation include;

a) **Lack of an effective marketing channel for the facility:** Government does not have an information or advisory arm for financial services (both at the centre and local government level). A significant number of potential beneficiaries of the ACF therefore remain unaware of its existence. Efforts to have information on the ACF transmitted by PFIs branches located outside Kampala have not been very successful as the branch staff are not well informed about the Facility and are therefore unable to effectively market it to interested borrowers.

b) **Exclusion of tier 4 (especially SACCOs) from participation:** Tier 4 institutions operate within close proximity of potential ACF end-users. However, access to the ACF is limited to BOU- regulated financial institutions. Tier 4 institutions financial products are usually small and of very limited tenure. Injection of ACF, on soft terms, could support Tier 4 institutions to provide the financial products

Table 4: **Loans by size as at March 31, 2019**

Loan size (UGX)	Total amount, (UGX)	Refinance[1] (UGX)	Projects (Number)	Projects %
0-20,000,000[3]	571,170,990	359,985,495	34	5.8
20,000,001-50,000,000	3,188,535,618	1,770,821,009	80	13.6
50,000,001-100,000,000	13,328,071,999	7,555,574,552	164	27.8
100,000,001-300,000,000	26,371,918,699	13,990,906,819	140	23.8
300,000,001-above	348,449,480,855	174,408,100,788	171	29.0
Totals[3]	391,909,178,161	198,085,388,663	589	100.0

Source: Bank of Uganda

needed by agricultural enterprises emerging out of subsistence level into SMEs.

c) **Lack of a price stabilisation mechanism**: Price uncertainty and instability of agricultural commodities is a big disincentive to lenders/PFIs. It is difficult to establish the true capacity of an agricultural enterprise to earn and to pay back loans. Uganda does not have any price stabilization mechanisms to help stabilize agricultural commodity prices.

d) **Lack of an enabling legal framework for the ACF:** The ACF was established without the requisite statutory instrument that would allow it, as a government project, to write off loans. Government's auditor general procedures do not adequately cater for periodic loan write off. Consequently government's failure and delays in settling PFI claims for loan losses have discouraged some PFIs from participating. The ACF (and other credit guarantee programmes operating in the country) require a regulatory framework suited to guarantee-type activities, which differ considerably from lending.

e) **Lack of reliable Information on the weather:** Farming investments in Uganda are vulnerable to unreliable weather patterns partly due to dependence on rain-fed agriculture, but also the emergence of new pests and diseases due to climate change. Agricultural value chain actor need good information to plan production and to acquire irrigation, greenhouse and post-harvest equipment. PFIs on the other hand need reliable information to provide the appropriate and cost effectively-priced financial loan/lease products as well as agricultural insurance premiums.

f) **Poor procurement planning and execution -** Delays in procurement of machinery and equipment lead to ACF funds being committed for longer than the period envisaged at the time of advancing the loan. These delays results in tying up of funds that could finance more agricultural projects. Delays also increase the time PFIs are exposed to risk of non-repayment.

g) **Lack of a coordinated post-harvest strategy:** Uganda's post-harvest handling capacity in terms of skill, planning and equipment is still severely constrained. The size of farms and farming enterprises cannot individually afford post-harvest handling facilities like silos and warehouses. The lack of post-harvest handling capacity not only results in quality and price losses but it also leads to selling when prices are low and failure to use warehousing options that enable farmers to use their commodity stock as collateral (rather than land and buildings). Low prices, loss in volumes, lack of collateral substitute (in form of stock) heighten risk perception due to lowered borrowing eligibility and payback capacity.

h) **Lack of collateral substitution options:** Many of the agricultural SMEs do not (may never) own large tracts of land or real estate within large urban centres that most commercial lenders prefer. Collateral substitution in form of registered chattels, regulated and certified financial groups/associations, credit guarantees, bulk warehousing (for small operators), and a commodity exchange are key elements of providing collateral substitutes that are recognised by regulated financial institutions (RFIs). The enabling institutions, skilling and regulatory framework to enable the shift by PFIs to other forms of collateral is still lacking in Uganda.

i) **Poor record keeping by Ugandan entrepreneurs:** The lack of record keeping is general among Ugandan entrepreneurs. But for agriculture it presents even more serious challenges because most of the PFI staff have little or no knowledge of the agricultural enterprises they appraise. Without adequate historical data to justify financing, lend-

ing decisions are based, not on earning/pay back capacity but on collateral or the earnings of other non-agricultural enterprises that the end borrower operates. Consequently, some good agricultural projects are not accepted because the risk of non-repayment is overrated.

j) **Lengthy and costly loan processes:** Applications to the ACF are first approved by the PFI and then forwarded to BoU for further review, approval and disbursement of funds. This is a long process because two institutions are involved and in addition, staff do not have sufficient agricultural project appraisal skills to informatively handle loan approval and follow-up. These challenges limit the number of application that are presented, approved and which turn into successfully paid-back ACF loans. PFIs have also complained of the high monitoring costs compared to the high risk/default and limited return on loans to small farmers.

1.2.6 Conclusion and recommendations

Notwithstanding the limitations and criticism, the ACF had, as at 31st march 2019, disbursed loans to the tune of UGX 331.53 billion to 525 projects across the country. Other benefits that have come out of ACF operations include; PFIs have begun appreciating lending for agriculture and they have developed some innovative financial products for the agricultural sector. It is anticipated that as PFIs gain more experience, they will 'wean' some of the borrowers from the guarantee cover so that more and more of the guarantees are not 'repeat covers' but the guarantee cover is used for clients who have not benefited before.

It is envisaged that uptake of the Facility will continue to improve, particularly under the newly approved Memorandum of Agreement of 2018. The challenges affecting the ACF have already been presented. Most of the challenges arise not only because of weaknesses in the implementation on the ACF but due to the lack of an agricultural finance policy space. Table 5 presents the policy, regulatory, institutional, and product issues that need to be addressed to improve ACF's relevance to financing of Uganda's agriculture.

Table 5: **Recommendations to improve access and use of ACF**

Issue	Recommendations to improve access and use of ACF
Agricultural Finance Policy	The agricultural finance policy needs to articulate the country's agricultural finance objectives. An impact assessment of ACF should be undertaken so that the role and future of ACF in these objectives can be defined and its contribution to the above objectives improved.
Legal framework	Legal framework for credit guarantees to enable speedy processing of claims is required. Modifications in warehousing receipts system and commodity exchange to make them suited to small value chain operators
Tier-4 Participation in ACF	A strategy for tier-4 institutions to access medium and long term finance available under ACF is needed. It is recommended that the larger Tier 4 institutions be offered an opportunity to participate if they fulfil set BoU requirements or upgrade into the higher tiers.
Institutional setup	The policy framework should identify what can make existing institutional framework (Tiers 1, 2 and 3) more suited to financing of agriculture in general and ACF in particular. Mechanisms for flow of information and advice, including agi-business/finance to all value chains should be identified and strengthened
Coordination & Information flow	To reduce risk along value chains, sectors responsible for planning, mobilisation, production, post-harvest storage, processing, local sale, export should offer coordinated information and advice to value chain actors. A public-private partnership is recommended. This should be included in the policy.
Skilling in Agri business and Finance	Providers (financial institution staff), enablers (extension agents) and financial service users need better agri-business and agricultural finance skills - value chain (risk) analysis, appraisal, agricultural loan management and competitiveness for finance and investment
Price Stabilisation	In addition to grain facility under ACF, there is need for a national price stabilisation mechanism to cover other commodities (beyond the grain facility)
Products and Processes	Government should source concessional long term funding to increase long term finance Financing delays could be mitigated by block funding. More research on ACF up is needed to establish in what form the ACF loans (amount, loan period) reach the end-user Changes in regulations and risk assessment to enable registration of chattels, certifying of financial groups/associations could ease collateral requirements

Endnotes

2 This article mainly focuses on recent developments in the ACF since its last update in 2018

3 Also referred to as 'government contribution'

1.3 UGANDA AGRICULTURE INSURANCE SCHEME: PROGRESS, CHALLENGES AND LESSONS

Mildred Barungi[1]

Picture credit : http://newz.ug/wp-content/uploads/2016/08/ climate00.jpg

1.3.1 The Uganda agriculture insurance scheme

Uganda is currently experiencing climate variability. For example, the onset of rainy seasons has been documented to shift by 15 to 30 days (earlier or later), while the length of the rainy season can change by 20 to 40 days from one year to the next (USAID, 2013). Changing rainfall patterns and intensities affect soil moisture, crop growth at different stages, and post-harvest storage conditions. Crops such as coffee, rice, maize, bananas, and cassava are adversely affected by climate variability (USAID, 2013), and yet, these are part of the twelve priority agricultural enterprises identified in the National Development Plan (NDP) II—for the country is to achieve long-term sustainable economic growth (NPA, 2015).

The Government of Uganda (GoU) recognises the risky nature of agriculture but acknowledges that the sector is critical for Uganda's growth. As such, the GoU is supporting a number of interventions to address climate variability. One such venture is the Uganda Agriculture Insurance Scheme (UAIS). Started in FY 2016/17, the GoU has piloted this scheme with the overarching objective of hedging farmers against agricultural risks/natural disasters over which they have limited or no control. The Scheme is projected to run until the FY 2020/21.

The UAIS is a public-private partnership between government and the private sector. The government representation includes the Ministry of Finance, Planning and Economic Development (MoFPED), the Bank of Uganda (BOU), the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), the Insurance Regulatory Authority of Uganda (IRA), the Office of the President, the Office of the Prime Minister (OPM), Operation Wealth Creation (OWC), and the Uganda National Meteorological Authority (UNMA). Other Private sector bodies include: financial institutions (commercial banks under the Uganda Bankers Association), insurance companies, development partners (aBi Trust, SNV, USAID), National Union of Coffee Agribusinesses and Farm Enterprises (NUCAFE), and the Environmental Analysis and Remote Sensing (EARS). The

1 Economic Policy Research Centre (EPRC). (mbarungi@eprcug.org)
Picture credit : *http://newz.ug/wp-content/uploads/2016/08/climate00.jpg*

Table 6: **Description of insurance products offered under the UAIS**

Type of insurance product	Enterprises covered	What the insurance product covers
Multi-peril Insurance	**Crops:** maize, beans, coffee, bananas, tea, cotton, sunflower and oil seeds	Loss or damage to growing crops caused by uncontrollable pests and diseases, drought, lightning, malicious damage, earthquake, riot and strikes, explosion and wind.
	Livestock: dairy cattle, exotic beef cattle, local cattle, fish farms, pigs and poultry	Death of animals due to: fire, lightning, floods, rainstorm, snake bites, windstorm, hailstorm, snow, hurricane, earthquake, landslip, disease, inundation, surgical operation, and accidental damage by animals, aircraft or motorised machinery.
Aquaculture (Fish Farm) Insurance	▪ Fish farms established in lakes or rivers ▪ Fish farms established on land ▪ Grow out operations and hatcheries ▪ Aquaculture equipment: boats, moorings, cages and feed barges	Loss or damage to fish farms due to; pollution, lightning, tidal, wave, collision, structural; failure of equipment; freezing and super cooling; de-oxygenation of water; other changes in water (e.g. salinity); predation; theft; uncontrollable diseases; drought, fire, explosion, earthquake, mechanical breakdown, and electrical breakdown at onshore farms.
Drought Index Insurance	▪ Crops: maize, beans, coffee, bananas, tea, cotton, sunflower and oil seeds ▪ Livestock	Losses incurred by farmers due to drought and excessive rainfall

Source: Agro Consortium UAIS Brochure (2018)

UAIS is administered by the Uganda Insurers Association (UIA) through the Agro Consortium, which is a coalition of 10 non-life insurance companies, namely APA, Sanlam, Phoenix Assurance Group, Jubilee, UAP, CIC General, First Insurance Company FICO, NIC, NOVA and Pax Insurance.

There are two broad types of insurance products provided under the UAIS, namely; (i) multi-peril/risk insurance (multi-peril crop insurance, livestock insurance and aquaculture); and (ii) weather index insurance (crop weather index insurance and livestock weather index insurance). The priority enterprises and risks covered by each insurance product are presented in Table 6.

The basic premium and government-approved subsidy allocations per category of farmers are shown in Table 7. Basic premium is a proportion of the total value of insured crops or livestock. Farmers pay between 2 to 6 percent of the total value of the crops/livestock insured to the Agro Consortium as the premium. Through the scheme, Government pays to Agro Consortium 50 percent and 30 percent of the basic premium for small scale and large scale farmers, respectively. These rates apply countrywide except in areas that are known to be high risk and are prone to frequently natural disasters (namely, Isingiro, Kasese, parts of Mt. Elgon, Teso, Karamoja and West Nile sub-regions). In these areas, farmers pay 10 percent of the total value of the insured crops/livestock as basic premium - this is almost double the premium paid by farmers in low risk areas. Also, in the high risk areas, government subsidy is similarly high (80 percent) – with the farmer paying only 20 percent of the basic premium. According to the Agro Consortium, the premiums can be revised downwards if a large number of farmers enrol on the Scheme.

Table 7: **Government approved UAIS premium subsidy allocation (per farmer category)**

Farmer category	Criteria defining scale of operation	Basic premium (% of total value of crops/animals insured)	Government subsidy (% of basic premium)
CROPS			
Small scale	▪ 1 – 5 acres ▪ Earnings of less than UGX 20 million per season	Weather index insurance ▪ 5.5%	50
Large scale	▪ >5 acres ▪ Earnings more than UGX 20 million per season	Multi-peril insurance ▪ 5% for maize, beans, coffee, bananas, sunflower and oil seeds. ▪ 6% for cotton ▪ 4% and 6% for tea in western and central regions respectively.	30
Small and large scale farmers in high risk, disaster prone areas		10%	80
POULTRY			
Small scale	500 – 2,000	5%	50
Large scale	>2,000	5%	30
CATTLE			
Small scale	1 - 30	▪ Dairy cattle — 5% ▪ Exotic beef — 4% ▪ Local cattle — 3.5%	50
Large scale	>30		30
PIGS			
Small scale	1 – 50	6%	50
Large scale	>50	6%	30
FISH			
Large scale		6%	30

Source: Insurance Regulatory Authority (2017) and Agro Consortium UAIS Brochure (2018)

Table 8: **Trends in approved government subsidies (for payment of basic premiums)**

	FY 2016/17	FY 2017/18	FY 2018/19*[6]
Approved premium subsidies (billion UGX)	5	5	5
Actual premium subsidies paid by GoU for farmers (billion UGX)	0.69	5.01	0.68
Share of Subsidy absorbed	13.8%	100.2%	13.6%

Source: MoFPED (2019), FY2018/19 Quarter 1 UAIS Progress Report

1.3.2 Implementation progress

Premium subsidy allocation and utilisation

Since FY2016/17, Government allocates UGX 5 billion annually, to cater for the premium subsidy. Table 8 shows the relationship between subsidy allocation and utilisation. It is noted that during FY2016/17, about 14 percent of the subsidy allocated was used to pay premiums; the low subsidy absorption then was due to the low sum insured[2] – the UAIS had just been launched and few farmers were insured. However, during FY2017/18, the subsidy allocated was fully utilised following a remarkable increase in number of insured farmers and hence, the total sum insured. Given that the sum insured has continued to grow over the years (see Tables 9 and 10), it is highly likely that the subsidy allocation for FY2018/19 will be exhausted before the end of the financial year.

The UAIS outreach (insured farmers and enterprises)

The number of insured farmers had increased to 68,361, as at 30th September 2018 from 5,800 as at the end of FY2016/17. As shown in Table 9, the western and eastern

Table 9: **Regional distribution of UAIS-subsidised farmers**

	Central	Eastern	Northern	Western	National
Number of farmers insured under the UAIS as at September 30, 2018	17,886	20,315	7,088	23,072	68,361
UAIS insured farmers as a percentage of the population of subsistence farmers	3.2%	0.9%	0.5%	1.5%	1.2%
Share of UAIS insured farmers	26.2%	29.7%	10.4%	33.8%	100.0%
Population of subsistence farmers in FY 2016/17 (millions)	0.560	2.364	1.427	1.563	5.914

Sources: 2018 UBOS Statistical Abstract and MoFPED (2019), FY2018/19 Quarter 1 UAIS Progress Report

regions account for the highest shares of the total number of insured farmers under the UAIS. However, the regional disparities in number of insured farmers do not necessarily reflect huge inequality in subsidy distribution because of the differences in the populations of subsistence farmers. Although the western region has the highest number of UAIS subsidised farmers, they account for only 1.5 percent of the population of subsistence farmers in that region. Similarly, while the eastern region ranks second in the number of UAIS subsidised farmers, these form less than one percent (0.9%) of the population of subsistence farmers in that region.

Apparently, the central region has the highest percentage of farmers with the UAIS subsidy, The number of insured farmers forms 3.2 percent of the population of subsistence farmers in that region, On the other hand, the Northern region has comparatively fewer UAIS subsidised farmers since the number of insured farmers in the north translates to 0.5 percent of the population of subsistence farmers. From the foregoing, there is need to balance the distribution of the UAIS subsidy by taking into consideration the population of farmers in each region. Specifically, the northern region needs to be prioritised during the future roll-out of the UAIS.

Almost all (99.9%) insured farmers are insured for crops; majority of these (over 83%) are engaged in mixed cropping. The latter may be explained by the fact that smallholders have limited land holding (less than five acres). Hence they establish multiple enterprises on the available land to meet some of their food needs. Mixed cropping is also a strategy to mitigate against the likely effects of agricultural risks and uncertainties. Maize (mono-cropped) is the second most commonly insured enterprise, accounting for 13 percent of all insured crop farmers. Other insured crops include: rice, coffee, oil seeds, beans, horticulture, fruit trees, bananas, cassava, potatoes and cotton. On the side of livestock, the four most commonly insured enterprises are layers, broilers, dairy cattle and exotic beef cattle. Their shares of insured farmers are 21.6 percent for layers, 21.6 percent for broilers, 18.2 percent for dairy cattle and 18.2 percent for exotic beef cattle.

Value of insured crops/animals

Mixed cropping accounts for 93 percent of the total value[3] of insured crops, followed by rice monocrop (4.7 percent)

Table 10: **Value of insured crops/animals disaggregated by region**

Region	Sum insured (UGX billions)		% Growth	Shares of value/sum insured	
	FY 2017/18 Quarter 4	FY2018/19 Quarter 1		2017/18 Quarter 4	2018/19 Quarter 1
Central	144.4	150.8	4.4%	39.5%	38.9%
Eastern	45.1	47.5	5.3%	12.4%	12.3%
Northern	30.7	40.6	32.4%	8.4%	10.5%
Western	145.1	148.4	2.3%	39.7%	38.3%
National	365.3	387.3	6.0%	100.0%	100.0%

Source: MoFPED (2019), FY2018/19 Quarter 1 UAIS Progress Report

Table 11: **Value insured disaggregated by insurance product**

Insurance product	Value insured (UGX billions)		Growth (%)	Share of value insured (%)	
	2017/18 Quarter 4	2018/19 Quarter 1		2017/18 Quarter 4	2018/19 Quarter 1
Aquaculture Insurance	1.1	1.4	26.9	0.3	0.4
Area Yield Index Insurance	1.5	1.5	0.0	0.4	0.4
Crop Weather Index Insurance	2.3	11.2	381.0	0.6	2.9
Livestock Insurance	0.3	0.6	98.5	0.1	0.2
Multi-peril Crop Insurance	328.3	337.5	2.8	89.9	87.1
Poultry Insurance	31.7	35.0	10.6	8.7	9.0
All products	365.3	387.3	6.0	100.0	100.0

Source: MoFPED (2019), FY2018/19 Quarter 1 UAIS Progress Report

and maize monocrop (1.3 percent). On the livestock side, layers account for about 70 percent, broilers 16.4 percent and hatchery 9.7 percent; thus, poultry enterprises account for the bulk (96 percent) of the sum insured under the livestock category. The findings underscore the need to balance insurance coverage across all priority and strategic agricultural commodities.

Table 10 disaggregates values of insured enterprises by region, and disparities in performance are observed. Between the fourth quarter of FY 2017/18 and the first quarter of FY 2018/19, the value of insured crops/animals grew at an average rate of six percent. The growth rate was highest in the northern region (over 32%), largely attributable to the increased training and sensitisation campaigns that were carried out in this region. Therefore, as GoU rolls out the UAIS, continued large-scale training and sensitisation will be required.

The central region and the western region account for the largest shares of the insured value; about 39 percent and 38.3 percent respectively for the first quarter of FY2018/19. The eastern region, despite having the second largest share of insured farmers performs poorly in terms of value insured. This means that the values of enterprises insured by individual farmers in the eastern region are relatively low compared to other regions. The northern region lags behind all the other regions both in numbers of insured farmers and value insured. Therefore, during the UAIS roll out, efforts should be geared towards closing the current regional inequalities in insurance coverage.

Table 11 shows that based on value insured, multi-peril crop insurance is the most commonly purchased UAIS product, accounting for 87 percent of value insured in FY2018/19 Quarter 1. This is explained by the fact that crop agriculture is faced with multiple risks (such as pests and diseases, drought and windstorms) which are covered under the multi-peril insurance—is more comprehensive than the other types of insurance products. However, there has been a reduction in value insured under multi-peril insurance by 2.7 percentage points from the value of FY2017/18 Quarter 4. This is because farmers are increasingly embracing crop weather index insurance. Aquaculture and livestock insurance are the least purchased products perhaps because there are fewer farmers engaged in these enterprises compared to crop farming.

UAIS claims pay-outs

In case of loss, insured farmers make claims to the Agro Consortium. Table 12 presents the total and paid claims as at September 30, 2018, disaggregated by insurance product.

Multi-peril crop insurance accounts for more than half (58%) of the total claims. This could be attributed to the fact that incurred losses are usually due to multiple risks, and multi-peril crop insurance is the most purchased product with respect to value insured. In terms of

Table 12: **UAIS claims as at end of FY2018/19 first quarter**

Insurance Product	Total Claims		Claims Paid	
	Claim amount (UGX millions)	Share of claim Amount %	Claim paid (UGX millions)	Share of total claim %
Multi-Peril Crop Insurance	2,358.1	58.1	1,848.0	78.4%
Poultry Insurance	1,371.2	33.8%	1.5	0.1%
Area Yield Index	272.1	6.7%	272.1	100.0%
Crop Weather Index Insurance	37.1	0.9%	19.6	52.7%
Aquaculture Insurance	18.2	0.4%	0.0	0.0%
Livestock Insurance	4.0	0.1%	0.0	0.0%
All Insurance Products	4,060.7	100.0%	2,141.3	52.7%

Source: MoFPED (2019), FY2018/19 Quarter 1 UAIS Progress Report

claims settlement, and as of September 30, 2018, 52.7 percent of the total claims had been paid to the affected insured farmers. Area Yield Index had the highest claims settlement (100%); while only 78.4 percent and 52.7 percent of Multi-peril Crop Insurance claims and Crop Weather Index Insurance claims, respectively were paid. None of the aquaculture and livestock insurance claims had been settled yet.

From the findings presented in Table 12, we can conclude that the UAIS is indeed compensating insured farmers in events of loss. The outstanding claims are in part explained by the fact that settlement of claims under the UAIS takes place within 3 to 6 weeks from the time an insured farmer presents a claim to Agro Consortium.

1.3.3 Challenges and opportunities in implementing the UAIS

Despite the achievements documented in Section 2, implementation of the UAIS faces several challenges. The key ones according to the key informant interviews with Agro Consortium and NUCAFE are; limited awareness and sensitisation; limited staff with the required technical competence to adequately assess the risks facing farmers and advising them accordingly; high taxes on insurance products (VAT and stamp duty); limited local capacity to collect adequate risk and loss assessment data; and the constant premium subsidy allocated by GoU despite increasing numbers of insured farmers and value insured.

a) **Limited awareness and sensitisation about the Scheme*:*** Most farmers are not aware of the UAIS and how it works. Current funding from Government is earmarked for payment of subsidies and no budget for undertaking awareness activities has been provided for. However, aBi Trust, has greatly contributed to addressing this challenge through the generation and dissemination of brochures on the UAIS programme and running local adverts about the UAIS across the country. The brochure which has been translated into some local languages (namely, Luganda, Luo and Runyakitara), contains information about all the insurance products available under the Scheme. Farmer and agri-business organisations need to become more involved not only in dissemination of information on the UAIS but also to encourage farmers to prepare to pay their full insurance premiums in the future. Options for small contributions to future insurance needs should be explored by MoFPED with insurance companies so that farmers save collectively in preparation for future insurance cover;

b) **Inadequate qualified staff*:*** There are few technical personnel to assess and quantify actual and potential losses. This increases the cost of operations since the cost of facilitating the technical staff who assess loss incurred by the insured farmers is borne by the implementer (Agro Consortium). This challenge could be solved

by either training agricultural extension staff or staff of Farmer Organisations to undertake the assessments. While extension staff may be cheaper to utilise, they may not be as efficient as FO staff, who are more closely supervised by FO managers. Furthermore, under the FO option, the organisation could top up their staff members pay based on the numbers and how well the assessment has been done. The Agro Consortium has already embarked on building the capacity of agricultural extension staff to assess risks and guide farmers but the FO option, should for quality and sustainability, be explored .

c) **Taxes:** There are three types of taxes imposed on insurance products: (i) Stamp Duty of UGX. 35,000; (ii) Training Levy (0.5 percent of the basic premium); and (iii) VAT (18 percent of the basic premium and the training levy). These taxes and levies make insurance products expensive, especially for the small scale farmers. The opportunity that exists is that the Agro Consortium allows farmers to enroll as a group for the UAIS such that the levies are shared among many farmers. Also, the Consortium is seeking (from the MoFPED) a VAT waiver or zero rating of insurance products, and reduction of stamp duty to UGX 5,000 for farmers. These efforts will make insurance products cheaper than they currently are, which might stimulate further demand.

d) **Limited local capacity to collect sufficient data:** The Agro Consortium uses satellite-based data to determine farmers' compensations in times of loss. The data is collected on a bi-weekly basis at sub-county level by Environmental Analysis and Remote Sensing (EARS), a remote-sensing firm based in the Netherlands. Unfortunately, the GoU agency (the Uganda National Meteorological Authority [UNMA]) which has the mandate to provide cost-effective and timely information on weather and climate, collects data at the regional and district levels —which is insufficient to effectively determine payouts. Reliance on a foreign firm for such critical data may not be sustainable because the partnership on which it is based, can end any time. There is need for GoU to strengthen UNMA's capacity (in terms of skilling the human resource and putting in place the necessary facilities) to take on the data collection role.

e) **Constant premium subsidy allocation:** The Agro Consortium predicts that the UGX. 5 billion premium subsidy allocated by GoU annually is likely to increasingly become inadequate and will run out before the end of the UAIS project life. This is because the number of farmers enrolling on the UAIS is increasing very fast and so are the values insured. While the UAIS target is to insure 100,000 farmers by FY 2020/21, already at the midpoint in implementation, over 68.4 percent of the target has already been achieved (68,361 farmers are insured). Early plans need to be made for UAIS to be mainstreamed into private insurance companies. Possible policy options need to be explored and gradual 'weaning' of some of the more able beneficiaries off the insurance subsidy need to start before the project ends.

1.3.4 Lessons learnt

For the period the UAIS has been implemented, the Agro Consortium and other co-implementers like the National Union of Coffee Agribusinesses and Farm Enterprises (NUCAFE)[4] have understood the factors that drive uptake of agriculture insurance products. According to the key informant interviews with Agro Consortium and NUCAFE, these include: assured access to output markets, flexibility in premium payment terms, continuous awareness creation and sensitisation, review of insurance products, group insurance cover, and leveraging good partnerships.

a) **Access to markets:** Linking farmers to output markets can stimulate the uptake of insurance products. This has been witnessed with one of

the UAIS products that was specifically designed by Agro Consortium for coffee, the coffee drought index insurance. This particular insurance product is implemented by NUCAFE which also facilitates farmers to market coffee. NUCAFE buys coffee from its members (farmer groups) and exports it on their behalf. Additionally, NUCAFE has a coffee processing facility that provides coffee processing services to its members, and a market for the processed coffee. The presence of an assured coffee market has encouraged farmers to insure their coffee farms against drought.

b) **Flexible premium payment terms:** Flexibility in payment of premiums (e.g. insuring farmers but allowing them to pay premium charges at the time of marketing) can enhance insurance uptake. However, this mostly works best for well-developed agricultural value chains. For example, in the case of the coffee drought index insurance, NUCAFE allows insured farmers to pay premium at the time of marketing. Since NUCAFE is the buyer of the coffee, it deducts the premium when effecting farmers' payments.

c) **Awareness creation and sensitisation:** Awareness creation is the key for the uptake of insurance products. It helps farmers to become aware of the existence of different products and enables them to appreciate the benefits of being insured (e.g. de-risking their farms and becoming more credit worthy, stable incomes and food security), and hence prompts them to take action. Indeed, the Agro Consortium largely attributes the increase in the proportion of the national total of insured farmers operating in the northern region (from 8 percent in FY2017/18 quarter 4 to 10 percent in FY2018/19 quarter 1) to the series of sensitisation workshops held in that region.

d) **Insurance product design reviews:** Specifics of every insurance product should be reviewed periodically and amended to better serve farmers' interests. For example, premium for the coffee drought index insurance is paid for the main season, yet, farmers have expressed preference to pay for the entire year. Thus, the Agro Consortium should consider reviewing the specifics of all the available insurance products periodically, as one of the strategies of increasing demand.

e) **Group insurance cover:** The cost of insurance policies can be minimised when farmers seek insurance as a group since by so doing the stamp duty is divided among members of the group. Therefore, MAAIF as one of the partners should mobilise farmers to form groups, and strengthen the existing farmers' groups to enhance participation in the UAIS.

f) **Leveraging beneficial partnerships:** The Agro Consortium requires real-time data to assess loss and determine farmers' compensation. Through its partnership with EARS, the Agro Consortium receives sufficient satellite-based data covering a wide geographical area. Currently, UNMA has limited technical capacity to collect the requisite loss assessment data, and besides, the costs involved would be high—the Ago Consortium would then pass such operational costs to farmers in form of increased premiums. Therefore, working together with partners of value helps to reduce the cost of insurance products.

1.3.5 Conclusion

From the foregoing, we conclude that there is noticeable progress in implementing the UAIS. Key progress indicators include; (i) Government has committedly provided UGX. 5 billion for payment of premium subsidies annually since FY 2016/17; (ii) the number of insured farmers has remarkably increased from 5,800 in FY 2016/17 to 68,361 farmers as at 30th September 2018; (iii) the value insured has grown across all regions; and (iv) the Agro Consortium

is settling claims.

However, there are some questions that have not been asked and therefore no thought given yet to possible answers. First is the issue of the future of the UAIS beyond the project period. Even if a second phase was to be instituted, it would be meaningful to introduce features that encourage farmers to make savings for insurance long before the losses occur, since they now appreciate the role of insurance. UAIS has provided lessons that can form the basis for policy proposals for agricultural insurance in general. Such policy proposals would help embed agricultural insurance into agricultural sector policies and strategies. The issue of disparities in uptake of agricultural insurance (i.e. the northern region lagging behind other regions) and the low utilisation of some of the products under UAIS is an indicator of the need to pay closer attention to the design of future insurance initiatives. Agricultural insurance in Uganda requires more research to be done to because product failure and user exclusion might be due to reasons far deeper than lack of awareness and regional proximities.

When one examines the challenges to agricultural insurance discussed in this article, it is clear that the issues affecting the UAIS are not peculiar to this scheme only but they also affect other insurance products – in essence, they are systemic. Therefore treating the challenges as if they affect only the UAIS means that the same challenges will remain for other insurance products. The feasible option is to treat the challenges as affecting the insurance sub-sector, and the solutions should be for the subsector or the sector. In fact, when the challenges are looked at collectively (limited awareness/sensitisation and inadequate qualified (insurance) staff, insufficient data, high taxation, poor access to markets by clients, poor products (inflexible, not reviewed regularly), lack of leverage of partnership) - the discussion could relate to agricultural finance as a whole.

The UAIS demonstrates that proactive action by government can spur uptake of financial products. However a condusive policy framework is needed to address the challenges across the sector. Addressing the challenges to UAIS therefore is only part of the action needed to increase access to financial services. The challenges should be looked at as sector challenges and the appropriate policy designed to address them.

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Endnotes

2 Sum insured is a term used to mean the value of crops or livestock that a farmer has insured. It is the basis upon which premium charges are computed.

3 The Agro Consortium determines the value of the crops to be insured using the formula: Value/Sum insured (UGX) = Area under a given crop (acres) × Usual crop yield (tons per acre) × Estimated Market Value of Harvest

4 NUCAFE in partnership with Agro Consortium piloted the coffee drought index insurance in 2016/17 to help coffee farmers cope with drought risks.

1.4 THE IMPORTANCE OF AN AGRICULTURAL FINANCE POLICY FOR UGANDA

Ezra Munyambonera[1]

1.4.1 Introduction

The agricultural sector continues to play a critical role in Uganda's development. The sector employs 65 percent of Uganda's labour force and at same time accounts for 24 percent of gross domestic product (GDP) as well as 40 percent of export earnings (UBOS, 2019). The sector's contribution to GDP has marginally changed during the past 10 years implying that agriculture is neither growing nor transforming significantly.

To achieve its full potential, the sector requires significant investments by different stakeholders (i.e. farmers, agricultural input suppliers, processors, traders, storage firms, exporters, and distributors) along the different stages of the value chain. However, agricultural finance which would inevitably support these investments, is costly, inadequate, inaccessible and inequitably distributed among the key value chain players especially at production (MoFPED (2017). To realise the required level of agricultural finance investment, there is a need for an appropriate agricultural finance policy to address the financing challenges that have continued to impede agricultural transformation.

Despite the efforts and the sizable amounts of public funds invested in agricultural financing since 1990s and 2000s, sufficient funds have not been allocated to important value chain activities—particularly to smallholder farmers and small and medium agro-enterprises (Agricultural Finance Year Book, 2008; Munyambonera *et. al*., 2013). Notwithstanding the inadequate public financing, access to credit by farmers could also have been affected by lack effective legal and institutional framework for Tier-4 microfinance institutions whose products could be easier to tailor to the needs of farmers compared to those of commercial banks.

While financial institutions could play a critical role in financing the commercialisation of agriculture, lending by formal financial institutions for agricultural and related activities has continued to stagnate below or at a maximum of 10 percent (Finscope III (2013), Finscope IV (2018), and the BOU Financial Sector Performance Report (2018)).

The key factors, mentioned in the above reports, that continue to constrain access to credit for agriculture and related activities include the high cost of finance and lack of security, among others. This in agreement with data from the BOU (2018) which shows that the proportion of private sector credit to agriculture has, in real terms, increased by only 2 percent (from 10.3 percent in 2016 to about 12.3 percent in 2018). However significant improvement has been achieved in the absolute values that have risen from UGX 1.20 trillion (2016) to UGX 1.65 trillion (2018). In addition, there are institutional challenges that continue to affect the level of mobilisation and flow of funds to agriculture. Some of the challenges can be addressed by putting in place an effective agriculture finance policy and implementation mechanisms to support transformation of the sector. The policy would have to spell out how the public sector can leverage commercial banking in improving access to credit for agriculture.

This article provides the justification for developing an agricultural finance policy in Uganda. It draws upon the 2017 Synthesis Report of the Uganda agricultural finance landscape by Ministry of Finance Planning and Economic Development (MoFPED) and the Uganda Agribusiness Alliance (UAA).

1 Senior Research Fellow, Macroeconomics Department, EPRC (emunyambonera@eprcug.org)

1.4.2 Policy context to Uganda's agricultural finance

Since 1987, Uganda has been undertaking key policy reforms designed to create a more liberal market-oriented economy to reverse the previous inward-looking, import substitution development strategy. The government has implemented key policy measures to develop an effective, efficient and competitive financial system (Meyer *et. al*., 2004). The emerging demand for formal agricultural financial services during economic reforms has provided fertile ground for private sector responses to economic opportunities in agricultural and fisheries production and other associated downstream value-added activities. The success of these developments is crucial to the transformation and modernization of agriculture as an important contributor to poverty eradication.

While the formal financial system currently meets some of the demand for financial services for agricultural production and trading activities, access agricultural finance is generally limited to larger clients who can meet the collateral requirements for the loans and those who can present bankable project proposals. Even for larger clients, there is still unmet demand for less traditional financial products, such as long-term loans and price buffering mechanisms (Meyer *et. al*., 2004). Financing to agriculture continues to be less attractive to commercial banks due to perceived risky nature of the sector. Thus improving financing to the sector requires additional components (to credit) such as agricultural insurance and credit guarantee schemes to mitigate against the risks and this need could be addressed within an appropriate agricultural finance policy framework.

Bank of Uganda (BoU, 2018) indicates that formal financial institutions have increased from about 23 in 2010/11 to 33 in 2018/19, Tier-3 (deposit-taking microfinance) institutions increased from three to five. Tier-4 was comprised of semi-formal and informal financial institutions had about 1000 active SACCOs, about 300 non-deposit-taking MFI companies and more than 70,000 financial self-help groups in 2018. The increase has been accompanied by growth in asset and credit portfolios of the institutions, which was expected to result into improved access to formal financial services by small firms and households. However, this has not been the case as most microfinance institutions (MFIs) continue to focus their operations in urban and peri-urban areas. In addition, MFIs mostly provide short-term loans for trading and commerce, which may not, in the absence of an agricultural finance policy and strategy, adequately support agricultural transformation and modernisation.

At the regional level, an Agricultural Finance Policy would align Uganda to its commitments under the East African Community (EAC) Treaty. This treaty requires governments to invest in interventions that ensure sustainable production to enhance food security, increase incomes and contribute meaningfully to poverty reduction. The policy would comply with the 2006 Agricultural and Rural Development Policy for the East African Community (EAC) and the Agricultural and Rural Development Strategy for the EAC 2005-2033. The overall objective of the 2006 EAC Policy is to secure financial resources for investment in new interventions that ensure competitive agricultural production and productivity. The overall objective of the EAC Strategy on the other hand, is to improve the legal and institutional framework that improves access to financial services by the rural community and facilitates capacity building for resource mobilization and financial management.

At the national level, the Agricultural Finance Policy would be part of the broader efforts by Government towards the realisation of Uganda's Vision 2040, through six National Development Plans (NDPs), the second of which, is under implementation. The policy would complement other policies, acts, bills and regulations, which all aim to improve the productivity, efficiency, profitability, resilience and viability of value chain actors in Uganda's agricultural ecosystem.

1.4.3 The status of agricultural finance in Uganda

According to the Agricultural Finance Yearbooks—2011 to 2015,—lending to the agricultural sector has registered nominal growth. This is also consistent with BOU (2018) data that shows that overall, commercial bank credit to agriculture has steadily increased from about 6.7 percent in 2011 to 12.1 percent in 2018 (Table 13 & Figure 6). In nominal terms, agricultural lending increased by 30 percent in 2011 from UGX 518.9 billion to UGX 709.2 billion in 2013, by 60 percent from UGX 709.2 billion (2013) to UGX 1,168.6 billion in 2015 and by 30 percent between 2015 and 2018 (from UGX 1,168.6 billion to 1,858 billion). Some of the probable reasons for the increase in the volumes of agricultural lending include an increase in the number of financial institutions lending to agriculture, as well as increases in the size of agricultural production acreage (MoFPED, 2017). Prior to 2004, the increase was attributed to increase in lending for agricultural marketing. However from 2004 onwards, the proportion of lending for agricultural production and processing has overtaken lending to agricultural marketing activities. It should also be noted that the positive growth trend in agricultural lending registered from 2011 to 2015, stagnated and eventually declined by about 10 percent in the period 2016 to 2017.

Lack of a national policy and strategy for financing agriculture. The lack of an appropriate policy has resulted into poor coordination, implementation, and response to agricultural finance needs. Current agricultural financing legislation and regulations in Uganda are not economically rational for stimulating private sector finance inflows into the agricultural sector. This inadequate response is due to; (i) lack of an agricultural finance policy; (ii) financial institution non-responsiveness; (iii) weak technical capacity; (iv) weak user education and protection; (v) poor risk management along the agricultural value chain; and (vi) limited accessibility and affordability of agricultural finance products and services (MoFPED, 2017). There is compelling evidence that even the activities of Government-owned financial institutions have not been rationalised to address market failure risks in the financing of agriculture. Despite some efforts to support agricultural finance skills improvement and product development, more needs to be done. These issues and many more would have been better articulated and addressed in a broader agricultural finance policy.

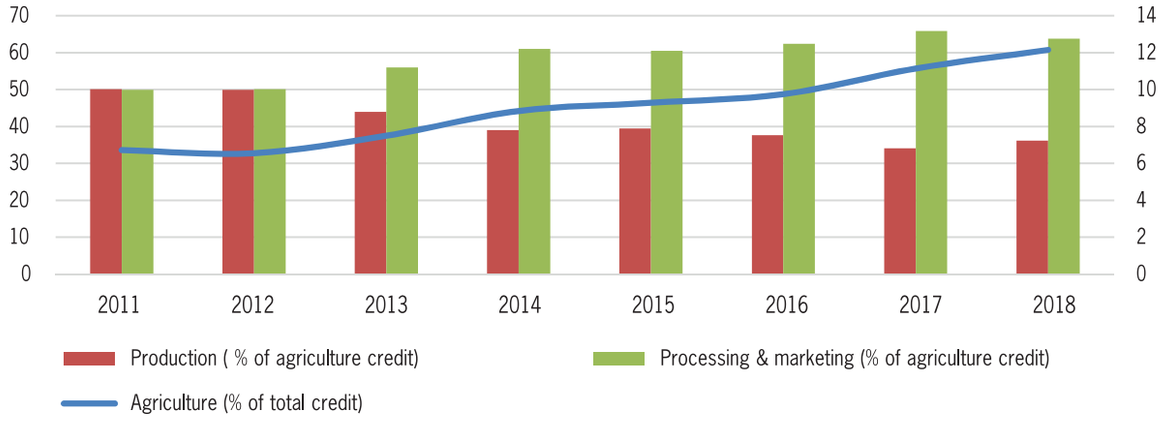
The demand side of agricultural finance. This constitutes input suppliers, farmers, buyers, processors, among others. MoFPED (2017) shows that little preparation by borrowers has led financial institutions especially commercial banks to doubt their reliability. This negatively affects their capacity to repay and intention

Table 13: **Commercial bank credit to agricultural sector (UGX billion)**

Sector/Activity	2011	2012	2013	2014	2015	2016	2017	2018
Agriculture	518.9	570.6	709.2	936.2	1,168.6	1, 896.0	1,560.8	1,858.4
Production	260.2	284.8	311.9	365.6	461.2	485.0	532.7	673.3
Farming	226.4	227.2	248.5	299.2	398.0	424.8	464.8	620.4
Fishing	156	225	223	265	200	168	159	79
Forestry	16	37	23	13	12	22	17	14
Other	167	313	388	386	420	412	504	435
Processing and Marketing	2,587	285.8	397.3	570.6	707.4	804.6	1,028.0	1,185.1
Marketing	116.2	1,266	140.6	1,947	226.2	2,668	254.9	289.0
Processing	142.5	1,592	256.8	375.9	481.2	537.8	773.2	896.1
Agriculture (% of total credit)	673.0	656.0	751.0	885.0	929.0	976.0	1,115.0	1,216.0

Source: BOU (2018)

Figure 6. **Variation and trends in agricultural lending by commercial banks**



Source: BOU (2018)

to use the borrowed funds as planned. The report further shows that even when institutions and funds are available, agriculture remains financially underserved due to ineffective demand (low bankability scores) primarily caused by; (i) high real and perceived risk levels and (ii) lack of business and investment preparedness by many agricultural enterprises. For agribusinesses to qualify for credit from commercial banks, companies need to have a documented track record and robust structures in place.

To attain this level, agricultural SMEs should be trained in business development and prepared to access formal financing. While (i) high interest rates are undoubtedly a serious issue, the other critical problems are; (ii) lack of 'bankable' agricultural enterprises; (iii) persistence of a very large informal sector; (iv) lack of records; (v) poor contracts enforcement; (vi); limited collateral substitution and guarantee options; (vii) weak focus of public investment on de-risking the sector and on enhancing market access; (viii) lack of flexibility in agricultural credit, and (ix) fiscal policy disincentives to agricultural credit. Often, many agri-SMEs do not differentiate between profit and working capital, and so prioritise short-term spending on education, housing or even luxury goods over re-investing in the business. Such characteristics render the demand for agriculture finance ineffective and hence negatively affects the depth, quality and absorption of financial services in the agricultural sector in Uganda.

The Supply side of agricultural finance

The supply side is largely composed of financial institutions which are not adequately supported to service the country's loose, smallholder-dominated agricultural sector. MoFPED's Synthesis Report of Uganda's Agricultural Finance Landscape (2017) shows that financial institutions are challenged by the high systemic risk levels in agricultural enterprises. This is compounded by inadequate skills in most financial institutions to conceptualize and assess these risks, rendering the institutions technically inadequate in developing and providing financial products that are appropriate for agricultural value chain activities. Other supply side challenges mainly relate to agricultural finance products provided including; financial products with inappropriate terms for financing agriculture; (ii) limited outreach of suitable products (which are mostly confined to informal providers); (iii) lack of linkage between formal and informal providers for suitable products to gain more funding and outreach; and (iv) lack of support to institutions so that they roll out those products suited to financing agricultural SMEs.

A review of Uganda's economy and financial sector (in the same report) revealed that while the macroeconomic indicators and performance were generally good, agricultural finance delivery was very poor. It was characterised by; (i) limited outreach to remote rural areas;

(ii) declining growth of agricultural lending and leasing; (iii) very limited insurance coverage (mostly from informal sources); (v) very limited capacity to mobilise catalytic and patient capital (needed for an emerging agricultural sector); and (vi) a non-operational warehousing receipt system and commodity exchange. To address these diverse issues requires an effective agricultural finance policy and regulatory frame work.

1.4.4 Areas of focus of agricultural finance policy in Uganda

This section focuses on the appropriate policy response to agricultural finance that should address the demand and supply sides. Where success was achieved, the expected policy recommendation would be to replicate the success stories so that a wider part of the population enjoys the success. In case of gaps or mismatches, the expected policy response should be measures to reduce the gap or to improve the match between demand and supply of agricultural finance. Some key policy areas that an effective agricultural finance policy should address are outlined below.

Agricultural finance policy successes

Uganda has, in the last two decades, had some success in providing a condusive macroeconomic environment for the delivery of agricultural finance. Macroeconomic stability has ensured; (i) containment of inflation to single digit levels – necessary for stable and affordable interest rates; (ii) positive (above 4.5 percent) GDP growth rates; as well as (iii) reasonable level of international reserves. On the financial sector side, the banking system; (i) improved and its legal and regulatory framework; (ii) most financial institutions have remained sound despite a few bank failures; (iii) significant growth in both formal (banks, CIs and MDIs) and informal financial service providers (SACCOs, VSLAs, etc.); (iv) new financial products and services including those for agriculture;

This existing condusive environment needs to continue as it fulfills basic needs for delivery of financial services. However the conditions are not sufficient for providing a firm foundation for transforming Uganda's agricultural finance landscape. Policies to improve and attract agricultural finance emanate from different sectors including agriculture, finance and the economy (IISD, 2015)[2]. The number of governmental players particularly in a smallholder-dominated agricultural sector make the development of agricultural finance markets even more complicated hence the need for a policy framework that articulates the joint objectives and roles of the different sector actors. Furthermore, the regulatory framework governing the financial sector requires government to provide enough openness and flexibility for the financial sector and effective regulation to control potential abuses by financial institutions. Overregulation can present major problems for flexibility and innovation in finance. Boosting opportunities in agricultural finance therefore requires an effective regulatory framework and a coherent strategy that match the sectors´ needs in improving financial resource allocation/ financial intermediation (FAO, 2013).

Access and utilisation of financial services has mainly been possible for medium and large scale agricultural enterprises, particularly those operating at the post-harvest and marketing stages of the agricultural value chains. These enterprises have the capacity to overcome the main agricultural risk areas by having; (i) in-house extension/production staff (not relying on public extension services); (ii) economies of scale (through large scale production augmented by outgrowers or smallholder commodity suppliers; (iii) conventional collateral (land and buildings) that banks require; (iv) capacity to acquire insurance cover (either separately or within loan products); and (v) the requisite human, equipment capacity to successfully utilise financial services (MoFPED, 2017).

Agricultural finance policy – the need

According to the World Bank, a regulatory environment that supports the development of agricultural finance in emerging markets requires adjustments in the overall finance sector regulatory framework (World Bank, 2009). First, there should be provision for an assessment of

the existing legal framework to establish the challenges and constraints to agricultural finance. This assessment should also include learning from experiences of other developing countries, where laws and regulations have been changed to accommodate the special financing needs of agricultural enterprises.

An agricultural finance policy that aims to enable smallholders and other small scale value chain actors to access financial services should therefore address the issues that have kept them excluded from access vide; (i) weaknesses in the public extension services; (ii) organising smallholders into units that have economies of scale and can supply large quantities of commodities; (iii) how non- conventional collateral substitutes can be made more attractive and available to lenders (e.g. chattels registry, credit guarantees, etc.); (iv) more enterprises can access government's insurance initiative UAIS and eventually fully pay their premiums; and (v) the requisite human, equipment capacity to successfully utilise financial services (MoFPED, 2017). In the best of circumstances, emerging agri-SMEs require finance alongside expertise in managing the expanding enterprise and this need implies that issues affecting the type of equity financing and leasing suited to the country must be well researched and addressed.

However, success in financing large scale agricultural enterprises may also remain limited because many large enterprises rely on smallholder suppliers to attain scale and profitable levels of operation. Policy interventions must therefore be more fundamental to ensure that; (i) more of the medium and large scale agricultural enterprises can benefit from existing sources of finance; (ii) agricultural enterprises have access to a wider range of financial products (long term finance, leasing, equity finance and warehousing receipt system) that also cater for capital investments and the transformation of small into the medium and large scale agricultural enterprises; and (iii) large scale enterprises are enabled to financially intermediate between financial institutions and their suppliers/out growers.

The above needs require extensive review not only of financial sector law and regulations but also agricultural and agro-industry laws review. Financial sector legal review should encompass supervisory concerns like; risk assessment for collateral substitutes and loan rescheduling; the use of credit guarantees and supportive legislation for equity and other forms of finance (e.g. Islamic finance); assessing risk concentration along agricultural value chains (rather than assuming the same risk profile for production, marketing, processing stages). All this however should be done within acceptable prudential norms (MoFPED, 2017).

Policy and the cost of finance (interest rates)

There are many arguments on why interest rates in Uganda have remained high. These include; (i) poor portfolio performance; (ii) high cost of delivery and (iii) riskiness of financed activities, particularly agriculture. One the other hand, the single factor that has been consistent in the 'high interest rate' question has been the growing high levels of government borrowing from the domestic market especially commercial banks (BOU, 2018). Government domestic borrowing through treasury bills and bonds has increased more than fivefold in a period of 10 years. Specifically, government borrowing increased UGX 1.9 trillion in 2006/7 to UGX 10.9 trillion in by 2015/2016. Indeed, since 2010/2011, a double-digit rate of increase for bonds and bills has been maintained.

The policy measures to address agricultural finance must therefore consider macroeconomic conditions of the economy that hinder efforts to lower interest rates. The policy issues include; (i) government's recognition of the problems that its domestic borrowing stance is causing to interest rate levels and the risk appetite of banks; (ii) a roadmap for reducing this borrowing so that lenders focus more on lending to the private sector; (iii) a strategy for improving savings mobilisation among entrepreneurs to minimise use of loan funds ; and (iv) sourcing funds to establish a Catalytic Fund and/or a risk sharing facility that can support the establishment and start-up phases where interest rates for many agricultural enterprises

remain above expected rate of return.

Policy and skilling for agricultural transformation

Both the demand and supply sides of the agricultural finance 'equation' need to be addressed in terms of skilling. Demand side skilling has to address enterprise selection, business planning and management, record keeping, and loan management and use. These skills may vary along the agricultural value chain. For example the skills needed for production are very different from those at post-harvest. The business skills set needed for successful market entry have little connection with the type of production-focused extension service that Uganda operates. The focus here is to understand where the market is, what volume and quality standards are required as well as when and where to deliver profitably.

Inadequacies in demand-side skilling have been exacerbated by a generally weak extension service that also lacks a strong agribusiness development component. The lack of appropriate institutional structures along value chains continues to be a major hindrance as subsistence producers and marketers continue to operate below the capacity required for a profit-making rate of return. Now that financial services' strengthening, is the responsibility of the Financial Services Department of MoFPED (the home for agriculture finance in Uganda), there must be a deliberate policy move to provide skilling for institutional building along value chains. MoFPED neither has the skills nor the staff network/department at local government level. MoFPED must therefore find mechanisms to coordinate such efforts through the ministries responsible for group formation, cooperatives development, trade and industry.

On the supply side also has its value chain – from the bank board level through the manager to the frontline agricultural credit staff. Skills weaknesses exist at all these levels due to limited understanding of agricultural enterprises, household characteristics, agricultural loan appraisal techniques and profitability and competiveness analysis of agricultural enterprises. Changes must be made in the banks (or MDIs) policy on agricultural lending by board members who have been trained to appreciate agricultures special challenges. The managers must review loan appraisal methodologies and management processes to accommodate the changing risk profile along value chains. This raises issues of finding a competent trainer and the associated cost in training not only staff but the managers and board as well.

An effective agricultural finance policy should factor in training and accrediting extension workers in agricultural finance, developing a curriculum for agricultural finance for the financial institutions and modules on agricultural finance in institutions of higher learning.

Policy issues on financial products and services

MoFPED (2017) shows that there are substantial levels of inadequacy and inappropriateness of agricultural finance products and services being offered by providers of agricultural finance. High interest rates and savings-liability mismatch are the basic factors blamed for making it difficult for institutions to deliver better financial products and services to agriculture. Other factors identified in the study include; (i) high value of collateral and guarantors' requirements (ii) unsuitable grace and repayment schedules, and (i) inadequate client training and explanation of loan terms and conditions.

These findings are consistent with other studies on factors that limit access to agricultural credit such as Munyambonera *et al.,* (2013). The study recommends ; (i) financing the different activities along the value chain with suitable products; (ii) allowing (or enabling) the use of collateral substitutes (like contracts, invoices, commodity stocks, guarantees etc.) instead of land and buildings; (iii) financiers hiring agronomists to complement other sources of extension/advisory and research services; (iv) providing insurance and related products for risk mitigation; and (v) using information technology (IT)/ digital means to reduce transaction costs and improve outreach.

The discussion in the previous section addresses the

issue of high interest rates. On savings-liability mismatch, an appropriate policy framework should provide for ; (i) government and private sector sourcing patient and catalytic funds to provide medium to long term loans; (ii) a deliberate national strategy to improve and increase savings mobilisation, especially those of a long term nature. Policy interventions to spur and support to financial institutions to develop new agricultural finance products include supporting; (i) development of a legal framework for collateral substitutes (like contracts, invoices, commodity stocks, guarantees etc.) and supporting institutions to start using them; (ii) innovations in information technology (IT)/ digital means that increase outreach but reduce transaction and monitoring costs for agricultural finance.

1.4.5 Conclusion and policy implications

The article demonstrates the importance of having an agricultural finance policy for Uganda. Given the importance of agriculture in Uganda's economy and the need to transform the sector, agricultural finance cannot be over-emphasised. While government has put in place various programmes aimed at financing agriculture since 1990s, an effective policy framework for agricultural finance is missing.

An effective agricultural finance policy would therefore address the institutional, regulatory, product, skills constraints, on the supply and demand sides that currently hinder access and usage of agricultural finance in Uganda. Such a policy, if developed and complemented with the appropriate changes to legislation, would result into; (i) effective inter-sectoral approach to de-risking of the agricultural sector; (iv) more agribusinesses becoming attractive to lenders and investors; (iii) increased uptake of a variety of agricultural credit, insurance leasing and equity finance products; (iv) increased financing of the sector by government–owned financial institutions (with each concentrating on a segment where they have a comparative advantage and/or creating mutually beneficial links between formal and informal agricultural finance providers) of the sector; and (vi) increased public and private support to innovations in agricultural finance

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Endnote

2 In the case of smallholders, in an effort to build the necessary economies of scale through bulking, the sectors responsible for group/ cooperative development, trade and industry also become relevant to agricultural finance.

1.5 WILL THE TIER-4 REGULATORY FRAMEWORK BOOST AGRICULTURAL FINANCE?

Andrew Obara[1]

Picture credit Andrew Obara

1.5.1 Background

For a long time, microfinance operations in Uganda were hardly regulated. When Bank of Uganda (BoU) realised that some microfinance institutions (MFIs) were dealing with considerable volumes of money both on their asset and liability sides of business, and some of their actions could easily infringe deposit taking prudential norms, BoU drafted proposals for regulating such institutions (1998). A protracted engagement with stakeholders culminated into the enactment of the Microfinance Deposit-taking Institutions (MDI) Act 2003. The Act covered only a handful of large, well-functioning MFIs and left thousands of MFIs unregulated. When Parliament passed the MDI Bill 2003, it instructed that a bill to regulate all the other MFIs be tabled before it within 12 months. This was the origin of the Tier 4 Microfinance Institutions and Money Lenders Act 2016, which was enacted thirteen years later. Based on the Act, Tier-4 MFIs cover: (i) SACCOs, (ii) non-deposit taking MFIs, (iii) self-help groups; and (iv) community-based MFIs.

This article makes an attempt at presenting the current and future importance, potential and impact of the Act on agricultural financing. The article discusses the; (i) current spread of Tier-4 financial institutions; (ii) structure/composition of Tier-4 financial sub-sector; (iii) products, services, operations conduct and performance of Tier-4 institutions.

1.5.2 Spread and characteristics of Tier-4 financial institutions

The last census of Tier 4 MFIs[2], was done in 2007. Though it did not provide the actual number of Tier 4 institutions, anecdotal estimates are fairly consistent within a range; about 4,000 registered SACCOs (75 percent of which are dormant or inactive); about 300 non-deposit-taking MFI companies including community based ones; and more than 70,000 financial self-help groups. Similar to the deposit-taking BOU regulated institutions (in Tiers 1, 2 and 3), most credit-only MFIs tend to be located around towns and trading centers, but by their operational methodologies, they reach into the rural areas. Credit-only MFIs are more concentrated in the central and western parts of the country, SACCOs are fairly common in all regions/ districts while the self-help groups (commonly referred to as Village Savings and Credit Associations-VSLAs or Community Savings and Credit Groups-CSCGs)

1 The Managing Director, FRIENDS Consult Ltd (aobara@friendsconsult.co.ug)

Table 14: **Common characteristics of Tier-4 MFIs**

Characteristic	NDMFIs	SACCOs	CMFIs	SHGs
Scope and Coverage	Throughout all the regions of the country, concentrated in the Central and West	At least 2 SACCOs in each sub county; in some cases up to 5.	In the localities where development/ welfare sponsoring organisations work	Very numerous, more than 70,000 countrywide
Capitalisation,	Often fairly well capitalized for the level of business they do, through grants and accumulated surpluses	Varying. A few good ones are very well capitalised, a significant number (about one third) modestly capitalised and a majority critically undercapitalised	Well capitalized in comparison to the business they do	Usually not capitalised. Funds are usually saved/ borrowed throughout the year and at the year-end, savings and loan proceeds are "shared out"
Savings	N/A	Varying. A few good ones have savings in billions of UGX, moderately good ones have savings in hundreds of millions of UGX while a majority have very low savings, often under UGX 50 million	N/A	Savings range from under one million to 10 million or more each year, usually shared out at year end and the group begin savings anew
Loan Amounts	Not restricted Normally up to UGX 5 million for each group member (group loans) and UGX 100 million or more for individual or institutional borrowers	Not restricted Employee based SACCOs generally have higher thresh holds like UGX 50 to 100 million Rural SACCOs generally lend small amounts of UGX 1 to 30 million with a few with higher thresholds. for individual or institutional borrowers	Small microloans, usually from a few hundred thousand to about UGX 10 million	Very small amounts, usually below UGX 1 million and only occasionally more
Sectors Financed	Trade, small scale production/agro-processing, primary agricultural production and occasionally services	Agriculture, agro-processing, primary agricultural production, small scale manufacturing, services, trade	Trade, small scale farming/ production, services	Mainly petty trade, occasionally primary agriculture and processing
Agricultural Finance in the Loan Portfolio	Modest, usually under 20%	Substantial especially for rural SACCOs, usually over 70%	Moderate, between 30% and 50%	Negligible for those around towns/ trading centres, significant for the rural ones (up to 60%)
Typical Number of Clients/ Users	500 to 5,000	200 to 10,000 for rural SACCOs, but up to 50,000 or more for employee based SACCOs	100 to 2,000	15 to 50

Source: FRIENDS Consult Ltd reports (2004 to 2019)

exist almost evenly in all regions, and seem to be more pronounced in the Northern and Eastern. Community based MFIs are rather sparsely distributed, and are mostly sponsored by community-based welfare organisations or NGOs.

By their nature and operations, the following are the commonly defining characteristics of the different categories of Tier-4 institutions – Table 14.[3]

1.5.3 The nature and business of Tier 4 MFIs

a) **Savings and credit cooperatives (SACCOs)**

SACCOs are registered by the Ministry of Trade, Industry and Cooperatives (MTIC), and regulated by either Uganda Microfinance Regulatory Authority (UMRA) or by MTIC depending on their age and maturity. Rural SACCOs are community-based while most of the urban and peri-urban ones are either employee or occupation-based. SACCOs are governed under the cooperative laws and principles.

As long as they transact business with their members who are also shareholders, their operational areas are in principle unlimited. But in real practice, their operations are limited by inability to provide services beyond defined geographical areas. A typical well-functioning SACCO has a gross savings portfolio of two or three times their loan portfolio. For those that are not well managed, their loan portfolio far exceeds the savings. The savings and loan portfolios vary significantly from as low as below UGX 10 million to UGX 5 billion or more.

In keeping with the cooperative principles, the business conduct and policies of SACCOs are largely set by the membership during the Annual General Meetings (AGMs), and compliance is enforced through the SACCO Committee or Board, which is often the top executive organ of the SACCOs. Every SACCO also has an Audit Committee and a Supervisory Committee, which jointly oversee management and report to the AGM. SACCOs which qualify according to UMRA licensing criteria are regulated by UMRA and all those that do not are regulated by MTIC. For a long time, there has been dissatisfaction with the way SACCOs were supervised and regulated, which in a significant part is a painful result of the collapse of the cooperative system that happened in the 1980s and the 1990s. From this, the cooperative sector is yet to fully recover.

SACCOs are common in rural areas and those that are member-initiated, without inducement or promises of funding from Government or its development partners, have shown signs of resilience while those formed to tap into external funds have either collapsed or been severely weakened. SACCOs perform best when people (without external pressures) get together and pool resources to provide financial services for members. The key financial products are basic savings and personal loans, and in some cases, time deposit services. On the loans side, SACCOs have developed sector or purpose-specific loan products – like agricultural, school fees, house improvement and solar equipment loans.

(b) **Non deposit -taking microfinance institutions (NDMFIs)**

These are credit-only MFI companies. The promoters/ owners of the NDMFIs are usually not the users of the financial services. They are typically registered as a company limited by shares or by guarantee (under the Companies Act), owned by international organizations or by a group of nationals, with some having NGO status. They lend out money from; own externally sourced or self-generated funds; as well as from borrowed wholesale funds. They do not take voluntary savings from their clients, though loans may be partly secured with compulsory savings. Clientele can range from a few hundreds to more than ten thousand per NDMFI.

The NDMFIs usually have either shareholders or trustees that constitute the AGM, and a Board of Directors that oversees management. The governance structure is similar to that of an ordinary, business company. All of these MFIs are supposed to be regulated by UMRA under the Tier-4 Microfinance Institutions & Money Lenders Act 2016. However, in practice, only those that have been licenced MFIs are regulated by UMRA.

NDMFIs have two major categories of loan products - group loans and individual loans. Their operations are usually limited by the size of their loan fund and the types of clients they target. They therefore typically offer micro loans to clientele within a 50 kilometre radius from their branch or service point.

NDMFIs promote rural outreach through two main means: locating their operations in upcountry townships/ trading centres and employing loan officers who travel deep into the rural area, to meet and serve clients

(c) **Community based microfinance institutions (CBMFIs)**

As the financial sector gets more integrated and sophisticated, CBMFIs) are becoming less common. They are usually locally registered organisations providing financial services in addition to other welfare needs

(health, literacy etc). Their governance and management structures are similar to those of NDMFIs, only that they are often more closely controlled by the parent organization or founders.

Although some are mature, most CBMFIs are small with low capitalisation, and most of them are likely to take time and effort to qualify for UMRA regulation. Like the NDMFIs, these also have group and individual loans for various purposes but unlike NDMFIs, they are limited both by the funds they have and by the boundaries of the communities in which they operate. CBMFIs are common in rural areas where the founding projects/ programmes work, but their future is less certain due the advent of mobile money and agency banking, which are pushing the frontiers of formal financial services far beyond the proximity of bank branches.

(d) **Self-help groups**

During the formulation of the Tier-4 MFIs and Money Lenders Act, many professionals in the microfinance industry did not think it was necessary to have self-help groups as a category of institutions included in the Act. The reason was that these are user-owned, managed and controlled, very small entities which thrive purely on close local connections rather than any kind of formality. A typical SHG has between 15 and 30 members (sometimes up to 50), does the business of joint savings and lending to members (transacted in weekly or fortnightly meetings), and keeps its increasing amounts of money in a safe box from January till December when the box is open, the money is shared in proportion to member-savings, and they wait to start again the next January.

Microfinance professionals including FRIENDS Consult and others, who work with programmes that support both SHGs and higher level MFIs, have however noted a trend. Despite being run by poor, often illiterate and semiliterate people, SHGs are far better managed and governed than the formal entities like SACCOs or NDMFIs. In addition, they have very limited operating costs, minimal risk of embezzlement and the amounts collected and accumulated funds are read out to all members at each of the regularly-held meetings. As such, every member is a 'watchdog' because of their savings and their close and inclusive participation in running of the SHG. Although they have had no regulatory oversight for a long time, they have few and exceptionally rare cases of funds being lost, and they do not make significant operational losses because they have almost no operating costs. This clean and transparent nature of SHGs, however, disintegrates when external funding (either from Government or any development partner) is injected into the SHG. In such a case, the primary interest of SHG members shifts from protecting their savings to getting a slice of the "free" money.

SHG financial products are generic and they include; regular savings and simple loans to members, usually of up to three months, but commonly for just one month. Remote rural areas which are hard-to-reach are fertile ground for such SHGs which spring up to fill the financial service vacuum.

1.5.4 TIER-4 Products, services and operations

Having explained the nature, products, services, governance and regulatory aspects of MFIs, we turn to matters of linkages between Tier 4 institutions to those of the other tiers (Tiers 1, 2 and 3).

Linkages with Tier 1, 2 and 3 Institutions

The linkage between Tier 4 MFIs and the higher tier financial institutions is inevitable. All Tier 4 organisations need a safe place to keep their money - a bank account. They also often borrow from institutions in the higher tiers for onward lending. Larger SACCOs and NDMFIs tend to have linkages with Tier 1 institutions while smaller SACCOs and some CMFIs have accounts with Tiers 2 and 3 institutions. Some DNMFIs and SACCOs also borrow from wholesale lenders like the Microfinance Support Centre Ltd (MSCL) and Stromme Microfinance Ltd. The opportunity for more Tier-4 institutions to forge mutually beneficial links (not

only bank accounts) has not been well explored. This is in spite of government putting in place Tier-2 and Tier-3 institutions that could improve (volume, terms) flow of funds from the upper tiers into Tier-4 institutions.

Linkages with input supply production and/or marketing organisations

Ideally, financial institutions as financing arms should have beneficial backward and forward linkages with the input production and marketing actors along the agricultural value chains they finance. In Uganda this is minimal compared to countries like Kenya that have robust cooperative systems. Though there have been fairly successful attempts by the Uganda Cooperative Alliance to establish such linkages through the Area Cooperative Enterprise (ACE) scheme, the importance of these links and their potential to support agricultural finance has remained largely unnoticed and untapped. The pockets of success of the ACE scheme have not been supported to encompass more SACCOs producer groups/organisations, input dealers and marketing agents. There is need for policy recognition of the importance of these linkages and implementation arrangements to support agency inter-sectoral coordination so that links between Tier-4 institutions and production/input/marketing actors are recognised in finance and agriculture policies as enablers to agricultural finance.

If done, Tier-4 institutions especially SACCOs and VSLAs could be linked to farmer groups/input dealers on one hand, and marketing cooperatives/companies on the other. A number of farmer groups would access finance from a SACCO (possibly their own) and the SACCO would be linked to a larger financial institution. On the other hand, the farmer group would also link to a marketing agency for quality control and bulk selling. The marketing agency would work with the SACCO to channel proceed from commodity sale ensuring that all loans due are deducted

1.5.5 Tier 4 regulation

Box 1: **Highlights of the Tier-4 Act**

The Act aims to;

- Establish the Uganda Microfinance Regulatory Authority, responsible for licensing, regulating, and supervising tier 4 microfinance institutions and moneylenders
- Provide for the licensing and management of tier 4 microfinance institutions
- Provide for management and control of money lending business
- Establish the SACCO Stabilization Fund
- Establish the SACCO Savings Protection Scheme
- Provide for a Central Financing Facility for SACCOs
- Provide for licensing of money lenders
- Provide for self-help groups and commodity microfinance
- Provide for receivership and liquidation of a tier 4 microfinance institution
- Repeal the Money Lenders Act, Cap. 273 and, for related matters.

The challenge ahead

UMRA has long term challenges arising from the highly ambitious expectation of regulating the "rest of the financial sector", meaning – all those not regulated by BOU. Of the more than 4,000 registered SACCOs, only about 1,000 are active, many of them limping precariously with a tilt on the wrong side. They are poorly governed, often poorly managed, prone to theft, poor in accounting and financial reporting, seldom audited in any meaningful way and lately, very vulnerable to political manoeuvres. There could be as many as 400 or more NDMFIs and CMFIs, some which suffer similar conditions. Then there are hundreds of money lenders all-over the country. Regulation of such a diverse and chaotic subsector is truly a tall order.

Pilots of industry-wide regulation of the microfinance sector have not been successful in other African countries. Efforts in the past years were met with several challenges in a number of African countries including Ghana, Sierra

Leone and Gambia. Although this does not mean UMRA will fail in its mandate, it is useful for all the interested stakeholders to be aware of the sources of critical challenges to mass regulation of MFIs;

i) The sheer cost of effectively regulation thousands of institutions spread countrywide is immense;
ii) Competent human resource needed to adequately cover all the institutions is not available. A regulatory authority would need one staff to cover 20 Tier-4 institutions, at most. To supervise just 2,000 SACCOs, 300 NDMFIs, 200 CMFIs and 500 moneylenders requires at least 150 well trained supervision professionals, and that is before the more than existing 80,000 SHGs are considered;
iii) The relative absence of supervisory/ regulatory skills for financial institutions in the country, and thus difficulty in getting experienced people to undertake the supervision duties effectively;
iv) Poor recording and reporting systems by the MFIs, which do not produce reliable and on-time information on performance;
v) Poor governance of most Tier 4 MFIs, many with board members who are incapable of effectively supervising management or to even propose actions for safe and sound operations;
vi) Political interference in enforcing existing regulations -especially regulations pertaining to the closure of none-performing SACCOs;
vii) Difficulty in identifying small MFIs in hard-to-reach areas, rendering onsite and offsite supervision difficult and expensive;
viii) Informality and semi-formality of operations of the very small community based MFIs and SHGs, rendering it difficult to use the regulatory tools on them;
ix) Inability of the MFIs or sponsors to meet regular annual audit costs, needed to generate more reliable and accepted MFI financial statements; and
x) Overall low budget allocation to UMRA in comparison to the tasks the Authority is expected to accomplish.

1.5.6 Future potential of tier 4 financial institutions

Appreciating the potential of Tier 4 MFIs requires understanding the problems and prospects they present to the regulatory authority (UMRA) and to the economy. Whereas predictive forecasts will almost always turn out inaccurate due to the swift industry and economic dynamics, some of these will most certainly happen;

- Mature Tier-4 institutions will for the first few years after licensing, feel the pinch of regulation (pre- and post- licensing costs, extra reporting, penalties, board and management changes, other costs of compliance), but these will later on be strengthened by regulation if supervision is effective;
- Errant institutions will be the *collateral damage* that sound Tier-4 regulation brings. While this will be hurtful to agribusiness finance in the short run (many rural MFIs are likely to fall victim), it will be very good in the long run in terms of provision of responsive, sustainable financial services for agriculture and other rural finance needs;
- Money lenders will become better organized, compliant and will eventually do very good business which is formal and attractive to external capital. Moneylenders will boost customer confidence and accelerate business growth within Tier-4.
- A well-ordered, well-regulated and supervised Tier-4 is likely to bring enormous growth contribution to the country, especially in the rural economy where agriculture and agribusiness are the dominant activities
- MFIs with poor governance and management will suffer poor growth, and many will die a natural death – a process of self-sanitization for the sector. Government efforts at sustaining such MFIs without addressing the fundamental flaws are only likely to pollute the Tier-4 market
- With Government's intention to expand the Area Cooperative Enterprise (ACE) model, regulation and supervision will be strengthened because of

better coordination of production and marketing with the financing aspects. .

1.5.7 Conclusion and policy implications

In conclusion, Tier-4 regulation has its benefits and costs. Whereas attempts at regulating all Tier-4 institutions is an unrealistic intention, if effective supervision is established for a good number of MFIs, a good foundation for growth and provision of more suitable financial services will have been set. Government of Uganda is not short of good, well written polices in most of the sectors the recurring challenge has been the professional and consistent implementation of these policies.

The policy implications worth considering are;

a) Government should allow UMRA autonomy to regulate the Tie- 4 sub- sector, including closure of MFIs that are persistently errant or those that pose a threat to their members. Short term political interests should not override the long term goal of making Tier 4 institutions a key driver of the expansion of agricultural and rural finance in Uganda;

b) Government and other funding programmes should mostly support Tier 4 in capacity building and product development. Improved capacity and products will enable Tier-4 institutions to mobilise more saving, achieve higher loan recovery levels and to attract investors and lenders. Any loan capital support should be considered an emergency or short term measure and should be designed to have very limited distortions in the management of the individual MFIs or the Tier-4 market as a whole;

c) Government's rural and agricultural finance policy and strategies should set out capacity building and product development criteria and standards to ensure prudent use of support provided to Tier-4 institutions. Such support should not only be based on need but on performance as evidenced by improved compliance with the law, financial sustainability as well as outreach;

d) Government should increase the pace of revival of the cooperative sector (production, marketing, financial) as an integrated engine of rural development through independent private sector owned entities and keep away from excessive control or use of cooperatives as politically-inspired structures to meet/enforce political agenda; and

e) Government should examine how it can maximise linkages between Tier 4 institutions and the financial sector on one hand. On the other, how Tier-4 institutions can be better linked to the actors in the productive sectors of the rural economy. Models such as India's Lead Bank-SHG and Agricultural Marketing Companies concepts, as well as the ACE model should be explored with the aim of linking Tier-4 institutions to government owned/supported institutions and programmes like ACF, UAIS and others.

Endnotes

2 The census was not conclusive

3 Abbreviations; NDMFIs – Non Deposit-taking Financial Institutions, SACCOs - Savings and Credit Cooperatives, Community MFIs, and SHGs – Self-Help Groups. Parameters are based on authors 20 year experience with MFIs.

2

CHAPTER

INNOVATIONS AND RESEARCH

2.1 INTRODUCING DIGITAL PAYMENTS IN AGRICULTURAL VALUE CHAINS TO DRIVE FINANCIAL INCLUSION IN UGANDA: LESSONS LEARNED AND IMPLICATIONS FOR THE SECTOR

Richard Ndahiro[1]

Picture credit: Richard Ndahiro, UNCDF Uganda/2018

2.1.1 Introduction

Agriculture is the most important income source for people in rural Uganda, yet most agricultural payments remain cash-based and many people remain unbanked (Better Than Cash Alliance, 2017). Through its Mobile Money for the Poor (MM4P) programme in Uganda, the UN Capital Development Fund (UNCDF) has focused on improving the financial lives of vulnerable population especially rural people since 2014. The digitisation of payments within the agricultural sector has been central to its efforts.

This article seeks to share the rationale of UNCDF in its approach to digitising agricultural value chains. The article provides key lessons learned and makes broad recommendations for digitalising the sector.

2.1.2 Rationale for digitising agricultural value chains

Digitising agricultural payments presents compelling benefits to value-chain actors. For agribusinesses, the digitisation of bulk payments offers improved efficiency, increased revenue, greater transparency and security, in addition to stronger business relationships (Chaintreau *et al,* 2018). For individuals, the digitisation of bulk payments provides time and cost savings, better security, efficient cash management, greater convenience and a financial identity (Lucini *et al,* 2016). The latter can then facilitate access to credit and insurance, in addition to digital solutions for health, education and employment, among others.

UNCDF sees the benefits of digitisation as including the opportunity to improve the financial inclusion of smallholder farmers as well as creating efficiencies for agribusinesses and other stakeholders. The benefits of financial inclusion are through lowering the financial barriers and allows vulnerable people to better manage household risks and plan for their future. With access to digital financial services (DFS), people can save, borrow and build a financial history, which in turn can provide them with better opportunities to transition out of informal economies (Cull *et al,* 2014). Since 2009, when DFS was launched in the country, Uganda has made substantial progress in financial inclusion, particularly in the rural

1 Digital Finance Plus Consultant, United Nations Capital Development Fund (richard.ndahiro@uncdf.org)

areas. According to the Global Financial Inclusion data by the World Bank, 58 percent of rural adults had an account at a financial institution or an account through Mobile Money (MM) up from 20 percent in 2011 (World Bank, 2017). The same data shows that only 55 percent of rural Ugandan adults said that they would be unable to come up with funds in the event of an emergency. It is against this backdrop that UNCDF set out to digitise payments in five agricultural value chains (Maize, Coffee, Tea, Seed oil, Diary) in Uganda.

2.1.3 The digitisation challenge

While the digitisation of agricultural value chains offers great potential to increase financial inclusion, many challenges exist for farmers, private-sector agribusinesses and DFS providers that ultimately impact the success of such digitisation efforts.

The literature shows that understanding beneficiaries is critical to digitising any payment type—digitisation efforts will fail if they do not effectively address real challenges and meet actual financial needs, behaviours and desires faced by the clients (Mattern and Tarazi, 2015). These challenges must be considered alongside the barriers to digitisation that are common in rural areas: low levels of literacy including digital literacy, and low levels of mobile phone ownership. The supply side of digital payments must also be assessed, including the payment infrastructure and access points at the last mile as well as the specific pain points or challenges that private-sector companies and DFS providers experience.

Aware of these knowledge gaps, UNCDF commissioned research in different agricultural value chains in order to improve understanding of the challenges facing different value-chain actors and stakeholders when it comes to digitisation. Specifically, UNCDF undertook primary research on smallholders, agribusinesses and other key beneficiaries such as traders, within the five selected agricultural value chains.

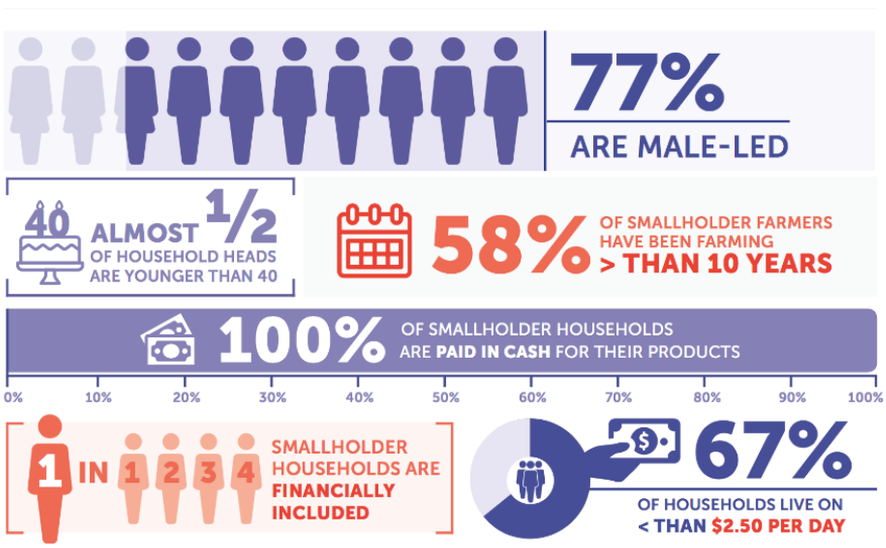
The highlights of the research, include:

Smallholder farmers

UNCDF identified the following challenges when it comes to digitising payments to smallholders:

- Low education levels
- Fluctuating income
- Formal financial exclusion and limited usage of available financial services
- Mobile phone ownership but mixed awareness and

Figure 7: **Smallholder households in Uganda: findings from CGAP**



Source: CGAP (2017)

usage of MM
- Price sensitivity and preference for cash

CGAP (2017) also undertook research that sheds additional light on Ugandan smallholders (Figure 7).

Private-sector agribusinesses

Understanding the challenges that private-sector agribusinesses face is an important gateway to digitising payments in the sector. Providing digital solutions that solve real challenges of the agri- business, increases the commitment of the latter to implement the solution. Working closely with key players in the selected agricultural value chains, UNCDF identified a series of problems that could be solved or improved through digitisation:

- Risk of cash theft or loss
- Lack of available cash
- Lost work time in running manual processes
- Limited digital records
- Lack of agricultural investment by smallholders (investment in improved seeds and other inputs)

DFS providers

Finally, as with agricultural and other private sector companies, DFS providers—whether mobile network operators (MNOs), banks or other players—confront the following challenges when digitising payments in rural areas:

- Limited infrastructure (roads, transportation, electricity)
- Few financial access points (e.g., agents and branches) and/or liquidity constraints
- Poor mobile network coverage in some remote areas
- High costs of mobile network expansion and maintenance
- Frequent network downtime

2.1.4 The UN capital development fund approach

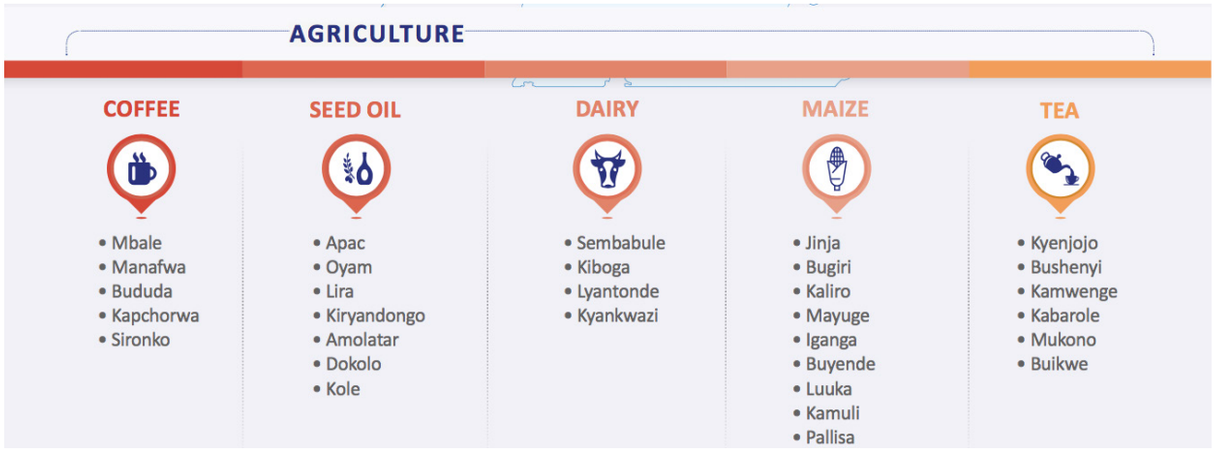
Figure 8: **Ecosystem development approach to digital financial services used by UNCDF**

Source: UNCDF, 2018

Given the wide array of challenges to digitising payments in Uganda, UNCDF developed an approach that considers the entire ecosystem during each phase of market development. As illustrated in Figure 8, this ecosystem includes Policy & Regulation, Infrastructure, Providers, Distribution, High-volume payments and Customers:

- **Policy & regulation** – Involves working with regulators (including Bank of Uganda, Uganda communications Commission) on their overall digital finance strategy and promoting enabling policies and regulatory updates, better data collection and analysis, and providing effective oversight
- **Infrastructure** – Involves promoting the development, awareness and use of systems that facilitate regular connectivity as well as interchange of consumer identity data and privacy
- **Providers** – Involves providing technical and financial support to advance providers'

Figure 9: **Regional locations of the UNCDF agricultural value chain projects**



Source: UNCDF, 2018

understanding of underserved markets, notably rural populations and women, improve digital finance products and adapt business models accordingly.

- **Distribution** – Involves investigating key constraints and proposing solutions, to distribution and customer-service challenges
- **High volume** – Involves facilitating shifts from cash to digital payments that are performed regularly and in large quantities
- **Customers** – Involves identifying barriers to customer adoption and supporting client-centric approaches.

Considering its ecosystem approach and recognising that the digitisation challenge outlined above would likely exist across all value chains, UNCDF identified and selected value chains where digitisation efforts were likely to be successful. These were; **maize, coffee, tea, dairy and vegetable seed oil.**

Figure 9 indicates the regional locations of the value-chain projects.

To ensure that digitisation efforts would be sustainable over the long term, "anchor partners" were selected to work alongside UNCDF and help drive each project forward. These anchor partners are some of the largest agricultural companies in the country and are actively involved in at least one of the five value chains. Furthermore, these companies have earned the trust of smallholders and other value chain stakeholders. Each had expressed an interest in digitisation, to help reduce specific challenges and issues within their value chain. Between 2015 and 2018, UNCDF worked with anchor partners, farmers and other value chain actors to drive the digitisation agenda. The results achieved were encouraging, and the lessons learned were insightful for the sector as a whole.

2.1.5 Results of UN capital development fund approach

Across the five value chains, a total of 224,938 new users (largely farmers) were registered for MM—the MM account was, for many of them, the first financial account they had held in their life. Of the new users, at least 29.4 percent started receiving payments. In the same regions, new agents were established, connectivity was improved, mechanisms to improve agent liquidity were implemented, and farmers received financial and digital literacy training.

Lessons learned

The following were, the lessons learned;

i) The regulatory environment in a country can certainly affect the success of digitisation initiatives. UNCDF witnessed this issue in Uganda

with SIM registration requirements. Due to a new regulation, smallholders who could not gain access to a national ID, were unable to receive cash disbursements and salary payments via MM; Without the proper digital 'rails' in place at the start of an initiative, digitisation can fail. Digital 'rails' refer to the systems and infrastructure on top of which digital solutions are built, including connectivity, digital tools (e.g phones) and agents.

ii) The business case for *last mile* infrastructure (including telecommunication network) is not always guaranteed and may require financial support. Some rural areas may need to work with limited infrastructure or require a subsidy for better infrastructure to be built.

iii) The internal processes of agricultural companies may need to be digitised before payments. Payment digitisation brings value to agribusinesses but not enough to compel them to cover the costs of digitisation. Digitisation of payments must be part of a broader solution that addresses a problem agricultural companies face, which may require a focus on all internal processes.

iv) Partnerships are also critical. Providers—whether financial service providers (FSPs), Mobile network operators (MNO's), FinTechs or agricultural companies—are central to any digital payment project. Providers bring strong experience and local market context, both of which help projects succeed. Working with a variety of providers across the UNCDF projects revealed that partnerships are crucial for success and that competition leads to better outcomes for smallholders. Partnerships utilise the strengths while minimising the weaknesses of each stakeholder.

FSPs play a critical role in the digitisation of agricultural payments, but they lack the adaptability and agility to effectively market (to) and serve rural smallholder households. Similarly, *FinTechs* play a key role in aggregation, distribution and management, but they lack experience sales and marketing to the bottom of the pyramid. UNCDF found that *FinTechs* that specialise in agriculture, known as 'agrotechs,' were more successful in the digitising farmers, given their deep knowledge of the sector. Yet, innovation withers if it has nowhere to go. Collaboration ensures access to the digital rails laid by FSPs and MNOs, thereby supporting innovation to reach scale.

Competition speeds up DFS market growth and leads to better results for users. Not only does competition among providers reduce dependency on one provider and spur innovation in digital finance, but it can also positively affect price, service quality and product diversity (Mazer and Rowan, 2016). These benefits were evident in the UNCDF tea value-chain project, in which Airtel and MTN tested different digitisation models for bulk salary payments at two separate tea estates.

Without a solid distribution strategy that allows digital tools, products and services to reach all potential users in deep rural areas, most digitisation projects fail to gain the number of users and an level of use sufficient for sustainable digital payments. This issue is especially acute in rural areas, where limited infrastructure can make reaching smallholders more difficult and more expensive. The UNCDF projects uncovered the following additional lessons about distribution when digitising agricultural value chains; (i) booster teams are an important asset in rural areas; (ii) influencers in value chains are a potential entry point for digitisation; and (iii) liquidity and agent commissions remain challenging at the *last mile*.

When it comes to digitisation projects in agricultural value chains, the design of the payment solutions is not the main challenge. In fact, challenges are more likely to occur around farmers' existing financial behaviour and level of education. Therefore, digitisation initiatives must focus on understanding and changing customers' financial behaviour and aim to deliver strong value-propositions to them. As the end-users of digital payment

solutions, customers can make or break the success and sustainability of the products, based on how they perceive their value and usefulness.

Those looking to digitise payments in agricultural value-chains should work closely with farmers to ensure that projects; (i) have strong value propositions that address real farmer challenges; (ii) work with the existing financial behaviour and education of farmers; and (iii) consider social and cultural norms in designing the project. As a standalone service, digital payments are of little value to farmers unless they provide compelling benefits, such as allowing them to avoid long-distance travel, to receive a discount or to access a loan. The greater the value that farmers see in using MM, the greater the likelihood that digital payment uptake will increase. For the UNCDF, a safe place to store funds for emergencies emerged as a strong value proposition.

2.1.6 Conclusion and policy recommendations

In addition to the lessons learned, the UNCDF agricultural value-chain projects revealed a series of issues that those working to digitise bulk payments and drive financial inclusion for vulnerable people, elsewhere, should consider.

Digitalisation projects should be mindful of the regulatory environment in which they operate and consider how certain regulatory changes might influence their work. Sudden regulatory and policy changes can have considerable impact on digitalisation efforts. In Uganda, two unanticipated changes impacted work on agricultural value chains; (i) the SIM registration requirements introduced in 2017; and (ii) the MM tax introduced in 2018. While the former is beneficial in the long term, both of these interventions stalled DFS growth and use in the short term. The latter affected pricing, which in turn affected usage, especially for price-sensitive rural people (Lonie and Makin, 2016).

Tiered know-your-customer (KYC) requirements should be adopted to drive adoption and growth in rural areas. For rural people who lack the formal requirements to become MM agents, the development of a tiered regulatory framework for agent acquisition would help enable DFS growth in rural areas. Furthermore, the recent integration of MNOs in the national ID database by the National Identification and Registration Authority should ease the registration process for the rural population and lower entry barriers.

To truly address the needs of underserved customers, human-centred design principles—such as using iterative product testing and quickly gathering customer feedback—should, whenever possible, be integrated into any digitisation effort. Human-centred design ensures that there is a clear understanding of customers and that solutions are designed from the customers' perspective.

A combined approach to digitisation should be taken by working with both farmers (and other primary beneficiaries) and with the wider community, where digitisation efforts may be more feasible. It is often the primary beneficiaries, in this case the smallholders, who compose the hardest group to which to illustrate the opportunity and ultimately to digitise. In order to address this issue, projects should take a combined approach and simultaneously target other groups in the community where digitisation is more straightforward. These groups can help drive behaviour change more broadly, increasing uptake among beneficiaries.

For FSPs looking to increase growth in rural areas or with specific segments, booster teams (community educators and marketers) should be incorporated into their activities. In contrast to traditional mass market communication activities, booster teams are more hands-on with customers, spending more time on recruitment and focusing more on financial education and literacy. In the UNCDF projects, the activity of booster teams triggered behavioural change that accelerated the growth of a digital payment culture.

Driving payment digitisation, especially in rural areas, can be a difficult endeavour. Through its agricultural value chain projects, UNCDF experienced many different challenges, some of which persist today. Yet payment digitisation is feasible, and UNCDF has already seen the efficiency and productivity gains made through increased financial inclusion of smallholders in the selected value chains.

UNCDF hopes that its own experiences, lessons learned and recommendations will be helpful for bulk-payment digitisation efforts in other agricultural value chains and/or in other sectors. There are huge benefits to be reaped for both smallholders and stakeholders in the value chains, and UNCDF encourages others to continue to drive financial inclusion through these types of projects.

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2.2 PROMOTING ACCESS TO AGRICULTURAL FINANCE THROUGH AGENT BANKING

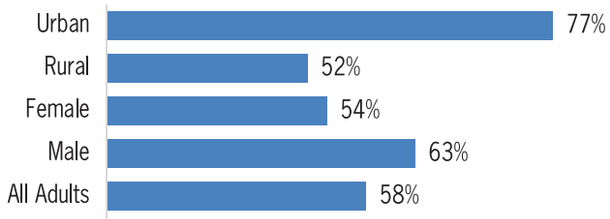
Musa Lwanga Mayanja[1]

Picture credit: Uganda Bankers Association

2.2.1 The state of financial inclusion and agricultural finance in Uganda

Increasing access to agriculture finance and building an inclusive financial system in rural areas can play a fundamental role in achieving inclusive growth and improved agriculture productivity. Despite this, access to agriculture finance in Uganda is still low, prohibiting this sector from attaining its full potential. According to the FinScope 2018 report, 22 percent of the adult population are financially excluded, (compared to 17 percent and 11 percent in Kenya and Rwanda respectively), while 20 percent use only informal financial services (FSDU, 2018). Exclusion and the use of informal financial services are highly skewed against rural residents—where exclusion stands at 25 percent compared to 14 percent for the urban dwellers. Furthermore, formal financial inclusion stands at 77 percent for the urban adult population compared to 52 percent in rural areas (Figure 10). These high levels of exclusion in the rural areas, have serious implications for the growth and development of the agricultural sector.

Figure 10: **Formal financial inclusion**



Source: (FSDU, 2018)

Whereas agriculture plays a vital role in the development of Uganda's economy—contributing nearly 50 percent of total export earnings (UBOS, 2017b), this sector attracts only 12.5 percent of the total credit from formal financial institutions compared to 36 and 52 percent advanced to industry and services respectively. Consequently, most smallholder farmers lack funds to improve productivity and access reliable market information. The majority of the farmers rely on their own limited savings and other informal sources to invest in their farms, which contributes to low productivity, persistent income inequality, and low economic growth.

The limited access to financial services is due to a number of factors including: the high cost of delivering financial

1 Head of Research and Market Development, and Patricia Amito (patriciaamito@ugandabankers.org), Head of Communications and Corporate Affairs, Uganda Bankers Association (musalwanga@ugandabankers.org / musamlwanga@gmail.com)

services in rural areas—as a result of deficits in large infrastructural investment, the high cost of operating bank branches in areas of low population density, poorly designed financial services and products that do not meet the requirements of smallholder farmers, low levels of financial literacy amongst sector actors, and a reluctance of financial institutions to extend services to the agricultural sector due to the perceived and actual risks associated with agricultural activities.

Given the above background, the government amended the 2004 Financial Institutions Act (FIA) 2004 in 2016 and allowed for the provision of Agent Banking, Islamic Finance and Bancassurance[2]. Agent banking involves extending banking services outside the conventional bank branches. A licensed and supervised financial institution contracts a third party operator (agent), who is approved by the bank regulator, to provide a limited range of financial services on behalf of the bank. In Uganda agent banking was operationalised in July 2017 following the passing of the Agent Banking Guidelines by the Bank of Uganda (BOU).

This article provides insights on the progress made so far in implementing agent banking, its potential role in expanding access to agricultural finance and documenting observed challenges and the lessons learnt.

Deepening financial inclusion through agent banking

The fundamental role of agent banking is to extend and deliver banking services outside traditional bank branches through strategic arrangements with existing businesses including farmer groups/associations. It results in wider outreach targeting the under-served, under-banked and unbanked populations. This model has potential to link rural households with formal financial services, improve savings mobilization and enable households to overcome liquidity constraints (Maina, Ritho, & Guthiga, 2016).

The scope, structure and operation of agent banking differs widely across countries. In Uganda, the banking industry through the support of the Uganda Bankers' Association and various development partners (aBi Trust, GIZ and the Financial Sector Deepening Uganda), adopted a shared agent banking model that allows all banks to connect to all bank agents across the country. It offers an opportunity for banks to minimise wastage by avoiding duplication of services and infrastructure.

The Shared Agent Banking System enables connectivity between member banks, enabling agents to serve customers of any bank. Since the adoption of the Agent Banking guidelines, considerable progress has been made in terms of building the agent banking technology infrastructure, as well as agent acquisition. As of February 2019, there were approximately 6,399 registered bank agents distributed across the country, offering a range of products and services. Through services they offer, agents have the potential to increase agricultural credit by receiving agricultural loan application proposals on behalf of banks as well as helping banks disburse approved agricultural loans.

2.2.2 Challenges to deepening financial inclusion in the agricultural sector through agent banking

Despite the progress made since the launch of agent banking, there are still obstacles to deepening financial inclusion through agent banking especially in the rural areas. Indeed, 99 percent of all the agents recruited so far are located in urban or peri-urban areas, with Kampala having over 60 percent of all registered agents. Challenges abound regarding extending agent banking to rural areas—where the majority of farmers live.

a) **Regulatory challenges**

The one and half years of operationalising agent banking in Uganda has enabled financial sector operators to identify regulatory hurdles in the Agent Banking Guidelines that are impeding the smooth roll-out of agent banking services. Such hurdles include, (i) the lengthy agent approval process, (ii) the Know Your Customer (KYC) requirements and (iii) the transaction costs involved e.g. printing transaction receipts.

1. **Agent approval process*:*** the process of approving bank agents in Uganda is lengthy compared to the approval period for mobile money agents. For mobile money, it takes an average of two days, while for a bank agents it can take up to six weeks. Although this lengthy process is important to allow due diligence to be carried out, it nonetheless imposes a high cost to agent recruitment. Ultimately, a lengthy approval process discourages some would-be agents from undertaking the business.

2. **KYC requirements:** Agent Banking guidelines are aimed at preventing the illegitimate provision of financial services and to enable banks to better understand the agents and their transaction patterns. However, some of the requirements are so stringent that they deter potential agents from joining the business especially in rural areas. The guidelines require one to have been a licensed business (operator) for at least twelve months yet the bulk of the private sector, especially in the rural areas is informal. In addition, many potential agents are finding it difficult to get a certificate of good conduct which is issued to the intending agent, by the Interpol, only in person, and at their only office in Kampala. The lack of audited financial records also knocks out many potential agents from getting a report from the Credit Reference Bureau. All these requirements increase the cost of doing agent banking business and cause delays in the geographical spread of agent banking particularly in the rural areas thereby disadvantaging users of agriculture finance.

3. **Printing of physical receipts:** To build trust and confidence in the operations of agent banking, the Guidelines require agents to issue hard copies of receipts to bank customers. Clearly, this adds an additional cost to the operations of agent banking. Printing of receipts requires the use of customised devices which are relatively expensive yet with available technology, evidence of transaction can be provided within the mobile phone handset. Currently, the customised devices cost approximately US$ 400 each, compared to an average cost of US$ 50 for a mobile phone handset.

b) **Capital requirement affordability**

Participating in agent banking requires investment capital ranging between UGX 2 million to UGX 7 Million depending on the guidelines set by the acquiring bank. Such an amount is difficult to accumulate particularly by the lower income rural dwellers, to whom being an agent could be an attractive proposition. This limits the spread of banking agents in the rural areas.

c) **Infrastructure deficiencies**

The spread of agent banking to some geographical—especially in rural areas, is constrained by inadequate infrastructure in the form of bad roads and poor telecommunications network coverage. Poor/impassable roads negatively impact the spread of agent banking especially in rural areas. Agent acquisition and recruitment becomes cumbersome and the agents find it difficult and expensive to move to and from bank branches to keep their accounts liquid.

Despite the significant growth in telecommunications infrastructure observed in recent years, there are places in Uganda that still lack connectivity. In some areas, coverage is still based on the older 2G network (See Annex, Figure 11), yet the devices required for agent banking, run on 3G+ network platforms.

d) **Financial illiteracy and awareness**

Financial illiteracy is a significant barrier to the demand and use of financial services. Coupled with limited awareness of agent banking, financial illiteracy is constraining the demand and use of agent banking services. The lack of understanding how bank agents work also creates fears among potential users about the security of using these services.

e) **Pricing agent compensation**

Field visits conducted by the Agent Banking Company (ABC) found out that different banks have adopted different pricing models for agent compensation/commissions with some paying higher commissions than others. This has the potential to create bias in the delivery of the services whereby agents prefer to concentrate on serving clients of the banks that offer higher commissions.

f) **Other constraints**

Other factors affecting agent banking business include fraud, cost in terms of time and money needed to rebalance float (liquidity management), low transaction volumes/ traffic in sparsely populated areas, high downtime due to poor connectivity, tax levied on Point of Sale (PoS) devices and restrictive account opening requirements. In addition, feedback from field visits undertaken by the ABC indicate that the seasonal nature of rural agriculture and rural business influences agents (who are farmers) to abandon the business during the planting and harvesting seasons, resulting into service disruption.

2.2.3 Strategies to scale-up agent banking

Resulting from the above mention constraints, the following strategies should be adopted to increase agent banking outreach, demand and service use;

(i) **Agent acquisition and network management:** Some Banks still find challenges in devoting staff time to acquire agents especially in the rural areas. These banks should outsource agent acquisition activities by engaging the ABC to sign up agents on their behalf.

(ii) **Community sensitisation and financial education:** Since agent banking is still in its infancy, increasing demand and use of the services requires community sensitisation and financial education. This can be done through awareness campaigns carried out by financial services providers. In addition, a module on Agent Banking should be included and delivered through financial literacy campaigns by the Central Bank in partnership with financial services providers.

(iii) **Regulatory reforms:** Reforms are required to reduce both the time it takes to approve agents and the cost of doing agent banking business. For example, regulations should facilitate the adoption of a paperless Know Your Customer (KYC) authentication process for agent recruitment as well as for account opening using data captured by the National Identification Regulatory Agency.

2.2.4 Conclusion

In conclusion, agent banking has the potential to increase access of banking services in rural areas of Uganda in general and access to agricultural finance services in particular. Most of the obstacles to the spread of agent banking (regulatory hurdles, infrastructural deficiencies, agency banking knowledge and awareness, limited investment capital and related costs) affect rural areas more than the urban areas. Efforts to increase the spread of agent banking should focus on interventions that ensure that rural areas are able to enjoy an increase in close-proximity bank agents who can deliver cost-effective and appropriate financial products and services that the communities require, including agricultural finance.

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Endnote

2 Bancassurance means selling insurance product through banks. Banks and insurance company come up in a partnership wherein the bank sells the tied insurance company's insurance products to its clients.

2.3 RECENT DEVELOPMENTS IN COLLATERAL FINANCING THROUGH THE WAREHOUSE RECEIPTS SYSTEM

Christian BAINE[1]

Picture credit: Coronet Consult Limited

2.3.1 Background

The advent of commodity backed collateral financing in Uganda's agricultural sector first came to the fore during the early 1990s, following the liberalisation of the commodity marketing boards – i.e. Coffee, Lint and Produce Marketing Boards. At that time, newly licensed commodity traders were left with the responsibility to arrange working capital to enable them procure, process and export coffee and cotton to international markets.

Such major international commodity trading activities had hitherto been financed by government through the commodity marketing boards. In the coffee, cotton and grain sector, the new exporters, most of whom had hitherto been mere suppliers of raw material (to the marketing boards), did not have much experience arranging or securing trade finance for export. Most did not even have the fixed asset collateral traditionally required by banks to arrange overdraft facilities. The new exporters also had to grapple with the frustrations of explaining the intricacies of their export business to banks that had no prior experience in the documentation and financing of commodity export trade transactions.

This article traces the developments in the financing of commodity export trade following liberalisation of marketing in Uganda, to the recent developments in Uganda's Warehouse Receipt System, as well as challenges constraining its development.

2.3.2 Challenges in emerging commodity export business

Uganda's liberalisation of international commodity export trade did not only come with challenges. It also offered opportunities to both traders and financiers. At the time, banks primarily used the normal credit risk evaluations emphasising use of asset collateral when appraising agricultural trade loans. However, because the exporters did not have sufficient fixed assets to secure the large export orders, some valued in millions of United States dollars, banks had to critically examine the risks arising from the export transactions.

Commodity export transaction risks are many and are prevalent throughout the lifetime or value chain of the transaction. They include quality control, storage, processing losses, price volatility, transportation, diversion of export proceeds, etc. These risks require special skills and experience to identify, quantify and mitigate. Banks tested various risk management tools including placing

1 Executive Director, Coronet Consult Ltd, a collateral management firm in Uganda. He is also a Project Consultant at the Uganda Securities Exchange advising on the establishment of a commodities segment on the bourse (chris@coronet.co.ug)

hedging tools. Many of the tools proved too sophisticated and costly; yet they did not meet the standard of collateral security required for the financing of commodity export trade. Banks were especially wary of financing the new exporters who lacked experience in handling, conditioning, valuing and delivering of the commodity against export contracts.

In 1995, the PTA Bank came up with an innovative concept of price risk management enhanced with Collateral Management (CM) for coffee exporters' commodity transactions. This concept was actualised in 1996 following pilots with three newly licensed coffee exporters and the structuring of the first inventory-linked export finance deal in Uganda. The finance was arranged by the PTA Bank and involved Warehouse Receipts issued by a CM company.

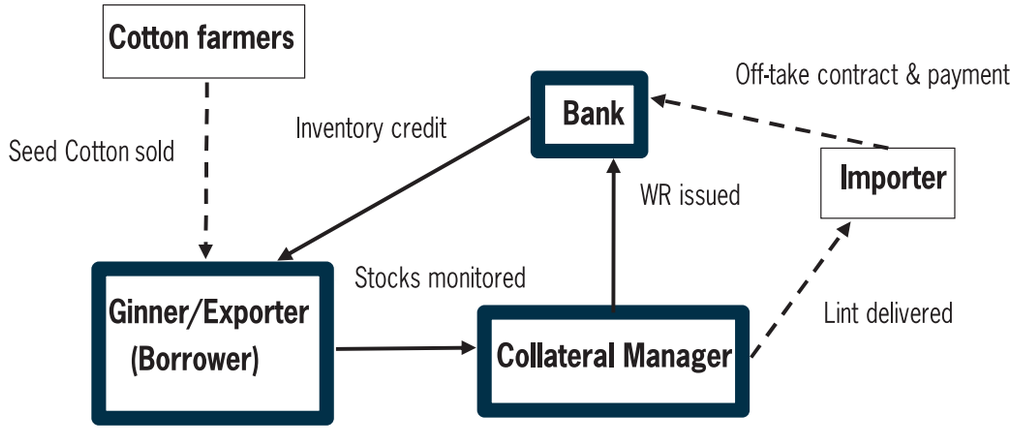
2.3.3 Collateral financing using warehouse receipts systems (WRS)

Under the WRS collateral financing system, banks collateralise a transaction including the underlying asset being financed (i.e. the commodity traded) under a third party warehouse management. The warehouse receipts are essentially documents of title, issued by warehouse operators or collateral managers, as evidence that specified commodities of a stated quantity and quality have been deposited under their custody at particular locations by named depositors. The depositor may be a producer, farmer group, trader, exporter, processor or indeed any individual or body incorporated. The holder of the receipt may pledge it to a lender (with the stored commodity being the collateral for the loan) or transfer it to a buyer (by way of a sale on a commodity exchange). The warehouse operator or collateral manager, who has custody of the stocks, guarantees delivery against the receipt, and should make good any value lost through theft, fire or other catastrophes. The warehouse receipt may be negotiable or non-negotiable depending on the circumstances in which it has been issued.

The key players in the WRS are depositors, the warehouse operators and or collateral manager who manage the stocks, the lenders, the buyers and/or commodity exchanges. Their roles, responsibilities and benefits may differ depending on whether the WRS is regulated by public or operated under private arrangements as we shall discuss in this article.

In Uganda, the WRS fall under two categories; (i) the private collateral management; and (ii) public regulated systems. The private collateral management system is operated by collateral managers (CMs). The CMs are usually stationed in the warehouse where the commodities are stored, with a responsibility of issuing a warehouse receipt to the commodity depositor as instructed by the financier (bank). The functionality of the private collateral

Figure 12: **Key players in the private collateral management warehouse receipts system**



Source: Author's construct

system is supported by a legal framework where the rights and obligations of all the parties are based on existing contract law[2].

Private WRS

Contractual obligations and rights under the private WRS system are usually defined in tripartite *Collateral Management Agreements* (CMAs) between three key players shown in Figure 12; the borrower (usually the depositor); the collateral manager who manages and takes collateral responsibility for the stock at a fee of about US$ 2,500 per month; and the lender (usually a bank).

The CMA spells out the terms and conditions, responsibilities and warranties under which the transaction is secured by the collateral manager. The collateral managers usually issue non-negotiable, non-transferable warehouse receipts to depositors that guarantee delivery of the stored commodity. Aggrieved parties can seek redress through the courts. However, unlike the government-regulated WRS, neither the collateral managers (who take custody of stored commodities) nor the issuing of receipts to depositors by collateral managers are supervised by an independent regulatory agency.

In Uganda, the services of a collateral managers are often outsourced by banks (lenders) from designated collateral management companies. These are local subsidiaries of international commodity inspection companies, which provide international professional indemnity insurance and performance bonds to the banks to back their guarantee of delivery of specified quantities and quality of commodity stocks; and performance by the borrower to execute the export contract. They also tend to have a track record in quality and quantity certification[3] for various commodities. Examples of these companies in Uganda include; ACE Global Depository (Swiss); Coronet Group (local Ugandan); Collateral Management International (South African); and Upstream Ltd (Kenyan).

Warehouse receipts systems (WRS) operated by collateral managers have since the 1990s, developed to become the dominant form of collateral financing operating in Uganda. In the coffee sector, for example, nearly 70 percent of the 10 companies that dominate the export business arrange their financing through private-linked collateral management interventions. This is largely the same for the cotton and grain sectors. However, access to the private collateral management system, in the agricultural commodity sector, has been largely restricted to relatively larger players. Borrowers tend to be medium-scale to large-scale processing or export companies that approach banks to finance large export contracts. They normally either own or lease storage space that meet the requirements for collateral management. These are also the ones who are able to meet the banks' borrowing threshold for structured trade finance products as they are now referred[4] and can afford the relatively high cost of collateral management estimated at US$ 2,500 per month.[5]

Small-scale farmers and traders have been largely excluded from this system. First and foremost, they hardly engage in the commodity export business. More importantly, they are not able to meet the stringent *"Know Your Customer"* (KYC) requirements that commercial banks need from a borrower under the Central Bank regulations. The list of the KYC includes; credit references (CRB), audited accounts, and legal formality. It is for this reason that the larger traders who can do bigger volumes of produce and can justify the cost of the collateral management agreements (CMA) service have been the main beneficiaries of the private collateral financing in Uganda.

The other major risk to the financier from using outsourced collateral management services, are their competence and reliability. Collateral managers, like other operators, sometimes experience losses through theft, negligence and fraud by their staff. These liabilities, when they occur during the performance of their duties, are often huge in amount. However, the liabilities are often limited by 'limitation of liability' clauses in the CMA.

Public regulated systems

In the late 1990s, the Government of Uganda sought to scale-up and promote the WRS to the smaller depositors. The "public" WRS initially targeted commodity sectors including; coffee, cotton, oilseeds, pulses and grains. Under this arrangement, a commodity depositor operating at any scale, can access the system by depositing stocked product of a standardised quality at the time of harvest or such time that prices are not conducive to sell it, in a licensed warehouse facility, operated by a licensed warehouse operator. The depositor still maintains ownership of the commodity, and the operator guarantees delivery of the commodity stored in their facility on demand. The depositor can opt to keep the produce in storage until they can sell it. Alternatively, they can take their warehouse receipt to a bank and negotiate credit to meet their immediate needs until such time as it is conducive to sell.

Unlike the private WRS arrangements hitherto operated by the banks, the public WRS involves the wider public, and the issuing of negotiable financial instruments. That is why it is important that the activities are regulated and supervised through a government regulatory process. The independent regulator[6] is responsible for licensing or certifying the warehouses, and the warehouse operators that act as custodians of collateralised stocks (ensuring that they comply with criteria set in relevant laws and regulations); regulating the issue of standardised negotiable warehouse receipts to minimise the risk of fraud; and overseeing the operations of warehouse operators (including carrying out unannounced stock and quality verifications).

Licensed warehouse operators offer 'public' warehousing services, implying that they can store commodities on behalf of multiple depositors (of all sizes) in a single licensed warehouse. The receipts issued are transferable and negotiable. It is important to note that the depositor continues to own the stocks of the commodity listed on the warehouse receipt. Unless he or she sells the receipt to someone else; the warehouse operator is not allowed to move the stocked commodity like grain or dispose of it without the receipt holder's permission. Even if the warehouse goes bankrupt, the grain is safe because the legal title to the grain remains with the depositor (i.e. the receipt holder).

In cases where the warehouse agreement specifies that stored stocks - must be '*identity preserved*', then the depositor is entitled to retrieve exactly the same grain. Otherwise, it may be other grain of the same grade and quality. If for any reason the grain has been spoiled or stolen, the warehouse operator has to reimburse the depositor. The depositor retains the option of keeping their receipt until such time that the market price is conducive to sell or obtain finance from a bank against it to procure more grain or essential items for immediate use while they wait for the prices to appreciate.

Commodity exchange

Government also sought to promote a commodity exchange to catalyse the development of collateralised commodity receipt-based trading. It is important to note that the Commodity Exchange complements the WRS and collateral financing by not only assuring secure and descriptive collateral, but also by providing a market and trading platform where quality produce can be traded to fetch premium prices for producers. It can also be used by financiers to value their inventory linked 'collateral' without the need for an export contract.

In 2004, with support from the Common Fund for Commodities, government through the Ministry of Trade, Industries and Cooperatives (MTIC), Uganda Coffee Development Authority (UCDA), and the Cotton Development Organisation (CDO), started a process of getting supportive warehouse receipts legislation promulgated in the country. In 2004-2005, following several successful pilots in the cotton and coffee sectors in West and Eastern Uganda, Parliament passed the Warehouse Receipt Act and Regulations in 2006 and 2007 respectively. These pieces of legislation provide a clear framework for an all-inclusive regulated warehouse

Figure 13: **Components of project initiative to develop Uganda's WRS and UCE**

SUB-COMPONENT 1:

Support to the development of a WRS with the following broad activity groups:

- Development of a sustainable system for reviewing and setting quality standards for agricultural commodities,
- Establish a network of licensed warehouses of a sufficient standard to store agriculture produce for prolonged periods,
- Establish a WRS for named commodities and
- Dissemination of information to and training of potential users.

SUB-COMPONENT 2:

Support to the development the UCE to achieve financial viability. Activities included:

- Establishment of an effective governance system for UCE.
- The design and installation of systems that enable UCE management to manage UCE as a commercial enterprise.
- Development of a network of private sector agricultural commodity brokers, and
- Provision of financial support to the operations of UCE during its first 4 years of operations.

receipting system that will support collateral financing and commodity exchange trading in the country.

The Warehouse Receipt System Act 2006 and regulations of 2007 have been able to establish a clear regulatory and policy framework for collateralised financing in Uganda using warehouse receipts for commodity traders at all levels in the following way;

i. Statutory recognition of the WR as a negotiable document of title, assuring third parties to whom it is transferred of their right to take delivery or sell the underlying commodity.
ii. A framework for regulating the issuing of negotiable WRS in Uganda, thereby engendering confidence in the warehouse receipts issued and making them attractive as collateral for bank lending as well as in commodity trading transactions.

2.3.4 Developments in the WRS and UCE

As far back as 1996 collateral financing had been operational under the private arranged collateral executed only by six banks[7] - offering inventory linked financing in the coffee and cotton sector. In the recent past initiatives have been put in place to expand warehouse receipts systems in Uganda, and currently, 18 Tier-1andTier-2 financial institutions have had some exposure to collateral financing and/or training in its concepts and operation.

The challenge however still remains with arranging collateral finance under the government regulated public WRS system. In 2006, following the passing of the WRS Act, the functions of the regulator were placed in the Uganda Commodity Exchange (UCE), a private organisation owned by cooperative entities. UCE pursued the development of the WRS with significant support from the Government of Uganda and donors such as the EU – that funded a four year project (2006-2010) in collaboration with WFP. The project operationalised by the UCE, had two major results to achieve: (i) to support the development of a WRS, and (ii) support the growth of a financially viable UCE. The detailed outcomes and activities of the project are as illustrated in Figure 13.

However, UCE concentrated on developing the WRS sub-component 1, with less emphasis on sub-component 2 (of building UCE's financial viability). Prioritising developing the WRS before exchange trading was premised on the understanding that – a commodity exchange can only develop with an effective WRS (that can guarantee delivery of stocks). At the time, World Food Program (WFP) Uganda also invested over US$4.6 million with the Government of Uganda in support of the WRS development process. Despite these investments, the level of uptake of the WRS

and UCE's trading facilities remained very low.

Total licensed storage capacity in 2014 stood at 22,000 tonnes – very marginal in comparison to the total annual volume of grains and pulses produced in Uganda – which is estimated at over 4.9 million tonnes. Capacity utilisation was always less than 25 percent (5,500 tonnes). Even at the peak of deposits in 2010, the total deposits held by the licensed warehouses represented only 24.9 percent (5,478 tonnes) of total licensed storage capacity. From 2010, the volume of grains deposited with licensed warehouse operators dropped sharply and the downward trend continued to nearly nil in 2015 (Mbowa et al., 2013)

Many reasons have been advanced for this dismal performance. In a study commissioned by the World Food Programme (WFP) and UCE and undertaken by the Natural Resources Institute (NRI)[8], the performance of the WRS and the UCE was below expectation because of;

(i) Incomplete development of essential institutional infrastructure for operations of the commodity exchange. The UCE did not set up a trading platform as well as clearing and settlement systems which would have facilitated trading of receipted commodities through the exchange;

(ii) Little attention was also paid to improving the existing market information systems to ensure access by farmers and other players in the grains value chains to price information which made quality premiums transparent. Consequently, though the report found evidence of profitability in the use of the WRS for direct marketing to end-users as well as in deferred sale (involving the use of inventory credit), farmers and other players found it difficult to determine financial benefits in utilising the system;

(iii) The licensed warehouses run by cooperatives lacked entrepreneurial operational capacity. In contrast to the sharper private warehouse operators, the cooperatives tended to focus on attracting deposits only from smallholder farmers. Not much effort was made to attract deposits by small to medium-scale traders, who have become significant depositors in terms of numbers and volumes of grains receipted;

(iv) Limited supply of inventory finance also hampered use of the WRS. Banks reported that low volumes and poor in-store maintenance of grain quality affected their perception of risks associated with lending against receipted commodities. This perception persisted despite the fact that none of the participating banks[9] actually recorded any default in repayment of the inventory backed finance they provided. In particular, there was aversion to providing advances to farmers' groups to aggregate grains for depositing. Inflationary pressures also impacted negatively on availability of funds and cost of borrowing from banks.

In 2015, following a WFP evaluation, government removed the regulatory functions from UCE and returned them to a statutory agency, the Uganda Warehouse Receipt Systems Authority (UWRSA), under the supervision of the Ministry of Trade, Industry and Cooperatives (MTIC). A Board of Directors was appointed to implement its functions comprising of stakeholder organisations including; The Cooperative Alliance, Uganda Bankers Association, Uganda Insurers Association, Uganda National Chamber of Commerce & Industry, the Forwarding and Clearing Association, MTIC, Farmers' Representative and the Private Sector Apex Body. Over the last three years, however, for various reasons, apart from some training of warehouse operators on quality standards and the concept of warehouse receipting, UWRSA has not provided any new impetus to developing the public warehouse receipts system to support commodity linked collateral financing in Uganda.

There have however, been some developments, which if supported, may provide the impetus to spur the development of a public WRS arrangement and in turn, improve access to credit by the smallholders. These include the following:

i) The Uganda Securities Exchange (USE) has recently started developing a commodity segment to trade commodities in addition to equities and bonds. This should be able to create the platform for banks to value collateral backed by warehouse receipts and quicker foreclosure avenues for distressed collateral. In time, it can also develop into a derivatives market where farmers can plant knowing well in advance, what prices they are likely to obtain, making it easier for banks to finance inputs and other production activities. Access to more accurate market price information, product availability, as well as better product quality should give traders more confidence in the markets;

ii) The USE is currently coordinating a study, in collaboration with the University of Greenwich, on the potential for a price risk-protected warehouse receipt – basically involving issuing and pricing of *Put Options*. Its objective is to determine a floor price for various commodities, using price data over a period of 20 and 30 years. This floor price, once determined, should not only encourage financing by banks, but also guide sellers, including farmers, cooperatives and associations to determine "*reference prices*" on an objective basis. The study will also look to generate information which can encourage more farmers, sellers and buyers to take advantage of the commodity exchange.

It is expected that this study will complement the efforts of the USE to promote WRS in Uganda, an issue that has proved quite challenging since the early 1990s.

2.3.5 Conclusion and policy implications

As indicated above, the WRS in Uganda continues to face various challenges which have been attributed to several factors, including absence of sizeable market for quality grains, lack of suitable storage infrastructure, difficulties in accessing inventory finance and skills gaps among key actors.

With respect to collateral financing, for most depositors, a major benefit from using the WRS is ability to delay sale beyond the harvest season when prices *bottom-out*. This can be done if they obtain finance using the stored produce as collateral. Thou some banks have had experience in financing stocks held by licensed warehouse operators,[10], more of them are willing to release funds as soon as they have confirmation that an electronic warehouse receipt has been issued by a commodity exchange. This would speed up lending significantly as depositors would be able to access funds within 24 hours after a receipt has been issued.

The main concern within the banking industry, however, appears to be the capacity of licensed warehouse operators to minimise in-store quantity losses and quality deterioration. If these concerns are addressed, partly through effective oversight by the regulator, banks in Uganda appear willing to lend against the receipted commodities.

There are also concerns about the security of collateralised stocks under the public regulated WRS. There appears to be limited understanding within the banking industry about the risks and how they can effectively be mitigated by financing stocks held by the licensed operators. For instance, since most smallholder farmers usually aggregate before depositing, the farmers' groups face considerable challenges in accessing finance to provide part-payment to members on delivery. Once the aggregated stocks are deposited, supply of inventory credit tends to be less onerous. Banks may be willing to provide advances to farmer groups or cooperatives on the basis of their track record and some form of guarantee by its leaders or union. However, most groups often have difficulty meeting the criteria set by the banks. Consequently, the liquidity problems encountered undermine their capacity to compete for volumes of grains with private traders who offer cash at the farm-gate.

Another factor limiting access to finance for smaller groups is the current legislative framework for group-

based transactions. The existing cooperatives are, in most communities, rather weak because the second/third tier organisations which in the past fostered the development of the primary-level structures are no longer as strong as they used to be. The legal lacuna is therefore making it difficult for farmers' organisations, such as registered associations, to engage in contract-based transactions including borrowing from banks. Some opt to register as cooperatives (in name only) just to circumvent this challenge.

The main benefits of collateralised WRS is the opportunity to use commodity stocks (highly liquid and relatively low risk intermediate assets) to expand agricultural credit financing which has historically been restricted by the use of land and buildings as collateral. To lenders (banks); the development of a regulated WRS, is the creation of relatively low-risk collateralised intermediate assets (commodity stocks). The borrowers can also leverage on grain stocks as bankable assets to access agricultural credit. Therefore, collateralised WRS can be a strong instrument for expanding avenues for agricultural financing if the following conditions are met:

i) The stock as collateral managed by independent professionals (warehouse operators), who are backed by insurance and professional indemnities in the event of a loss;
ii) The market value of the collateral is transparently determined by the market especially where they are linked to a commodity exchange. These can be closely monitored on a daily basis through their information systems that generate credible and transparently determined market prices which reflect quality premiums/discounts;
iii) Liquidating the collateral is made relatively easy, especially through a commodity exchange;

The paper shows that recognition of the lower risks associated with commodity-backed financing is what informed the risk-weighting recommended by the Bank for International Settlements[11] for this form of lending. Under Basel II norms, loans against commodity warehouse receipts are generally rated at A- to A+, implying low capital requirement for such loans. Secondly, a well-regulated WRS which assures near-zero default is likely to improve the risk profile of commodity-backed loans to levels similar to that of Government Treasury Bills, implying that banks offering these loans would have very low non-performing loans and therefore, low loan provisions. Their overall profitability will be improved and their capital adequacy ratio enhanced, thereby making it possible to increase their lending operations.

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Endnotes

2 English Law of Bailment
3 FOSFA and GAFTA
4 Structured lending by Orient Bank Boosts Agriculture Marketing Efficiency Article 2.3 AYB 2010 page 54
5 A typical collateral management intervention costs a minimum of US$2500 month
6 The Uganda Warehouse Receipt Systems Authority, created by an act of parliament, in 2006 performs the role of independent regulator of warehouse receipt systems in Uganda
7 Standard Chartered, Orient Bank, HSBC Equator Bank, East Africa Development Bank, Cooperative Bank and PTA Bank
8 Natural Resources Institute Final Report. (Jan 2014) Study of the Efficacy of the Warehouse Receipt System in Uganda.
9 Participating Banks included Stanbic Bank, Centenary Bank and Housing Finance Bank
10 Housing Finance Bank financed receipts in June 2009 in collaboration with UCE in Kasese, Jinja and Masindi.
11 **The Bank for International Settlements (BIS)** is an international financial institution owned by central banks which "fosters international monetary and financial cooperation and serves as a bank for central banks".

2.4 FINANCIAL INNOVATIONS IN AGRICULTURE FINANCE: THE CASE OF THE CENTESUPA WOMAN CLUB

Tomusange Hellen[1]

Picture credit: Centenary bank, Uganda limited

2.4.1 Background

Agriculture remains the backbone of Africa's economy. It is the primary source of livelihood and accounts for about 25 percent of the continent's GDP (Woldemichael, 2017). In Uganda, there has been an increasing trend in the proportion of women engaged in agricultural production from 78 percent in 2013/14 to 82 percent in 2015/16 as compared to 66 percent men in both periods (NPA and WFP, 2017). With more women than men engaged in agricultural production, it infers that the development of sub-sector will mainly depend on transforming women's production and productivity. However, most women have limited access to credit which is a key determinant of production and productivity. An analysis[2] of the 62 farms/firms that benefitted from the Agricultural Credit Facility (ACF) in FY2014/15 revealed that the majority of borrowers were men (64%).

In response to women's access to financial services, a number of financial service providers have come up with financial products to improve women access to credit. Notable among these is Centenary Bank's product dubbed 'Cente SupaWoman'. The Cente SupaWoman club is a special savings account for individuals or groups of women to increase financial inclusion for women in business while improving their levels of income and livelihoods. The product was unveiled in June 2015. By 2018, over 7000 individual women had enrolled for the product, 90 percent of whom are running businesses at micro and small scale level.

The Cente SupaWoman club offers a number of financial and non-financial services. Among the financial products are: Cente SupaWoman individual account, Cente SupaWoman joint account, and Cente SupaWoman group account. These have different features and requirements (Table 15). In addition to the financial services offered, the program offers a number of non-financial services which include: (a) networking opportunities through conferences, workshops, events; (b) financial literacy trainings; (c) unsecured loans of up to a reasonable amount with lower repayment interest rate compared to many other loans provided to other customers; (d) business advisory services or access to information among others. Over the project implementation period, women have been trained in various modules, including agri-business.

A segmentation of the clients targeted by the Cente SupaWoman is presented in Table 16. The women include; agriculturalists, traders, professionals and manufacturers. Over 70 percent of loans that have been allocated to the women have gone to agricultural enterprises and no collateral was required. This is a unique opportunity for women to access since the lack of collateral has been one of the major barriers to their accessing credit. Since

1 Head of Women Banking, Centenary Bank Limited, Kampala, Uganda

Table 15: **Financial products offered by the Cente SupaWoman program**

Product	Deposit product	Deposit product	Deposit product
Brand Name	Cente SupaWoman individual account	Cente SupaWoman Joint Account	Cente SupaWoman Group Account
Features	• Opening balance 50,000 • Minimum balance 50,000	• Opening balance 100,000 • Minimum balance 50,000	• Opening balance 100,000 • Minimum balance 50,000
Requirements	• Minimum opening balance UGX 50,000 • Copy of Valid Identity Card for account holder • 2 passport size photos for the account holder	• Minimum opening balance UGX 100,000 • Copy of Valid Identity Card for account holder • 2 passport size photos for the account holder	• Minimum opening balance UGX 100,000 • Copy of Valid Identity Card for account holder • 2 passport size photos for the account holder • Certificate of registration • Certified copy of the constitution
Interest earned	• 2% Per Annum for credit balance 50,000	• Category 1: 3% Per Annum for credit balance UGX 1-10 million • Category 2: 5% Per Annum for 10 million and above	• Category 1: 3% Per Annum for credit balance UGX 1-10 million • Category 2: 5% Per Annum for 10 million and above

Source: Centenary Bank 2014

Table 16: **Segmentation of the woman market**

Attribute	Agriculturalists	Trader	Professional	Manufacturer
Percentage	70	25	3	2
Savings	Minimal surplus sales	Working capital	Salary	Assets
Capital needs	Start US100	Thousands - millions	Vary from 0 to millions	Millions
Market	Local middleman	General	General	International
Income per capita/month	US10+	Thousands - millions	Thousands - millions	Thousands – millions
FI interest rank	4	1	3	2
Collateral	Hardly	Stock and property	Can afford land	Assets can afford land and property
Records	Hardly	Transaction	Documentation	Documentation

Source: Naiga, 2015

introduction of the product, the proportion of women to total agricultural borrowers has risen to 15 percent (Centenary Bank; 2017).

2.4.2 Implementation challenges

The Cente Supa Woman Club has faced a number of challenges that have impeded its use, scale up, and uptake. These include;

i) Urban and peri-urban centred: The FinScope 2018 findings show that over 76 percent of the adult population of Uganda reside in rural areas. However, the SupaWoman program primarily targets the urban and peri urban women (Centenary Bank report 2015). This leaves many rural women (practicising agriculture) excluded from available financial services;

ii) In addition, there is unbalanced knowledge about the Cente SupaWoman innovation services across the branches. This has forced some customers to move to far branches where they feel they will be easily attended to. This is primarily attributed to the fact that women in upcountry localities have not enjoyed bank services as much as those in urban centres (where services are easily available);

iii) Inadequate empowerment activities: Due to limited funding, new entrants to the Cente SupaWoman club have not been trained in financial literacy

and due to limited financial resources. The bank has had to reschedule training of the new club entrants to another financial year. This leads to the inadequate empowerments of these women hence constraining them from accessing other available opportunities like grants;

iv) The Key Performance Indicators of the Cente SupaWoman are not embedded into the bank's performance measurement systems. This has led to complacent performance of club champions as it is not considered a core activity in the branches. In addition, there is lack of sex disaggregated data to make a business case to serve more women hence the limited internal buy-in. If sex disaggregated was available, it would be easier to present a business case to support program more Cente SupaWoman activities.

c. Centenary bank has adopted the creation of social media platforms through which the Cente SupaWoman communication is sent to members. However, over 50 percent of these women do not have access to social platforms either because of ignorance or due to limited access to internet. It is recommended that flyers in local languages be provided through bank agents and branches;

d. The bank innovated the business model of using women *champions* to promote buy-in of the Cente SupaWoman product. However, these are general champions with skills in businesses that are not related to agriculture.

2.4.3 A case of 'lady's first' product in Raw Bank (DRC)

The Democratic Republic of Congo (DRC), like many African countries has embraced the strategy of strengthening women's position in accessing credit through the 'Lady's First' product that is offered in by the Raw Bank. The initiative is supported by International Finance Corporation (IFC) and in particular, by its Women in Business (WIB) programme. The WIB programme places emphasis on creating a better climate by eliminating barriers that impede women's access to credit (Owuor, 2011).

Some the key similarities with the Cente SupaWoman Club include: a) networking sessions (business diners, seminars, workshops) for information and experience sharing; b) use of champions or role models to promote the project; among others. The lessons learnt are also similar to those of Cente SupaWoman – i.e. collaborations has helped to strengthen bank's capacity to provide products and services for women entrepreneurs; branding the product allows the banks to reach the relatively conservative clientele; and (c) in-house training of the customer service providers strengthens the bank's capacity to scale out the product (over 40 bank staff were trained in customer service).

2.4.4 Conclusion and policy recommendations

Given the role of women in Uganda's agriculture, well designed products that enable women to adequately borrow and invest in agriculture are essential in any efforts to strengthen women's role as agricultural value chain actors; to expand the set of agricultural activities they can undertake; the scale at which they can operate; and their ability to benefit from the sub-sector.

The following are key for the improved performance of the Cente SupaWoman product;

i) Centenary Bank should designate Cente agents as key actors to promote the adoption of the Cente SupaWoman product. The agents normally live in the rural areas where most women engaged in agriculture are found;

ii) Centenary Bank should provide the agents with brochures and all information related to the Cente SupaWoman product to increase information flow. The information on Cente SupaWoman should be translated into local languages to ease information dissemination;

iii) The Head of Women Banking should train all knowledge specialists in the various bank branches on the Cente SupaWoman to improve women's access to product information. It should be noted one of the key factors that led to the success of the Lady's first product in DRC was Raw Bank's 24 months in-house advisory services training that it offered to its knowledge specialist to strengthen the bank's capacity to scale out the product. (Owuor, 2011);

iv) The Head of Women Banking should train agricultural-specific Champions to scale out the product to more farmers. These will act as a learning platform for farmers in neighboring localities to learn the opportunities and challenges associated with the product; and

v) More banks should be supported to introduce products that target women directly and lessons learnt across the different programmes can be used to improve the delivery of financial services to women.

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2.5 DESIGNING EVIDENCE-BASED INTERVENTIONS TO ENCOURAGE AGRI-SME LENDING IN UGANDA

Edward Katende[1]

2.5.1 Introduction: The SME finance gap

The importance of agriculture[2] to the Ugandan economy and its roots in local communities makes it a strategic economic and social sector for the country. Agriculture accounts for 22.8 percent of GDP (2015 estimate) and approximately 50 percent of the value of exports (World Bank, 2018 a). Agricultural exports represent about 20 percent of the country's total foreign exchange earnings (World Bank, 2018 b). The agriculture sector is a major partner in the development of other sectors of the Ugandan economy such as tourism, manufacturing, trade, health sectors. For instance, the manufacturing sector, a priority for the Ugandan government as can be seen in the country's social and economic development plan, 'Vision 2040', is heavily dependent on the agriculture sector. Uganda's manufacturing sector is dominated by the food processing, drinks and beverages sub-sectors, which accounts for approximately two thirds of the total manufacturing output (UNECA, 2017).

Despite the importance of the agriculture sector to overall economic growth, employment, and poverty reduction in Uganda, private sector credit from Tier-1, 2 and 3 financial institutions to agriculture was 12.3 percent by 2018 (BOU, 2018). This is still low compared to 19.5 percent for other low-income countries worldwide. Harnessing the opportunities presented by agriculture will nonetheless require the provision, at unprecedented levels, of financial services to the smallholder farmers and other agricultural small and medium enterprises (hereafter referred to Agri-SMEs) that dominate the sector. Financing Agri-SMEs should enable these firms to make much-needed investments in quality inputs, post-harvest infrastructure, risk mitigation tools (such as insurance and guarantees), in addition to large scale and long term investments in processing plant, irrigation schemes, out-grower schemes and new distribution channels. Furthermore, if Agri-SMEs are supported to manage their operations well, they could be the catalysts for a green revolution in Uganda, providing new opportunities both on and off the farm. Financing Agri-SMEs is also critical for Uganda achieving the Sustainable Development Goals; - SDG#1 (no poverty); SDG#2 (zero hunger); SDG#5 (gender equality); SDG#8 (decent work); SDG#13 (climate action); and SDG#15 (life on land).

Such financing would include savings, transfers, remittances, leasing, insurance and credit products that are needed by the agricultural sector for production, input supply, agricultural facilities (e.g. tractor hire, irrigation equipment providers, post-harvest and value addition), trade, wholesaling, marketing and distribution. It would also include agricultural value chain finance i.e. both internal and external forms of finance that are developing

1 The CEO, Uganda Agribusiness Alliance and Jesse Baver, Associate Partner, Dalberg Advisors (edward.katende@ugandaagribusinessalliance.com)

along with the agricultural value chains they serve.

This paper focuses on agricultural credit with an emphasis on the economics of agricultural lending to Agri-SMEs. Lending to agri-SMEs in Uganda has proved to be complex for financial institutions as it needs to be adapted to the peculiarities of Uganda's agriculture in addition to those inherent in serving the SMEs in general. The specific peculiarities or constraints include; climate change; low productivity; co-variant risk profiles; fragmented supply chains; inadequate infrastructure; and sub-optimal policies in areas as disparate as food safety, agricultural inputs and land tenure. Other constraints are; price volatility; very high costs incurred in serving the agricultural sector; information and knowledge gaps. As a result of both perceived and real considerations, banks and other financial institutions tend to minimise exposure to agriculture in their portfolios.

For too long, knowledge about the supply of agricultural finance including market size, segmentation or models of agricultural finance targeting agri-SMEs in Uganda and across Africa has been very limited. This has worked to compound the problem of access to finance as many commercial banks struggle to: i) understand the sector; and ii) develop and manage appropriate financial products targeting agri-SMEs. In Uganda, agriculture receives around 12 percent (BOU, 2018) of domestic credit despite employing 69 percent of the labour force and making up 25 percent of GDP (World Bank, 2018). Accordingly, an unmet demand for finance exists across the agricultural sector. This is in spite of the many financial services providers that are currently targeting the agricultural sector (summarised in Table 17).

2.5.2 Understanding the economics of lending to Agri-SMEs

Over the past year, Stawi Africa[3] led by members of the Council on Smallholder Agricultural Finance (CSAF)[4] commissioned a team from Dalberg Advisors[5] to undertake a study whose objectives would enable CSAF members and other Stawi Africa partners to understand the economics of lending to agri-SMEs around the world, with a focus on East Africa. The study also sought to help donors and policymakers to understand the specific needs of the lenders they seek to support in order to inform their agricultural finance policy and practice interventions. These studies also sought to fill a knowledge gap in the industry as limited quantitative evidence has been published to-date. Overall, the Dalberg team gathered data from 28 lenders, including 11 social lenders with global portfolios and 17 domestic lenders from East Africa. 20 lenders gave various types of quantitative data on their agri-SME loan portfolio; in-depth interviews were held with another 8. The global dataset collected included almost 4,000 valid loans originated between 2010 and 2017, with a total facility size of US$ 2.7 billion.

This article focuses on the subset of loans which were paid out in East Africa (Uganda, Kenya, Rwanda and Tanzania) from 2013-2017, totalling 876 loans amounting to US$ 327 million. Some of the key findings on the economic performance of the agri-SME loans in Dalberg's dataset are discussed hereafter, beginning with an analysis of overall profitability by lender type, and then discussing two major drivers of profitability of agricultural lending – operating costs and portfolio at risk.

2.5.2.1 Overall profitability

According to the data collected, each type of lender has areas of strength and weakness – no model is profitable across the board. Figure 14 shows roughly how expected profit per loan varies with loan size for a "generic" lender of a given type in the markets examined. Profit is presented as an annualised percentage of the amount lent, assuming a 12-month loan of the size indicated on the X-axis. Profit is pre-tax but is net of expected portfolio at risk, operating costs and an appropriate share of overhead costs, and average cost of funds for the indicated lender type.

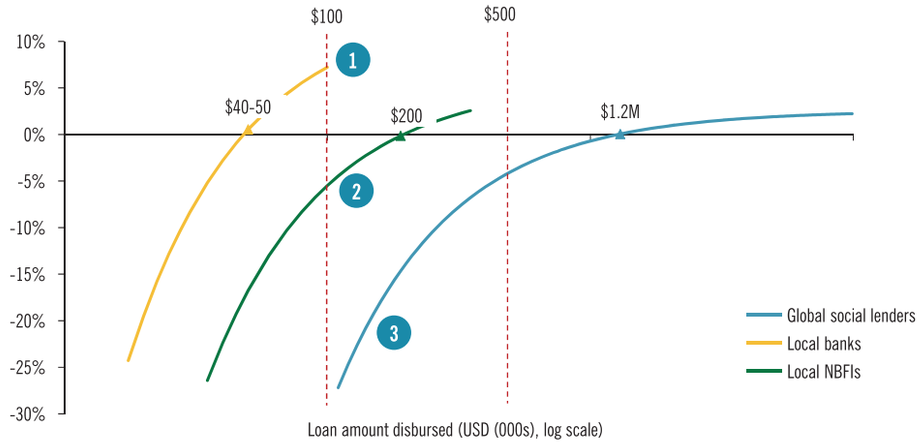
As shown in the yellow line, many agri-SME loans from

Table 17: **Supply side - Types of financial service providers (FSPs) to the agricultural sector**

Type of FSP	Description	Examples
Institutional investors	Includes resources from pension funds, insurance funds etc. These have a cap on investments outside capital markets.	NSSF through its investment in Yield Uganda Fund.
Tier-1, Tier-2 and Tier-3 financial institutions	Financing by formal financial institutions whose core business includes lending; primarily commercial banks, micro-finance banks and non-bank financial institutions	Commercial Banks, Credit Institutions and MDIs
Tier-4 financial institutions	Financing by semi-formal and informal financial institutions whose core business is members savings mobilisation and short term – limited amount loans	Multipurpose coops, SACCOs, VSLAs & other types of savings and credit groups
Investment Funds (private equity, venture capital and impact investing)	Provide capital to agribusinesses through diverse instruments, such as equity, debt, debt and equity, and guarantees. Many of these funds complement financing with technical assistance mainly as grant-based facility to businesses that receive investment through the fund	Pearl Capital Partners, Voxtra East Africa, Acumen Fund, Root Capital, Mango Fund, AgDevCo.
Corporates/Value Chain Actors	Private companies typically participating in value chains themselves and providing value chain financing, or otherwise able to de-risk finance (e.g. through off-take agreements).	Kakira Sugar, Biyinzika, Ibero Coffee, Mukwano, UgaChick and many other agribusinesses throughout the country.
Financial Instrument Providers	Focused providers of specific instruments to support the reallocation of risks; includes insurers, hedging platforms / swaps providers, and players that either solely or mostly focus on providing guarantees.	aBi, USAID (DCA), ATIF
Farmers' Organisations	Formal and informal entities that organize farmers and provide multiple services, which may include the provision of or on-lending of credit to individual farmers as well as collective investments and voluntary savings.	Numerous cooperatives, NUCAFE etc
Government	Providing balance sheet support or concessional funding to financial services providers to increase their risk appetite to serve the agricultural sector.	Government has 100 percent stakes in financial services providers such as Pride Microfinance, Microfinance Support Centre Limited, Post Bank and UDB.
Development Finance Institutions (DFIs)	Provide financing for development, at terms that are significantly concessional versus commercial providers. DFIs also provide patient capital to establish linkages with smallholder farmers and agricultural SMEs.	ADB, EADB, IFC, UDB, PTA Bank, KfW, EIB, IDA, IFAD
NGOs, Philanthropy & Foundations	Seek to achieve impact, primarily through provision of grants and lines of credit.	BMGF, Mastercard Foundation, Catholic Relief Service, Alliance for a Green Revolution in Africa (AGRA), Kilimo Trust
Multi- & Bilateral Donors	These focus on: delivering credit to commercial financing institutions; capacity building of financial institutions; financing business development services to target agricultural SMEs and farmers; and investment climate work that improve the legal and regulatory framework for provision of financial services to the agricultural industry. The main financial instruments used include credit lines, matching grants, and guarantee funds targeted to commercial institutions and value chain actors.	USAID, DFID, EU, DEG, GIZ, Dutch embassy, IFAD, AFD, the World Bank Group

Source: Author

Figure 14: **Evolution of expected net profitability (annualized, by loan size and lender type)**



Source: Dalberg Advisors (2018a)[1].

1 Each curve on shows expected annualized profit margin for a 12-month loan of a given size. Note that curves are based on average data submitted by lenders and thus may not reflect any individual lender's economics or the economics of loans outside the size segments shown.

the commercial banks that were examined are profitable. This is, in part, due to low operating costs, as bank models are optimised for scale and feature entirely domestic workforces with lower salary bills relative to some of the international lenders in the dataset. Another factor leading to profitability is high interest yields: In the dataset, realised interest and fees averaged about 22-23 percent of the annualized outstanding amounts. While these bank loans were in local currency and thus would be expected to be higher-yielding than hard currency loans, even when adjusted for macroeconomic conditions and the interest rate environment in the countries these banks operate in, bank yields were higher. Dalberg estimate that yields were 7-8 percentage points higher than the realised yields from hard-currency lending by social lenders in its data, after adjusting for interest rate environment differences. Finally, it is important to note that none of the banks who provided data were able to share results from their corporate lending units, so data is still missing for bank loans larger than US$ 100,000. Larger agri-loans are likely serviced by units with different cost structures. This is a key research gap for regulators and other stakeholders to explore in the future.

The second category examined is local non-bank financial institutions (NBFIs) such as Mango Fund and FACTS, the green line in Figure 14. These lenders had less-favourable economics than commercial banks, and at typical financial results, would only break even at a loan size of US$ 200,000 or greater. In large part, these economics were driven by high operating costs, due to the current small scale of the NBFIs in the sample. They were founded recently and are still growing into an appropriate scale for their fixed cost base. In fact, total lending volumes in 2016 for the NBFIs in the dataset ranged from just US$ 120,000 to at most US$ 3.3 million, greatly limiting volume-based earning potential. In addition, NBFIs lack access to deposits, and thus face a high cost of funds – some NBFIs reported a cost of funds as high as 12-15 percent, after accounting for the foreign exchange hedging required on their hard currency borrowings. Thus, despite interest yields of 22-23 percent per year as mentioned above, the typical small or medium-sized NBFI loan is not profitable for the lender.

The final category of lenders are the global social lenders such as Root Capital, AgDevCo and Oiko Credit– the blue line in Figure 14. As shown, a global social lender would not expect to make a profit on small or medium-sized loans – in fact, these lenders would only break even on a loan of US$ 1.2 million or larger. For this reason, most global social lenders focus on serving larger, well-established

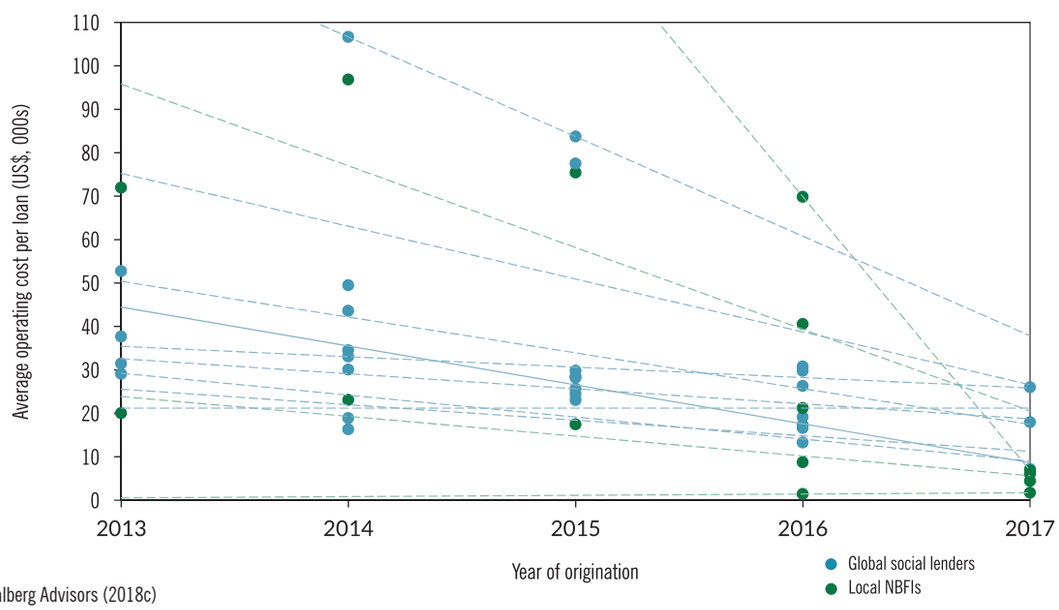
agricultural enterprises including cooperatives. These agricultural enterprises are often not well-served by other types of lenders - another survey conducted by Dalberg found that only 20 percent of borrowers from social lenders had a bank loan when they first became a customer of a social lender (Dalberg, 2018 billion).

The overall low profitability among social lenders is driven by a combination of high operating costs – social lenders employ a mix of local and international staff and invest significant time in due diligence, given the large loan sizes – and volatile but often high portfolio at risk experience due the fact that most of the enterprises that they lend to are driven by social objectives (like job creation, food security etc) and attract low profits. Most social lenders lend to agri-SMEs operating in tight value chains, and may have faced more competition in making loans in hard currency and realise to lower interest rates of only 7-8 percent. Local lenders charged higher headline rates than global social lenders, perhaps due to: a risk premium for lending to riskier segments such as informal businesses and loose value chains; compensating for smaller loans that yield lower overall interest income; and compensating for shorter tenures that yield lower overall income.

2.5.2.2 Operating costs

Operating costs are a large driver of the profitability of agricultural lending loans. In general, Dalberg estimated that the average operating costs (including overheads) per loan are US$ 38000 for a global social lender, US$ 12,000 for a local NBFI, and between US$ 5,000-9,000 for a local commercial bank, which can be compared to average transaction revenue of US$ 42,000, US$ 10,000, and US$ 11,000, respectively, for each type of lender. As mentioned above, many lenders in the dataset have recently started operations in East Africa. However, the positive news is that a clear downward trend was observed over time in average operating costs for NBFIs and social lenders. Figure 15 shows this trend clearly by graphing each NBFI and social lender's average operating cost per loan over time. As shown, the typical non-bank lender experienced a decline in per-loan costs in excess of 50 percent over the 5-year time period of the dataset. This must have been caused primarily by an increase in scale, which allowed the fixed cost base of each lender to be spread across a larger volume of lending. Staff are better utilised and overhead costs per loan decreased with economies of scale.

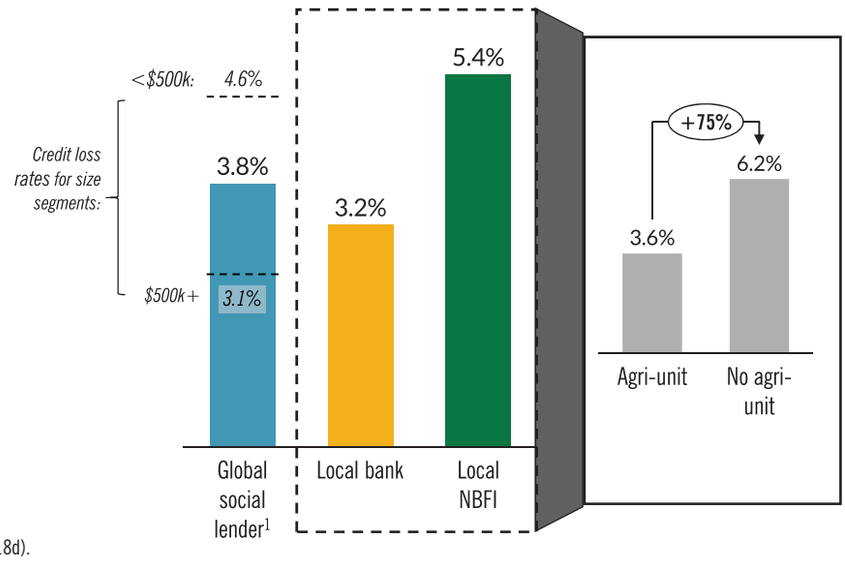
Figure 15: **Average operating costs per NBFI loan**



Source: Dalberg Advisors (2018c)

Note: Each line represents one lender (commercial banks excluded), and each dot represents the average direct and allocated overhead costs per loan originated by that lender in the year shown.

Figure 16: **Estimated annualised portfolio at risk, by lender type**



Source: Dalberg Advisors (2018d).

The implication of this finding is that, given the fact that many borrowers want to borrow small amounts of money, providing some form of growth capital to these types of lenders to help them scale up may be an effective way of making lending at small sizes more financially feasible. Therefore supporting sub-scale lenders while they grow could make some currently marginal types of lending more profitable.

2.5.2.3 Portfolio at risk of Agri-SME lenders

Portfolio at risk is another major factor in the profitability of agri-SME lending. As shown in Figure 16, typical portfolio at risk experienced by the lenders in the sample for the study ranged between 3 percent and 5 percent of the average amount at risk per year. Given the tight margins faced by social lenders (recalling their average yields of only 7-8 percent per year) and NBFIs (recalling their high cost of funds), this level of credit loss makes profitable lending very difficult and leaves little margin to defray operating costs. Interestingly, local banks had lower portfolio at risk in this dataset and social lenders experienced lower portfolio at risk as loan sizes increased – presumably due to borrowers becoming more experienced and formalised.

Portfolio at risk was also seen to be higher for lenders without specialized agriculture or agri-SME units. Banks and local NBFIs with agri-units were more likely to offer custom products and a greater variety of collateral options to agri-SMEs. All six local banks and NBFIs with agri-units saw their agri-lending portfolios increase in recent years, compared to 2 of 6 local lenders without such specialised units. Overall, the level of portfolio at risk seen in the dataset is higher than would be expected in other regions. For example, when social lenders' results in East Africa were compared with their results in the rest of the world, it was found that portfolio at risk was on average 2.7 percentage points higher in East Africa, and the differential was in excess of 4 percentage points for small loans (Dalberg Advisors, 2018).

The implication of this finding is that new types of credit guarantee schemes to absorb risk among newer or less formal borrowers, as well as capacity building for lenders without agricultural experience to improve their underwriting and risk assessment, may be required to encourage greater lending to agriculture.

Table 18: **Frequently-cited challenges to expanding agri-SME lending (by lender)**

	Local banks	Local NBFIs	Global social lenders
Market challenges	Inherent agriculture sector risks (e.g. price volatility and climate change)		
	Unpredictable and/or unsupportive government interventions (e.g. commodity export bans, interest rate caps)		
	Low bankability of agri-SMEs (due to e.g. informal management processes and systems)		
Strategic limitations	Low executive buy-in for agri-lending	Limited physical presence in rural areas	Limited local presence in countries of operation
	Tight risk limits on agriculture exposure		
Capability gaps	Low agri-specific credit assessment capabilities (especially for lenders without agri-units)		Limited lending in new value chains
	Low agri-tailored product terms (especially for lenders without agri-units)		Limited range of product offerings

Source: Dalberg Advisors (2018)

2.5.2.4 Other challenges faced by agri-SME lenders

In addition to analysing the loans provided by participating lenders, interviews were conducted with management representatives from 15 lenders, to understand their perceptions on key challenges preventing them from scaling up agri-SME lending. Lenders reported the following additional strategic and operational challenges; (a) Despite evidence of profitability in certain segments, all lenders highlighted strategic, market, and institutional capacity challenges in expanding agri-lending; (b) Securing executive buy-in for agri-lending is a major challenge, partly due to the risk perception of the agriculture sector, and risk exposure limits can also constrain their growth. Furthermore, not all lenders that were interviewed offered products appropriate for agri-SMEs. In these cases, this reflects a lack of experience with the sector and the needs of its borrowers. Table 18 presents a synthesis of these interviews, presenting the most commonly-cited concerns by lender type.

2.5.3 Encouraging agri-SME lending in Uganda

Based on the evidence provided by the Dalberg study, encouraging financial services providers in Uganda to lend more to agri-SMEs will require a combination, or all, of the following interventions by government development partners and private sector;

i. Scale up the use of credit guarantees to provide comfort to participating financial services providers so they can expand their lending operations to agri-SME. On top of credit guarantees, other instruments should also be experimented e.g. setting up *first-loss* guarantee schemes to absorb a certain percentage of portfolio losses, to incentivise lenders to target under-served segments with higher systemic risk such as new borrowers. In this intervention, a funder would create a 'reserve account' for lenders and contribute to the reserve account, a certain percentage of loans to targeted agri-SME borrowers. If any of the agri-SME borrower defaults, the lender could first seek recovery in full from the reserve account, before incurring any losses on behalf of the borrower.

ii. In addition to the Uganda Agriculture Insurance Scheme, Government should continue working with the private sector to deepen the insurance market that supports the different segments of the agricultural value chain in Uganda. This could be done by investing in;

   a) Collecting insurance industry relevant data and making it available for the insurance

companies to develop relevant, scalable, accurate, affordable and accessible insurance products.

b) Providing insurance distribution and claim support structures for example, by developing the capacity of extension workers to understand and provide agriculture insurance, mainstreaming agriculture insurance in extension messages as well as allocating resources for awareness creation.

c) Undertaking cost reduction measures and supporting development of appropriate infrastructure to support the expansion of agriculture insurance in Uganda.

d) Incentivising the agricultural insurance market through fiscal policy for example through facilitative tax incentives and other measures. Fiscal support should also be provided for instance for reinsurance markets and funding for catastrophic risks.

iii. Providing technical assistance to lenders that want to enter or expand their agricultural lending portfolio in order to improve their knowledge in agri-SME lending and risk management practices. This may include helping them to: (a) develop policies and processes to measure/manage their agri- SME lending portfolio; (b) upskill staff with agriculture expertise and design risk evaluation methodologies for agri-SME lending; (c) capacity building of management and board level executives of the financial services providers in order to improve executive buy-in; (d) establish specialised agri-SME lending units. Based on the Dalberg study, lending through specialised agri-SME units within banks provides greater value to agri-SMEs and lenders with agri-units seem to be more successful at growing agri-lending.

iv. Paying special attention to improving the professionalism, governance and management of Tier 4 financial institutions (especially SACCOs) in order to re-orient them towards production and marketing and ensuring that they remain a key link to financial services for the smallholder farmers, farmer organisations, cooperatives and other agri-MSMEs.

v. Providing technical assistance for agri-SME borrowers to make them more 'bankable' by improving financial management and governance. The technical assistance should improve business processes that support enhanced productivity, efficiency, profitability, resilience and hence viability of agri-SMEs.

vi. Offering low-cost capital to allow innovative financial services providers with an interest in agri-SME lending to scale up. This could be structured as equity or long-term concessional debt, to give lenders time to focus on growing their balance sheet to an efficient size.

vii. Support deepened application of digital financial services and the general use of ICTs in agricultural finance for instance by;

a) Incentivising *fintechs* and financial services providers to work together to provide secure payment platforms and to strengthen agricultural finance products distribution channels (through nationwide agency networks).

b) Investing in or facilitating the necessary backbone infrastructure interoperability that will support connectivity in rural areas among financial service providers. (Tier-1 to Tier-4 financial institutions, mobile money platforms, payments providers, etc)

c) Expanding the operation of alternative credit scoring (where ICT platforms are used to capture data that would be used to build credit profiles of the borrower in the agricultural sector especially smallholder farmers, women and the youth etc).

d) Incentivising blockchain/DLT to provide immutable traceability of products that can be used as smart contract and collateral to advance financing.

viii. Other supporting mechanisms could include; (a)

undertaking and making publicly available value chain studies that map out market dynamics, margins and risks at each segment of the key value chains with high unmet financing demands; (b) Advocacy and policy dialogues through the Agriculture Finance Platform and other such coordination mechanisms to influence enabling policies and funding mechanisms for long-term solutions to agri-SME lending in Uganda; (c) undertaking, on a biennial basis, the type of study carried out by Dalberg to provide updated evidence on the scale and type of support needed to develop data-driven solutions to agri-SME lending that can be adjusted as the market develops.

2.5.4 Conclusion

There is a wide range of lenders that are motivated and well-positioned, with some level of support, to increase agri-SME lending in Uganda. Accordingly given the importance of agri-SMEs as the engine that creates more jobs and improves more livelihoods than any other sector in the history of Uganda, public and philanthropic interventions are required to support lenders in closing the financing gap for this segment. A structured, targeted and transparent menu of support options covering risk, cost, and lender/ borrower capacity and other support mechanisms such as the ones described in the previous section, should strike the right balance between lender uptake, effective use of tax payers' money and/or donor funds, and feasibility. However, the mismatches between risk perception and actual risks means that senior leadership of lending institutions must be engaged to join the drive to increase agri-SME lending in Uganda.

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Endnotes

2 For the purposes of this article, "agriculture" includes on-farm and off-farm activities by researchers, farmers, agricultural input suppliers, processors, distributors, traders, exporters and retailers.

3 Stawi Africa is a multi-stakeholder partnership whose vision is to catalyse a competitive marketplace for agricultural SME finance in Africa. Uganda Agribusiness Alliance is a Stawi Africa Partner in Uganda.

4 CSAF (www.csaf.org) is a network of social lending institutions whose 9 members and 3 affiliates exchange learning, identify best practices, and work towards developing industry standards for a thriving, sustainable, and transparent financial market for small and growing agricultural businesses.

5 Dalberg Advisors (www.dalberg.com) is a strategy consulting firm focusing on issues of economic and social development.

3 CHAPTER

FINANCING OF AGRICULTURAL VALUE CHAINS

3.1 THE ROLE OF PUBLIC-PRIVATE-PRODUCER PARTNERSHIPS IN FOSTERING AGRICULTURAL VALUE CHAINS IN UGANDA: THE CASE OF OIL PALM

Nakazi Florence[1]

Picture credit: Nakkazi Florence

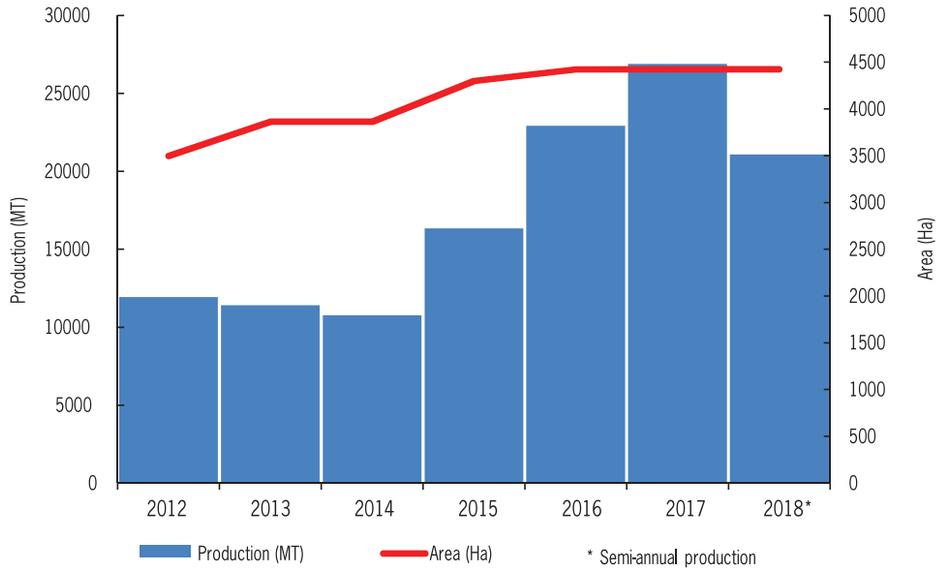
3.1.1 Background

The Oil Palm Project (OPP) was initiated in 2003 as one of the three components-oil palm, oil seeds, and institutional support-under the Vegetable Oil Development Project (VODP)[2] and in line with Plan for Modernisation of Agriculture (PMA), The project is implemented under a public-private-producer-partnership-(4Ps)-arrangement between the Government of Uganda (GoU) i.e. the public, Oil Palm Uganda Limited (OPUL)-private and producers. The project targeted increasing domestic production of oil palm, substituting imports, and generating rural employment. Planting commenced in 2006 and harvesting began in 2010 given the four year maturity period. Apart from the GoU, the project is supported by funding from the International Fund for Agricultural Development (IFAD). This article describes how the 4Ps arrangement has worked to support palm oil production and processing in Uganda.

The OPP is implemented through a value chain approach with clear roles and responsibilities for all the partners involved.[3] The three partners involved are: GoU; OPUL, and smallholder farmers, represented by the Kalangala Oil Palm Growers Trust (KOPGT). OPUL is responsible for management of nucleus plantations, provision of a guaranteed market to smallholder producers, the provision of quality seedlings, fertilisers and tools to smallholders and the production of crude palm oil that is sold to BIDCO for refining. Government is responsible for provision of financial support to smallholder farmers, the provision of land to OPUL, the construction of farm roads and the negotiation of an appropriate pricing mechanism. KOPGT-an intermediary institution between Government, OPUL, and smallholder famers-is responsible for; the mobilisation of farmers to grow oil palm, the provision of loans to farmers, the distribution of oil palm seedlings, fertilisers and other agro-inputs to farmers, the transportation of harvested oil palm nuts to the OPUL mills for oil extraction, the provision of extension services, mobilisation of land for OPUL to expand the nucleus plantations, land arbitration, among others. Kalangala Oil Palm Growers Association (KOPGA), an umbrella organisation for smallholder oil palm growers, is responsible for mobilizing members, organizing collective activities, supervising loan payments and disseminating information.

1 Research Analyst, Sectoral Department, EPRC (fnakazi@eprcug.org)

Figure 17: **Trends in area and oil palm production under the out-growers scheme**



Source: KOPGT (2018)

Oil palm production in Uganda is carried out under three integrated farming systems: (a) nucleus estate, (b) out-grower model, and (c) spontaneous. The nucleus estate involves OPUL that operates on over 6,500 hectares (including nurseries, demonstrations and farms) of government-owned land. This aims at mitigating production risks if smallholder production fails.

Under the out-grower model, farmers cultivate oil palm outside the nucleus estate on their own land or as tenants on a third party's land, usually adjacent to the nucleus estate concessions. Out-growers receive inputs from KOPGT, on condition that they sell the harvested oil palm to OPUL.[4] The out-grower scheme has over 1,810 smallholder farmers, 37 percent of whom are female. Since 2012, the area planted with oil palm by out-growers has increased from 3,498 hectares to approximately 4,424 hectares in 2018, while production of fresh fruit bunches (FFBs) has increased from 11,937 metric tonnes (MT) in 2012 to about 21,082 MT in 2018 (Figure 17). It should be noted that out-growers remain under the agreement until loans are repaid, and are therefore obliged to sell all produce to OPUL at an agreed price that is set every month.

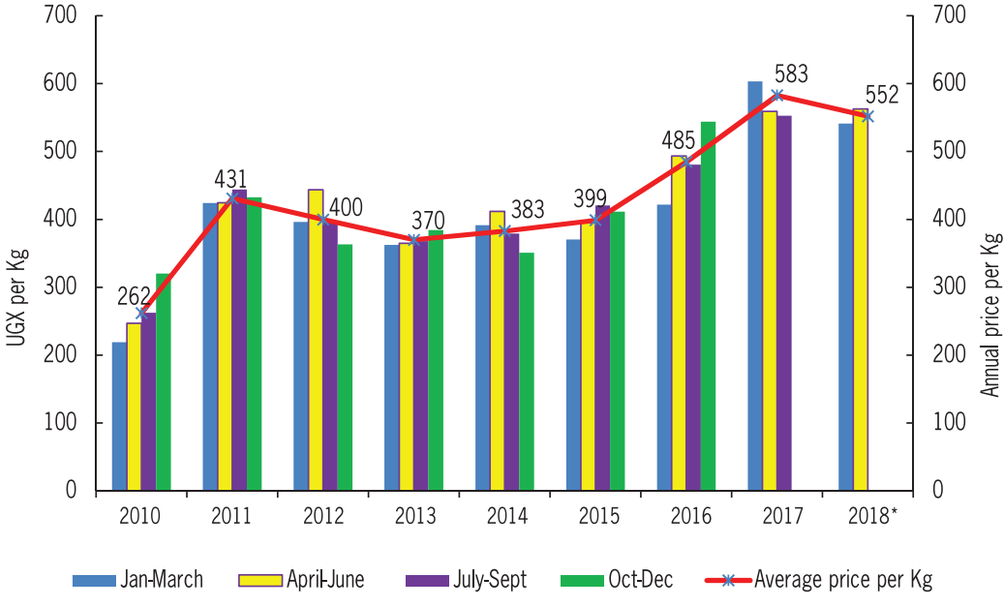
With respect to the spontaneous arrangement, farmers from the districts of Mayuge, Rakai, Masaka and Mukono are self-organised, self-managed and self-financed and have no contractual obligation to grow oil palm. They receive support or extension services from government and private agencies, on demand. They transport harvested oil palm to processing mills at Bugala Island in Kalangala district.[5]

3.1.2 Oil palm marketing and processing

The oil palm marketing chain consists of a series of activities ranging from weighing of FFBs on the farmers' farm, bulking of FFBs, transportation of FFBs to processing mills, and effecting payment for the deliveries made. Bulking of FFBs is done by farmers in a central place on individual farms. KOPGT weighs the bulked FFBs and uses trucks to transport FFBs to the oil palm mills, located at Bugala Island. Under the 4P arrangement, OPUL committed to buy all farmers FFBs at pre-determined prices. To this effect, farmers sell oil palm FFBs to the mill owned by OPUL through KOPGT.

The farm gate prices received by farmers are determined by the Oil Palm Pricing Committee on a monthly basis.[6]

Figure 18: **Trends in the price of fresh fruit harvested palm oil (2010-2018)**



Source: Oil palm pricing committee (various series)

The committee uses a pre-determined formula[7] that attaches the price paid to smallholders to the crude palm oil prices on the world market. This implies that the FFBs price changes monthly depending on the prevailing world market prices for crude palm oil. Average prices received by farmers have gradually increased from UGX 262 per kg of harvested oil in 2010 to UGX 552 per kg in 2018 (Figure 18).

Oil palm processing is primarily done by the two processing mills located on Bugala Island, each with a crushing capacity of 20 tons per hour. It involves the extraction of crude palm oil from the FFBs. From extraction process, two products (crude palm oil and kernel nuts) and two by-products (empty bunches and fibre) are produced. Crude palm oil and kernel nuts are sold to the BIDCO factory in Jinja for refining. The empty bunches are used as fertilizers in the oil palm plantations, while the fibre is used by OPUL to generate electricity that runs the processing mills. It is important to note that the mills at OPUL only perform primary processing. At the Jinja BIDCO Processing Works, crude palm oil is refined into a wide range of products.[8]

3.1.3 Financing the oil palm value chain

As earlier noted, the OPP is one of the three components funded under VODP. It was funded by different partners during the two phases of implementation (Table 19). Apart from private sector (OPUL), Table 19 shows that there has been increasing efforts by different partners to fund VODP. OPUL funded the establishment and maintenance of the nucleus estates. OPUL also financed the construction of processing mills and an oil refinery. Through the government loan that is administered by KOPGT, farmers under the out-grower scheme are pre-financed (for land opening, seedlings, fertilizers) for the first four years. When harvesting begins, the loans (at 10 percent annual interest) are recovered through deductions made by KOPGT from the OPUL payments to farmers. As of May 2018, the loan amount accessed by oil palm smallholder farmers was UGX 52 billion, of which about UGX 15.3 billion had been paid back (Key informant interview with KOPGT).

A synthesis of the disbursements of IFAD loan under oil palm component during phase 2 is presented in Table 02. It shows that the project successively consolidated

Table 19: **VODP project financing (US $ million)**

Financing party	VODP I (2003-2011)	VODP II (2012-2018)	Purpose
IFAD	19.90	52	Concessional Loan
IFAD grant to SNV	-	1.0	Grant to SNV to support the Uganda Oil Seeds Subsector Platform
GoU	12.50	14.14	Counterpart funding (taxes and land purchase)
Private Sector (OPUL)	120	70.38	Establishment of 6500 ha of nucleus estate of oil palm plantations, construction of two palm oil processing mills in Kalangala, and one oil refinery in Masese (Jinja)
Reflows Palm Loan	-	4.44	To be reinvested in the project
Farmers	3.16	3.9	Farmers estimated contribution provided in-kind as out growers (land and labour)
KOPGT	-	1.04	USD 1 million of own revenue generated by KOPGT
SNV co-funding	-	0.34	Technical Assistance OSSUP
Total	156	147.06	

Source: GoU (2014) and Parliament of Uganda (2018)

Table 20: **Disbursement of IFAD loan (oil palm component phase 2 in US$ as at 31st march 2018)**

Components	Budget	Actual	Performance (%)
Consolidation and expansion of Kalangala	8,608,100	14,780,999	171.71
Support to KOPGT	4,482,801	3,659,928	81.64
Mobilization-Buvuma	4,028,000	0	0.00
Development-Buvuma	9,217,299	609,909	6.62
Identification of new area	673,000	288,613	42.88
Total-oil palm component	27,009,200	19,339,448	71.60
Total-IFAD loan	52,000,000	39,632,719	76.22

Source: Parliament of Uganda (2018)

and expanded oil palm growing in Kalangala. Given the substantial and transformative socio-economic impact achieved under VODPI and VODPII, it motivated the design of the National Oil Palm Project (NOPP) (Parliament of Uganda, 2018).

3.1.4 Challenges

Evidence suggests that the 4P arrangement has generated significant achievements in oil palm production volumes, a ready market for farmers' produce, and employment creation (over 3,200 people are directly and indirectly employed at the oil palm mills, the refinery in Jinja and in the oil palm plantations. However, the value chain has faced a number of challenges including;

Inadequate extension provision to support oil palm production. On average, each farmer has over 7 acres of oil palm. However, under the out-grower arrangement, 1 extension worker is mandated to offer oil palm-tailored extension services to one block of about 500-700 farmers. Partly due to limited access to extension services, OPUL nucleus oil palm plantation have better productivity of 12 tons per hectare compared to the smallholders' 9 tons per hectare (IFAD, 2018).

Weak link between OPUL and oil palm research institution-National Agricultural Research Organisation (NARO).

For example, NARO has not developed the capacity to generate pre-germinated oil palm seedlings to be raised in nurseries for distribution to farmers. These are still being imported from Malaysia and Indonesia. In addition, soil and leaf sample analyses are still done in Malaysia and Indonesia, despite the presence of National Agricultural Research Laboratories (NARL) at Kawanda. The foresaid processes are quite expensive in a resource-constrained sector like agriculture, hence developing local capacity to undertake these processes would meaningfully reduce costs.

Despite the 1,500 MT capacity fertilizer store that was built in Kalangala, farmers still have limited access to fertilizers (IDS and IFAD, 2015; GoU, 2014). Under the arrangement, KOPGT conducts soil analysis on farmers' farms before recommending the suitable type of fertilizer to be applied. It is upon this basis that OPUL orders blended fertilisers from Malaysia and Indonesia. However, it is not readily available. When fertiliser application is delayed, the impact on yield is severe given that oil palm is a very sensitive crop. This could partly explain the wide variation in annual productivity of oil palm production of 9 tons per hectare and 12 tons per hectare on smallholder and nucleus farms respectively (IFAD, 2018).

There is underutilisation of the oil palm processing mills (EPRC, 2018). This is due to a mismatch between current oil palm production levels and what is ideally needed to fully utilise the installed capacity of the mills. Consequently, OPUL is not able to meet the crude palm oil required by BIDCO. OPUL's monthly crude palm oil production is refined by BIDCO in only three days (General Manger, OPUL; *pers. comm.*). Because of the huge deficit in crude palm oil supply, BIDCO continues to import more than 80 percent of its crude palm oil from Malaysia and Indonesia to meet the domestic requirements.

3.1.5 Emerging policy issues

Government is scheduled to borrow USD 75.82 million to scale up the commercial oil palm model under the NOPP to finance more districts. In order to achieve the intended programme objective of increasing domestic vegetable oil production, it is important that;

a) In the short term, Government (MAAIF) should train the existing extension staff in oil palm tailored extension (agronomy, harvesting and post-harvest handling. While the ideal situation would be for government to hire more extension staff, the pay provided and lack of extension staff supervision has always yielded suboptimal extension service results;
b) In the next phase of the project, support should be given to oil palm farmer organisations like KOPGT or KOPGA to train their own extension officers from whom they can demand quality extension service and provide reasonable remuneration. This arrangement assumes that the farmer organisation will be able to pay the extension staff. There are examples under similar models like the ACE model, where this has been successfully done;
c) Government, through NARO, should put strong emphasis on establishing national research capacity to address the emerging challenges in the oil palm sub-sector, including the production of high-quality seedlings, improved yields, disease control, and fertilizer regimes for different soil types;
d) Government should support farmer organisations like KOPGA to setup a strong traceability mechanism to effectively monitor the input acquisition procedures and ensure that the required inputs are availed on time to boost smallholder farmers' productivity. This could be reinforced by establishment of satellite factories to blend oil palm related inputs, particularly, fertilisers.

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Endnotes

2 Uganda's PMA was issued in 2000 as one of the government strategies to eradicate poverty through transformation of subsistence agriculture to commercial agriculture. It had four objectives: (i) increase income and improve the quality of life of poor subsistence farmers; (ii) improve household food security through the market; (iii) generate gainful employment; and (iv) promote sustainable use and management of natural resources.

3 With forward and backward linkages addressing all chain requirements from inputs, production, marketing to processing.

4 Inputs include high-yielding seedlings, fertilisers, credit, training in good agricultural practices and other production inputs.

5 Kalangala district has 84 islands but oil palm project activities are carried out on 3 islands of Bugala, Bunyama and Bubembe.

6 The committee comprise of representatives of KOPGT; OPUL; Ministry of Agriculture, Animal Industries and Fisheries-MAAIF; and VODP.

7 FFBs monthly price per ton = (H/J) * K where; H is price of crude palm oil per ton on the world market; K is oil extraction rate per ton; J is constant of 1.2 per ton, that takes care of processing costs.

8 The range of products include: Fats (Kimbo, Cowboy, Chipsy Plus 3, Chipo); Cooking Oils (Elianto, Golden Fry, Fortune Cooking Oil, Sun Gold, Fortune Butto, Ufuta); Soaps (Star, Bull, Kuku, Gentle washing powder); and Margarine (Gold Band).

3.2 FINANCING UGANDA'S INTEGRATION IN THE GLOBAL VALUE CHAINS: THE CASE OF COTTON AND TEXTILE INDUSTRY

Martin Luther Munu[1]

Picture credit: EPRC

3.2.1 Background

Cotton was introduced into Uganda by the British in 1903, initially being grown in the central region, with production later spreading to the rest of the country. The policy framework governing cotton production and marketing was embedded in the revised Cotton Act (1964) and the Lint Marketing Board (LMB) Act (1959, amended 1976). The economic and political turmoil of 1970s and 1980s led to a decline in production from over 300 million to over 11,000 bales in 1988.

In 1994, the Ugandan government liberalised the ginning and marketing of cotton. Liberalisation of the sector was effected by the passing of the Cotton Development Organisation (CDO) Act of 1994, which created the CDO, a semi-autonomous agency under the Ministry of Agriculture, Animal Industry and Fisheries. The Act opened up cotton ginning and marketing to private sector participation, while at the same time mandated the CDO to carry out monitoring, promotion, processing, marketing, and regulation of the cotton sub-sector on behalf of the government.

The Ugandan sector is still not performing well due to limited integration in the Global Value Chains (GVCs). These chains are usually understood as encompassing all activities of production of goods and services and supply in international (global) markets as well as their attendant supply chain.[2] Limited integration is because most of the cotton produced in Uganda is exported as lint—with only 5 to 10 percent of production used domestically (Masiga and Ruhweza, 2007).[3] Financing is required to upgrade Uganda's cotton into the GVCs, which in itself is an important element in facilitating the transformation of the cotton and textile industry.

Uganda has a huge trade deficit with respect to textile products. Analysis by the International Trade Centre (ITC)-computed *Trademap* database shows that the country's import bill on textile clothing steadily rose from USD 56.3 million in 2001 to more than USD 210 million by 2017 while earnings from the country's cotton exports only rose by 13 million to only USD 54 million in 2017 (ITC, 2018) Table 21 shows Uganda's trade balance for textiles[4]; The table indicates that worn textile products and clothing (second hand clothes) constitute a major component of Uganda's textile trade deficit. Worn clothing had the highest trade deficit of USD 27.4 million in 2001, increasing to USD 137.8 million in 2016. Trade, in textile products, has

1 Research Analyst, Trade & Regional Integration department, EPRC. This article has been produced from the EPRC's stakeholder analysis and case study for fostering agro-industrialisation in Uganda as well as previous work on the cotton sector. (mmunu@eprcug.org)

Table 21: **Uganda's trade balance in textile products (USD millions)**

Cotton product	2001	2005	2010	2015	2016
Cotton (lint)	12.8	25.5	13.4	12.8	23.9
Apparel and clothing products	-8.2	-12.4	-22.6	-20.1	-20.4
Man-made staple fibres	-8.6	-12.3	-17.0	-19.2	-20.6
Worn clothing & worn textile products	-27.4	-36.3	-86.9	-102.3	-137.8
Other textiles	-12.0	-14.3	-31.3	-32.0	-33.5
Overall Textile products trade	-43.4	-49.8	-144.4	-160.9	-188.5

Source: Computation by author using ITC data (2018)

on the overall, seen an increased deficit from USD 43.4 million in 2001 to USD 188.5 million in 2016.

This is a result of the relatively lower prices and higher quality of second-hand clothes as well as limited supply of domestically produced textile products. Government therefore needs to support the development of local textile industry by checking the importation of second-hand clothes and inexpensive Chinese textile products (UNCTAD, 2018). This would present the textile industry in Uganda with ready market domestically if the issue of prices and quality can be addressed.

3.2.2 Financing the cotton value chain

The financing mechanism for the cotton and textile GVCs can be classified into two, i.e. financing for cotton lint production and financing for textile industry production. Financing for production is primarily undertaken by the industry players—where by CDO works together with the Uganda Ginners and Cotton Exporters Association (UGCEA) under the auspices of the Cotton Production Support Programme (CPSP). Under this programme, UGCEA created a common fund i.e. Cotton Development Fund where an average of UGX 200 is levied on each kilogram of cotton sold by the farmers to the ginners based on the indicative price set by CDO.

The ginners remit the levy under the CPSP to CDO which then uses it to procure production inputs – such as seed, pesticides, spray pumps, fertilisers and herbicides. The inputs are then sold to farmers at subsidised rates. The rates for this subsidy are determined by UGCEA on an annual basis and this arrangement is independent of any government policy. The fund is also used to mobilise and sensitise farmers, as well as provide them with extension services. The extension system consists of 10 CDO zone coordinators and one area coordinator within each zones. This model has been successful in filling the gap created by the lack of advisory services under the defunct cooperative unions in Uganda.

In terms of textile industry production, financing is totally private sector driven in line with the Ugandan policy of private sector-led industrial development. Currently, there are only two textile industries i.e. Southern Range Nyanza Ltd and Fine Spinners (U) Ltd. The two mills consume about 10,000 lint bales per annum and have a total of 21,000 spindles installed. However, they produce at below installed capacity, utilising only around 63 percent of their capacity.[5] Private financing and loans are the main sources of financing for these establishments.

The role of the state has been key in redeveloping the textile industries especially through incentives to investors. In 2017, the Ministry of Trade, Industry and Cooperatives (MTIC) initiated the "*Buy Uganda, Build Uganda" (BUBU)* campaign and which was later adopted as a national policy. The import substitution policy promotes the purchase and consumption of more locally produced cotton as opposed to export which incentivised Nyanza textiles Limited (Nytil) to invest more than UGX 150 billion to modernise their plant in Jinja, for increased production. Other incentives have come through provision

of tax exemptions, included —allowing for full repatriation of profit. However, basing on the developmental states experience in Asia, there is need for more investments in the downstream cotton value chain especially in the area of spinning and weaving.

Ackah *et al*. (2014) recommends rejuvenation of the textile industry in an integrated manner, from seed production to spinning to ginning, and printing for the revitalisation of the cotton sector in Ghana. Since Ghana's case was similar to that of Uganda in the 1960s, such rejuvenation is something Uganda can also take up. Government support therefore needs to go beyond large-scale manufacturing industries to include financing the development of small scale industry players/cottages which is more inclusive and easier to manage. The Uganda Development Bank (UDB) and Uganda Development Corporation (UDC) should be the driving force for increased role of the state in financing Uganda's integration into the cotton GVCs.

The Textile Development Agency (TEXDA) is one approach to cotton small scale industry development. TEXDA is a key government agency under MTIC for promoting the growth of textile businesses through technical, managerial and entrepreneurial skills support to Micro, Small and Medium Enterprises (MSMEs). TEXDA was established as a project by the United Nations Industrial Development Organisation (UNIDO) in 1999 and for sustainability, its operations were later absorbed into MTIC. The Agency has been transformed into a Trust under the MTIC to become the Uganda Textile Development Centre (TDC), offering training and production in textiles. Government should therefore consider building the capacity of TDC as it links with Micro Small and Medium Enterprises (MSMEs) ultimately supporting the entire cotton value chain.

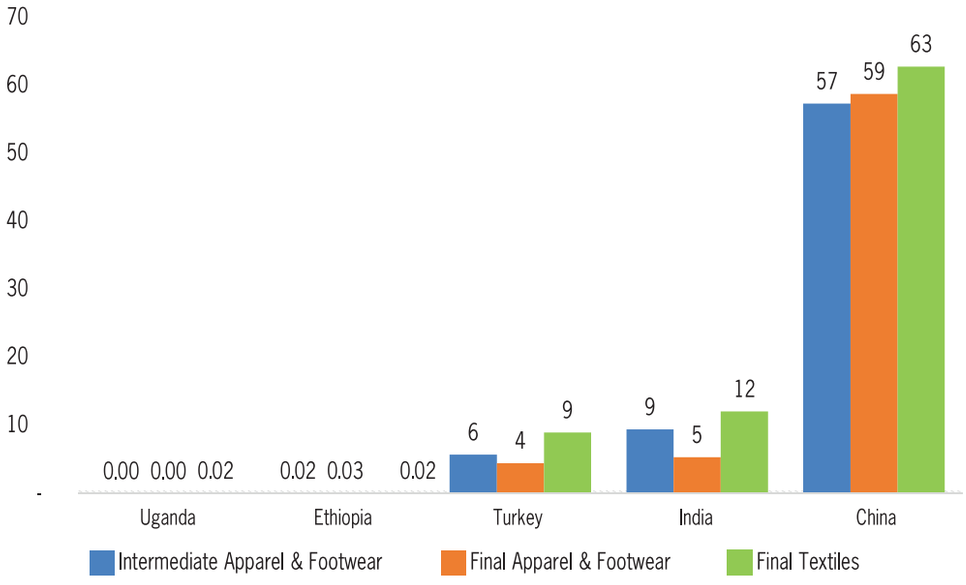
Financing from other countries through bilateral ties provides another opportunity Uganda can capitalise on. In July 2018, for instance, India and Uganda agreed on a credit line worth USD 200 million for technology acquisition for Uganda's energy and agricultural sectors. This kind of financing should be made available for upgrading the textile industry since India is one of the major suppliers of textile equipment in the country.

Financing Uganda's integration in the cotton GVCs requires investing in the entire cotton value chain as opposed to investing in some segments of the value chain. The Uganda Investment Authority identified a number of investment opportunities in the cotton and textile industry sub-sector that can be marketed to potential investors. These include; cotton ginning and production of cottonseed oil, animal feed, absorbent cotton wool and cotton yarn. There is need to finance these segments of the cotton value chain if Uganda is to transform its textile sector (UNCTAD, 2018), and support the sector's integration in the GVCs. Since textile projects are capital intensive, financing should be made available under the Uganda Development Bank's UGX 50 billion shillings annual capitalisation enhancements.

3.2.3 Integration into the global value chains

Uganda has a limited participation in the GVCs according to the World Integrated Trade Solutions Global Value Chain (WITS GVC) index. Figure 19 shows the share of Uganda's and other selected countries (with whom Uganda has links to in terms of trade agreements) exports in the global market value for cotton over the period 2012-2016.[6] It is indicated that Uganda is poorly integrated in the cotton GVC with less than 0.1 percent share in the world market, which is dominated by China. China accounts for 57, 59, and 63 percent of the global footwear, final apparel and footwear, and final textiles markets respectively. On the other hand, India and Turkey contribute between 4 to 12 percent of the GVC. In fact Uganda's GVC contribution dropped from 0.02 percent in 2012 to 0.007 percent in 2016. Besides the large trading nations, the chart includes Ethiopia—which has implemented ambitious plans to upgrade its participation in the leather and textile GVCs industries. Ethiopia presents good lessons for Uganda in terms of fostering agro-industrialisation through developing the textile and clothing industry.

Figure 19: **Integration in the GVCs: Uganda compared to other countries (2012-2016 averages)**



Source: WITS Database (2018)

Despite Uganda's limited integration, there are opportunities to upgrade in the GVC which can be harnessed. This is because Uganda has established bilateral trade ties with countries which are already big players (especially China) in the GVC. Using these ties, there are opportunities for knowledge and technological diffusion through partnerships in setting up manufacturing plants, supply chain linkages, and vertical as well as horizontal integration with Ugandan firms. Uganda should therefore seek to have a bigger role in the final apparel and footwear and textiles where there is huge demand both domestically (as seen in the huge import bill) and in the international markets. Uganda must increase its investment in the cotton and textile industries if it is to increase the country's cotton and textile exports beyond the current 1.2 and 1.0 percent respectively (WITS, 2018).

3.2.4 Challenges and opportunities

One of the many challenges in terms of financing Uganda's integration into the cotton GVCs is the inability to acquire long term capital at affordable interest rates. The weighted average lending rate for commercial banks was about 24 percent in 2016, lowering to around 20 percent in 2018[7], moreover with short repayment duration. This is problematic because the industry requires huge capital investments with a considerable time for returns to investment to be realised. This kind of finance cannot attract small or large-scale textile industry investors to the sector. The high costs of doing business, brought about by high energy and trade costs among others, further aggravate the situation.

In spite of the challenges, a number of opportunities have emerged over the last few years. The Buy Uganda Build Uganda (BUBU) policy[8], has provided increased market opportunities for the textile industries which has helped to attract investments in the sector. For instance, Southern Range Nyanza Textiles have since 1996 invested over US$ 45 million in a programme to revive the industry with a huge chunk of that investment used to modernise its plant in Jinja, in anticipation of demand generated by the BUBU policy. In line with BUBU principles, the industry is supplying uniforms to armed forces and other public servants. In addition, the Company plans to expand fabric manufacture to increase daily output of 80,000 metres by another 50,000 metres in response to the planned gradual phasing-out of second hand goods by the EAC.

At the regional level, integration of African countries offers opportunities for increased innovations and market access. The recently-agreed African Continental Free Trade Area (comprising 55 African Union member States and more than 1.2 billion people) increases prospects for increased trade in industrialised goods rather than trade predominantly of primary products (African Trade Policy Centre, 2018). Moreover, a regional strategy was put in place by the Common Market for Eastern and Southern Africa (COMESA) to develop the cotton value chain with a mission of promoting trade and increasing market access for the cotton, textile, and apparel industries in Africa (COMESA, 2009). Current efforts to attract investment in the sector are therefore also aimed at fulfilling the objectives of the COMESA strategy.

3.2.5 Conclusion and policy implications

In conclusion, financing Uganda's integration in the cotton GVCs requires a great deal of state intervention. Government needs to directly invest in spinning and weaving/knitting, stimulate production, and increase the proportion of cotton lint consumed domestically. Private sector investments are insufficient due to the long period before positive return on investment is realised, an issue that also discourages investors. Government needs to support the TDC's mandate by financing its development into the National Textile Institute as per the National Textile Development Policy. There is also a need to adopt deliberate initiative of ring fencing financing for textiles under the Uganda Development Bank (UDB) and Uganda Development Corporation (UDC) options.

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Endnotes

2 Arnell (2016) observes that African firms, and Uganda in this case, are usually stuck at the bottom of the value chain and have an unfavourable trade balance, since they primarily export raw materials and import finished goods. This is more pronounced in the cotton and textile industry, where Uganda exports cotton lint and imports manufactured cloth, both new and second-hand.

3 According to officials from CDO during stakeholder consultation, estimates in 2018 also maintain that less than 10 per cent of the cotton lint is consumed domestically.

4 This is a subtraction of total imports from total exports. A negative value indicates a negative trade balance (trade deficit) while a positive value indicates a positive trade balance.

5 This level of production translates into production of about 570,000 garments per month.

6 The higher the index, the more integrated a country in the GVC.

7 Bank of Uganda, available at https://www.bou.or.ug/bou/home.html

8 The BUBU policy was introduced in 2014, based on existing Government policies to support and encourage the consumption of locally-produced goods and services.

3.3 DONOR AND PRIVATE MODALITIES FOR FINANCING THE COFFEE VALUE CHAIN: A CASE OF THE AGRICULTURAL BUSINESS INITIATIVE (aBi)

Geoffrey Okidi[1]

Picture credit: aBi Trust Development Limited

3.3.1 Background

Coffee plays a leading role in the livelihood of Ugandans and contributes substantially to the national economy. The crop is cultivated by about 42 percent of farming households and has contributed an average 30 percent to the country's foreign exchange earnings over the past 20 years (UCDA, 2015). Despite its significant contribution to the economy, the coffee sub sector is struggling with a number of constraints including low investment leading to production and productivity challenges.[2] The coffee value chain, like other agricultural commodity value chains in Uganda, has limited access to finance. A recent report by Uganda Bureau of Statistics (2019) indicates that only about 12 percent (UGX 4.6 trillion) of the total commercial bank loans and advances to the private sector are allocated to agriculture.[3]

Given that finance is a fundamental input to the transformation of the agricultural sector, the Government of Uganda has since the 1990s implemented a number of agricultural finance initiatives (e.g. the *Entandikwa* Scheme (1996), the Rural Financial Services Programme (2005) and more recently the Agricultural Credit Facility). These initiatives have been complemented with NGO and donor projects. Munyambonera *et al*. (2012) makes a case for interventions to increase access to and use of credit by farmers.

This article examines attempts to filling the financing gap in the coffee value chain based on the financing model by the Agricultural Business Initiative (aBi)—a multi-donor entity.

3.3.2 Operations of aBi as a multi-donor entity

The Agricultural Business Initiative (aBi), is a social enterprise with the overall vision of contributing to '*a competitive and sustainable agriculture and agribusiness sector in Uganda in support of equitable wealth creation*'. aBi consists of two Companies Limited by Guarantee—aBi Development and aBi Finance. The main focus of aBi Development is to increase agricultural production and value addition by extending matching grants and business development services (BDS) to agribusinesses, farmer organisations and intermediaries.

The aBi uses a mix of three main instruments to address specific constraints in the 6 priority value chains (i.e. coffee, cereals, pulses, dairy, horticulture and oilseeds). These include;

i. Grants and Business Development Services (BDS); which are intended to enhance planning

1 Head of Portfolio Development, aBi Development Limited (Geoffrey.Okidi@abi.co.ug)

and management, production and businesses infrastructure, and upstream and downstream market linkages of producers and agribusinesses. As a multi-donor entity, aBi extends matching grants through implementing partners to reach the ultimate beneficiary smallholder farmers. Between 2014 and 2018, aBi financed around 130 matching grant projects to the 6 priority value chains. Matching grants were valued at about UGX 345 billion, of which at least 47 percent of the financing, was in form of grant contributions (KPMG, 2018).

ii. Lines of credit and guarantee scheme: aBi supports de-risking of agricultural loans by providing lines of credit to financial institutions (FIs) for onward-lending to agribusinesses. The risk sharing is offered via the Agriculture Loan Guarantee Scheme. By December 2018, aBi's financial products generated over 269,000 new loans to producers and businesses;

iii. Financial Services Development Program Support to FIs. aBi provides FIs with matching grants and BDS support to build institutional capacity for enhancing the provision of financial services and increasing outreach in rural areas. By December 2018, about UGX 25 billion was disbursed to 48 FIs in grants (aBi Trust, 2018).

The three avenues above have enabled aBi to contribute to enhanced agricultural sector growth and performance, ultimately benefitting the smallholder farmers. For example, in the period 2014 - 2018, aBi's investment benefited over 600,000 smallholder farmers. In the same period, aBi's financial products (lines of credit and the agribusiness loan guarantee scheme) generated over 269,000 new loans to producers and businesses (aBi Trust, 2018).

3.3.3 The aBi donor/private coffee value chain financing model

In the last five years (2014 – 2018), aBi interventions in the coffee sector have focused on productivity enhancement, quality improvement, establishment of value addition centers, production of clean planting materials, access to finance and markets as well as the integration of gender and green growth issues in the entire value chain. aBi has provided matching grant and BDS support to over 18 partners in the coffee value chain over the last 5 years with total grant value of UGX 34 billion matched by private sector financing from the Implementing Partners.

Some of the supported partners include: Kyagulanyi Coffee Ltd, UGACOF Ltd, Kawacom Uganda Ltd, Ankole Coffee Producers Cooperative Union, Uganda Coffee Development Authority, Café Africa, NUCAFE, Bushenyi District Farmers' Association, Rubanga Cooperative Society and Sembabule District Farmers Association. The support extended to the partners has benefitted over 362,000 smallholder[4] coffee farmers and created 39,605 Full Time Equivalent (FTE) jobs (aBi Trust, 2018).[5] In terms of geographical focus, interventions have been concentrated in the Uganda coffee growing regions of central, western, eastern and the West Nile area.

In the period 2014 – 2018, aBi worked with the 18 implementing partners in the coffee value chain with interventions aimed at; (i) improving productivity and competitiveness through training farmers in good agricultural practices; (ii) supporting production of clean planting materials; supporting value addition activities; (iii) pest control; (iv) certification; (v) market access; (vi) integrating gender equality and equity as a central theme in training households to view farming as a family-business; and (vii) building entrepreneurship skills and providing technical support to green growth interventions. With aBi's support, eight secondary processing facilities were established, 33 micro centres supported and numerous village savings and loan associations (VSLAs) enabled to promote a savings culture amongst farmers and to meet

Box 2: **Using technology to reach coffee farmers**

In recent years, technological innovations have provided unprecedented opportunities to rapidly and sustainably advance financial inclusion which has reduced the transaction costs for clients. For example, in a rural finance programme targeting the coffee sector aBi supported Opportunity Bank to reach 61,233 coffee farmers in the focus districts of Masaka, Mubende and Mityana using mobile technology. In this project, Opportunity Bank collaborated with Grameen Foundation to profile smallholder coffee farmers belonging to the Uganda Coffee Farmers' Alliance and to provide them with advisory services by mobile units while linking them to the bank's services through the mobile money platform. This project enabled the unbanked farmers to access financial services like loans to improve their coffee business.

their smaller credit needs.

aBi's partnership with the Uganda Coffee Development Authority (UCDA) enabled the UCDA to address challenges of sustainable quality improvement, capacity building, and knowledge management in the sector. The integration of gender equity in all project interventions in the coffee value chain has increased the participation of women in 2018 by about 33 percent from previous year from 20,927 to 27,832 (aBi Trust, 2018). A total of 60,291 acres of new lands were opened up and planted with 26 million coffee tree seedlings.

In the past five years, coffee farmers have achieved the following from aBi interventions; (i) getting organized for bulking and marketing purposes which increases bargaining power resulting into increased income at household level; (ii) increasing quality, production and productivity at farm level as a result of knowledge acquired from extension services in good agronomic practices and post-harvest handling services; (iii) gender relations in households have improved as a result of aBi's approach of encouraging equal participation in farming as a family business; (iv) having access to improved technologies; and (v) employment opportunities created along the coffee value chain.

In terms of increasing access to finance, aBi's financing of the coffee VC has evolved to include new grant modalities, including repayable grants or concessional loans for large operators and capital investments. Furthermore, aBi's has provided substantial support to FIs through its Lines of Credit, the Agricultural Loan Guarantee Scheme as well as grants and BDS support. aBi interventions have unlocked loan volumes in excess of UGX 800 billion to the agricultural sector in the past five years (aBi Trust, 2018). In addition, aBi has used innovative approaches e.g. using technology to reach coffee farmers (see Box 2). Even with this level of support, strong demand for long term finance for capital investments in the coffee sector remains.

3.3.4 Lessons learned and sustainability of the model

i. A single instrument is not a solution to value chain financing, rather mixed instruments are required. The use of blended financing ensures optimal use of resources and increases the capacity of grant beneficiaries to operate sustainably.
ii. In cases where weaknesses in the implementing partners have been identified, development partners' interventions should consider implementing institutional capacity strengthening activities prior to providing financial support. This ensures that the required institutional framework and capacity is in place to effectively deliver the intended services, as well as implement the project.
iii. Developing financial products for farmers must take into consideration the characteristics of agriculture and the real needs of farmers in order to serve the intended purpose.

The matching grants and BDS provided by aBi are aimed at strengthening implementing partners' capacity to sustainably operate on their own without further support. In essence the selected partners are only those with a commercial focus and ability to match the grant support. The selected partners have also been able to meet their contributions to the total project cost. A continued move away from noncommercial implementing partners such as District Farmers Associations and Non-Governmental Organisations towards SMEs will strengthen sustainability of the model. The use of blended financing instruments e.g. grants and loans or repayable grants/concessional loans is a move to wean partners off grant financing.

For the FI partners, evaluations of the performance of the Agricultural Loan Guarantee Scheme and Lines of Credit have demonstrated increased allocation of financial institution's own funds to the agricultural sector.

3.3.5 Challenges and opportunities

In implementing the aBi financing model, a few challenges have been encountered notably:

i. Weak institutions: In some cases, institutions' weakness in terms of governance and internal controls pose a risk to the safety of organisational assets and investments. This has been commonly found with Farmer Organisations and lower tier financial institutions. Institutional weaknesses pose institutional risk that lead to institutions collapse even after receiving lines of credit. Portfolio risk of weak institutions results into losses on guaranteed portfolio that are higher than what is envisaged in calculation of guarantee commissions and earnings.
ii. Interest rates for loans to the agricultural sector still remain high. For example, average lending rates for agricultural production loans in Microfinance Deposit-taking Institutions (MDIs) is in the region of 30 percent per annum compared to a slightly lower percentage of 24 percent for other enterprises[6]. FIs have not been as responsive in dropping interest rates to the agricultural sector even when they access lines of credit at below commercial interest rates.
iii. The adaptability of financial institutions systems to collect value chain specific data has been a challenge. For example, it was not possible to gather information on the volume of loan portfolio allocation to coffee sector within financial institutions. This makes planning interventions for specific commodities difficult.
iv. Lack of bankable proposals: Whereas financing may be available, many SMEs are not able providing proposals that are acceptable to financiers. The projects or proposals presented do not demonstrate or provide certainty of adequate future cash flow or high probability of success.

In spite of the challenges cited above, opportunities abound in financing of the coffee value chain. There are several coffee agribusinesses and/or farmer organizations that can be supported to develop at institutional level in areas of governance, business planning and financial management to be able to offer sustainable bulking/ marketing services to the farmers. The coffee value chain has a critical mass of actors at most of the stages.

Coffee trade in Uganda is relatively better structured than most commodities due to existence of support institutions and the ready export market. This makes the sector attractive to private sector service providers e.g. transporters, insurance, market information providers due to the associated returns to investment. This presents opportunities to extend financing to the sector. The financial services sector needs to develop appropriate products for financing the coffee value chain. At the moment there is an unmet need for medium term to long term loans for investment in coffee. This is an opportunity that needs to be exploited.

Government has demonstrated interest in supporting the coffee sector through the Uganda Coffee Development Authority (UCDA). There are also upcoming Coffee

Roasting and Retail Businesses in Uganda that will boost local consumption and widen the market for coffee hence the need to invest more in the value chain. Opportunities also exist in harnessing the energy of Uganda's youthful population and getting them engaged in the coffee value chain.

3.3.6 Conclusion and policy implications

aBi's financing model seeks to strengthen value chain actors to play their role sustainably with a commercial focus. In view of Uganda's ambitions to produce 20 million 60-kg bags of coffee by 2040 earning export revenues of US$ 2.5 billion there is need for concerted effort among all stakeholders. From aBi's experiences, attention needs to paid to the following;

i. There are opportunities for integrating the youth into the coffee sector at different stages of the chain. The most notable stages are production and marketing of value-added coffee products produced in Uganda. This way, not only will the employment opportunities provided by the sub-sector be exploited by the youth, but there are increased chances of entrepreneurial opportunities in the sector driven by this segment of the population. In addition, there are increased chances of this segment adopting coffee drinking in the long term and driving consumption in the subsector.

ii. There is still need for financial institutions to develop and diversify their portfolio on agricultural financing to create demand for the products and services. This will require the support of government and development partners. Furthermore, financial institutions need to harness technology for the delivery of rural financial services to smallholder farmers more cost effectively.

iii. Coordination of coffee financing: Whereas UCDA is mandated to promote and oversee the coffee industry in Uganda, there seems to be no central coordination function that is concerned with the financing of the coffee sector. This leaves both public and private sector players and facilitators uncoordinated and unaware of the activities of others thereby losing out on the synergy that could have been derived therefrom.

iv. There is need to continue to support and strengthen the capacity of commodity cooperatives, SACCOs and other lower tier financial institutions as they have proven useful in intermediating credit especially at the level of the smallholder farmers.

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Endnotes

2 The challenges include: low production and productivity at the farm level, pests and diseases, lack of access to technical coffee extension services, lack of agricultural financial products for coffee farmers, limited access to quality planting materials, limited funding for research and development, poor post-harvest handling practices, lack of proper coffee quality control mechanisms, limited coffee processing machinery, limited coffee marketing.

3 Uganda Bureau of Statistics (2019) Key Economic indicators 11th Edition.

4 Whereas 269,000 new loans were disbursed, the 362,000 farmers includes all those who have derived financial benefit from the intervention and not necessarily from the loans disbursed.

5 1 FTE job = 240 wage labour days (1 Wage labour day = 8 hours of work, either permanent or on casual labour basis)

6 Partner Quarterly Reports 2018, aBi Finance Ltd

3.4 MAIZE VALUE CHAIN FINANCING IN UGANDA: A DEVELOPMENT PARTNER'S PERSPECTIVE

Robert Kalyebara[1]

Picture credit: aBi Development Limited

3.4.1 Introduction

Financing the maize value chain (MVC) has, since 2011, been discussed in various past issues of the Agricultural Finance Year Book (AFYB). In 2011, Besigye reviewed opportunities and challenges for boosting investment in the (Besigye, 2011) . The paper highlighted increased domestic and regional demand, sustained high prices; and improved infrastructure and value chain services which he attributed to past and on-going investments by value chain actors as major opportunities. The paper elaborated an inclusive list of challenges, highlighting a big gap in MVC development interventions at the time.

In the 2012 AFYB, Miller expounds on the issues surrounding agricultural value chain finance in general (Miller,2012), while Oyee examines opportunities and challenges for small holders in the MVC (Oyee, 2012). Miller looks at financing risks and discusses the various value chain financing models and financial products offered to address production, price and market risks . The paper is heavily focused on addressing supply side constraints of finance, less on demand side interventions for enhancing smallholder access and 'purchasing power', such as through membership of Village Saving and Loan Associations (VSLAs), and Savings and Credit Cooperatives (SACCOs).

Oyee contributes to this discussion by addressing issues about the financial viability of maize production, looking at the determinants of margins in the value chain, comparing a high-input production system in Kapchorwa with a low-input system in Hoima. Both case studies conclude that investing in maize production and marketing is profitable, although the high-input production system yields the highest returns to investment. Maize margins are highly sensitive to cost of production inputs, fake inputs, yields, and cost of transport to markets. The analysis makes an important observation that returns to investment in high-input production system in Kapchorwa are much higher than in low-cost production systems in Masindi due to almost double the yield realised in the former location compared with the latter. The corresponding unit cost of production per kilogram is about 25 percent lower in high input production system, and maize markets are more structured. Hence the high-input system is a better financing proposition.

In the 2013-14 issue of the AFYB, Olweny and Ochiengs (2014) presented evidence from an impact assessment indicating that maize ranked third in terms of incremental growth in farm income between 2011 and 2013. Even without rigorous analysis of financial profitability and returns to investment, the data on proportion of farmers reporting income growth shows that maize is among

1 Head of Results Measurement and Research & Development, aBi Development Limited (Robert.Kalyebara@abi.co.ug / rkalyebara@hotmail.com)

the top five commercial crop enterprises among aBi beneficiaries. Further evidence from a 2015 nationwide survey by the Consultative Group to Assist the Poor and GIZ (Anderson, 2015) revealed that maize was the highest income earner for the highest proportion of farmers (25 percent), followed by beans (15 percent), and coffee (11 percent).

Objective

This review has summarised the key issues examined in previous AFYBs regarding the MVC's key financing opportunities and challenges, financing models, lessons learned and emerging issues. In this article, we add to this discussion by presenting a development partner's perspective on financing the MVC, with the goals of increasing competitiveness, incomes and job creation. The focus is on lessons learnt from implementing the Agricultural Business Initiative (aBi) maize financing model, and suggestions for improving future interventions.

3.4.2 Maize value chain (MVC) financing model

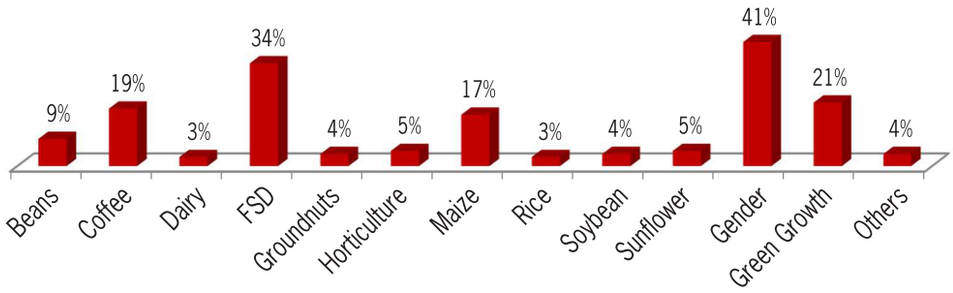
aBi offers financial and technical support to various value chain actors with the overall goal of increasing competitiveness, income and employment of farmers and agribusinesses. The programme targets six value chains (Coffee, Cereals, Pulses, Oilseeds, Horticulture, and Dairy) and Gender Equity, Green Growth and Human Rights as cross-cutting areas. Direct beneficiaries include farmers, input suppliers, aggregators/traders, service providers, agro-processors, distributers, exporters, agro-technology entrepreneurs, and regulatory agencies. Support is channelled through matching grants, Lines of Credit to Financial Institutions for on-lending to agribusinesses, an Agriculture Loan Guarantee Scheme for Financial Institutions, and agricultural insurance.

The general model for value chain finance supports private sector lead actors and support institutions in the selected value chains. Investment decisions are guided by a holistic value chain approach whereby opportunities and constraints for agribusiness development in the various value chains are identified through value chain analysis and specific interventions are supported to address the most limiting constraints. Since aBi is in the "business of agribusiness" there must be a strong case for improving business competiveness and sustainability that is attributed to the development partner's investment. The principle of the matching grant is that the grantee has a viable business proposal that is in line with the donor's objectives, and the grantee makes a specified financial contribution to the project. Depending on the investment appraisal recommendations, some proposals are granted a partial grant and are referred to a financial institution for a loan to complement the grant. This blended finance approach is a central tenet in the aBi value chain finance model, and is applied to all value chain support. However, this article focuses only on grant financing.

aBi's value chain finance model has been applied over the last eight years. The results presented in this article relate to projects supported during the period covered by last business plan, namely 2014 to 2018. Data were obtained by reviewing documents for 100 projects which were running at least one year in the business plan period (i.e. had at least one year to completion, or running one year before the end of 2018). Sixty six projects received Value Chain Development (VCD) grants covering the six value chains, and 34 projects were funded through aBi's Financial Services Development (FSD) technical assistance grants which target strengthening capacity of financial institutions to reach the unbanked population and bring services closer to rural clients. FSD grants by design do not target any one value chain, therefore the indicators discussed below reflect access and use of financial services by maize and other value chain actors. It is not possible to disaggregate the results.

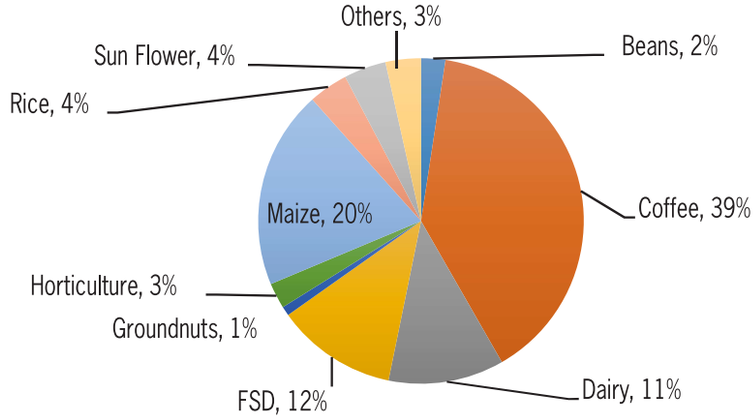
The total cost of the supported projects is approximately UGX 173 billion, of which 55 percent is grant, and 45 percent is partner contribution. The composition of the grant portfolio in terms of number of projects funded

Figure 20: **Share of maize projects - as a percent of grant portfolio**



Source: aBi M&E Database[1]: Totals exceed 100% because some projects cover more than one commodity

Figure 21: **Percent of total grant financing by commodity supported**



Source: aBi M&E database

shows that maize accounted for 17 percent of the total number of grant projects, second to coffee (Figure 20).

The share of total grant financing that went to maize is 20 percent, again second to coffee at 39 percent (Figure 21). The lion's share taken by coffee, maize and dairy in grant FSD support is an indicator of both investor priorities and competitiveness of these value chains/sectors. It is also an indication that these value chains are more developed and commercially-oriented.

3.4.2.1 Areas of focus in the maize value chain (MVC)

The main focus of the agribusiness development strategy for the MVC was deepening of the local and regional market for good quality maize. To achieve this, funding was directed at quality issues which had arisen due to poor handling, low value-addition, lack of value-addition infrastructure and bulking facilities, poor access to good quality seeds, training in Good Agricultural Practices (GAPs), improving post-harvest handling, and promoting marketing of maize.

In previous years, farmers and traders had challenges complying with trade regulations and quality standards for the World Food Programme (WFP) and major markets in Kenya. This explains why 100 percent of maize projects had funding for capacity building (Table 22) mainly targeting training of service providers and farmers in GAPs.

The two-pronged approach for maize; productivity enhancement and quality management; heavily depended on downstream capacity of grain processors to handle appropriate volumes and deliver good quality maize to

Table 22: **Number of supported projects by thematic areas, 2014-18**

	Programme area funded					
Value chain	Operations	Capacity Building	Post-Harvest Handling (PHH) Small Equipment	Capex	Gender/ HRBA	Green Growth
Maize	17	17	13	14	8	5
No. of projects	**96**	**85**	**38**	**73**	**41**	**21**
% of all VCs	18	20	34	19	20	24

Source: aBi M&E database

the market. For this reason, strengthening capacity for post-harvest handling, aggregation and grain conditioning is equally important as productivity enhancement. The capital investment (capex) support was directed mainly at the establishment of warehouses, value-addition machinery, and branch set up by financial institutions in rural areas to provide complementary financial services. In proportionate terms, 82 percent of maize projects received capex and recurrent financing, while 18 percent received only recurrent financing. The high proportion of grant financing to capex has attracted a lot of debate regarding the optimal mix of a capital grant and commercially- financed capital.

The overall development objective of aBi is '*A competitive, profitable and sustainable agriculture and agribusiness sector in support of equitable wealth creation in Uganda*'. To ensure equitable and sustainable agribusiness development, aBi's investment policy is modelled around the concept of a socially responsible SME model guided by DANIDA's strategic framework for Natural Resources, Energy and Climate; and the principles of promotion of human rights. The strategy prioritizes two pillars: i) Green Growth (climate change adaptation, clean energy, sustainable land management) and ii) Gender Equity and Human Rights-based Approaches (HRBA) in agribusiness SME development.

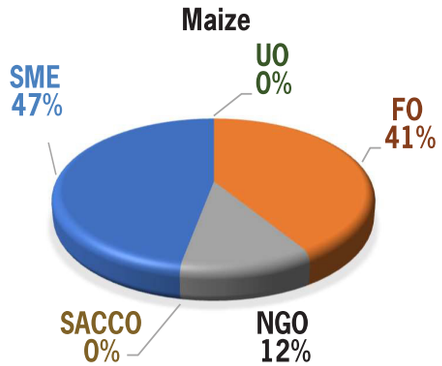
Maize financing is compliant with this policy. The mainstreaming approach was adopted, whereby calls for proposals require every project to integrate interventions that address opportunities and bottlenecks in the two areas. Approximately half of maize projects addressed gender and HRBA, while 30 percent addressed green growth issues. This exceeded the business plan target of 40 percent of projects integrating gender or HRBA, but fell short of the 50 percent target for integrating green growth. A key lesson learned is that the lack of a business case for the private sector to continue financing SER after the end of the project, makes the strategy less effective and unsustainable.

3.4.2.2 Implementing partners

In identifying implementation partners and undertaking value chain analysis, the main emphasis of grant financing is to address market failures and to enhance access and utilisation of best practices and innovations[2] that can trigger the desired multiplier effect in the entire value chain and among value chain leaders. The value chain leaders are the target implementation partners (IPs) who receive grants and financial interventions. There are five categories of target IPs: SMEs, Farmer Organisations (FOs), NGOs, Financial Institutions (FIs), and Umbrella Organisations (UOs)/apex institutions and Government institutions.

The choice of IPs is directly linked to the most demanded value chain financing as demonstrated in Table 22 above. Bearing in mind that projects applications are demand driven, experience shows that the main maize value chain partners are SMEs and FOs, which is in line with the key value chain bottlenecks identified in VC financing applications. SMEs are typically interested in

Figure 22: **Categories of maize value chain (MVC) partners**



Source: aBi M&E database

capital subsidies to fund aggregation and value addition infrastructure, usually combined with capacity building and operations finance for mobilisation of farmers to supply required quantities and quality. The main priority of FOs is capacity building and operations to support strengthening of farmer skills through trainings and demonstrations, strengthening governance of FOs and VSLAs, and increasing access to improved inputs and post-harvest handling technologies.

There is a downside to this model: most SMEs and FOs tend to justify grant funding to provide extension services to farmers to increase productivity and strengthen market linkages with buyers. Unfortunately the sustainability of private extension services in the MVC is in question – SMEs lose interest in farmer capacity building as soon as the project ends. Secondly, the capacity of FOs to mature into profit-oriented efficient businesses has remained low. The expected multiplier effect of funding SMEs to strengthen upstream capacity of farmers and extension services has not turned out as expected due to lack of a business case for private sector investment. On the other hand the FO model holds a lot of promise due to (theoretically) farmer ownership. This is why development partners have invested heavily in FOs, yet the expected transformation remains unrealised. The 'fly in the ointment' is the continued poor governance of FOs. Innovative cooperative governance models are being promoted, for example a hybrid ownership model whereby a cooperative divests business services to an SME who is a member of the FO.

3.4.3 Impact of the model for maize value chain financing

The results presented below were obtained from an Impact Monitoring Study conducted in 2018. The annual impact assessment covered 30 projects (20 Value Chain projects (6 maize projects), 10 FSD projects) because they were mature enough to observe impact according to the monitoring and evaluation plan[3]. Data collection was conducted in July-August 2018. The study measured the incremental change (net change = 2017-2016 values) in five impact indicators (Tables 23 and 24).

The comparison group method was used for VCD projects, while before and after comparison was used for FSD projects. Quasi-experimental design[4] was not possible due to lack of adequate baseline data. The sample size was determined using 90 percent confidence level, 10 percent margin of error and 50 percent response rate. For the control group a minimum of 30 farmers were selected per project which is the minimum standard for good research practice. Data was collected using a questionnaire from a total of 2,845 respondents (Treatment – 2,223; Control – 660 farmers).

The results show the annual increment realized in 2017 over the previous year (2016). Three key performance indicators are used to track value chain financing impact:

Table 23: **Changes in key value chain impact indicators for maize**

Commodity	Maize VC projects	All projects
Number of beneficiaries reached[7]	13,122 (6.3%)	208,350 (100%)
Males (%)	55%	69%
Females (%)	45%	31%
Percent of beneficiaries indicating at least 30% increase in income due to aBi support (%)	37	35
Number of full-time jobs created	1,655	9,080

Source: aBi M&E database (compared with changes for all value-chain interventions, 2018)

Table 24: **Key indicators of FSD impact on beneficiaries in 2017**

Key performance indicator	Value
Increase in the size of lending (from own sources) by partner FIs to agribusiness SMEs and smallholder farmers	52%
Increase in the number of loans and other financial services provided to agribusiness SMEs and smallholder farmers by partner FIs	8,885
Increases in the value of savings by supported agribusinesses and smallholder farmers	43%

Source: aBi M&E database

(i) The total number of direct and indirect beneficiaries reached, (ii) percent of beneficiaries indicating at least 30 percent increase in income due to aBi support[5], and (iii) number of Full Time Equivalent (FTE) jobs created[6]. Maize accounted for 6.3 percent of the total number of direct and indirect beneficiaries reached (Table 23). We observe more equitable gender balance in reach among maize projects compared to the overall portfolio. This is partly explained by the relatively large share of gender mainstreamed projects in the maize financing portfolio (Table 22) compared to the overall sample of projects. In terms of income, MVC financing benefited a higher proportion of farmers (37 percent) compared to the overall portfolio. The relatively low performance is mainly attributed to maize market glut in 2017. In terms of job creation, a total of 1,655 FTE jobs created in the MVC is equivalent to 18 percent of all FTEs created. This implies high job creation efficiency considering that maize accounted for only 6.3 percent of total reach.

Impact of aBi's FSD was tracked through 3 key indicators (Table 24).

In general, FSD support is not targeted at agriculture alone because FIs are free to lend to any sector. However the impact study picked out agricultural clients. There was an average of 52 percent increase in total amount of credit by FIs, matched by an increase of 43 percent in value of savings, indicating a high impact investment by aBi FIs and partners. A closer look reveals that the type of clients were reached by the FIs had an average loan size of UGX 500,000, an indication that small borrowers were the FI's target. The high savings rate is due to FIs imposing a minimum savings condition on borrowers who intend to access finance. Targeting of small borrowers can also be attributed to a change in aBi strategy which shifted emphasis to supporting lower tier FIs (Tiers 3 and 4 institutions[7]). 44 percent of FSD partners were SACCOs.

3.4.4 Lessons learnt, challenges, and implications

Although the article is biased towards maize, lessons learned and recommendations can be applied to other value chains in the Ugandan context.

aBi plays a catalytic role by financing lead value chain actors to promote the flow of finance between MVC actors. While this has seen major success in FSD, MVC financing has not resulted in significant increase in SMEs offering financing instruments such as trader credit, contract farming, and warehouse receipts. This is primarily due to the dominance of small scale famers in the maize market, their limited bankability and the informality of most of their transactions. Maize is characterised as a market governance structure which makes value chain financing difficult. Additionally and unfortunately, both development partners' and maize SME investment models have been 'boxed' in the thinking that maize for human consumption is the only viable business.

The inability to engage in value addition and export trade is a significant disadvantage for small scale farmers, whose relatively low unit costs of maize production would have maximised returns from export earnings. While aBi has invested heavily in farmer capacity building, maize farmers have limited bargaining power, hence they remain price takers. The high cost of value addition and export trade investments plus information asymmetry are the main deterrents for farmers to compete/bargain for higher margins like the large traders. For example, when in recent times, maize prices slumped to as low as UGX100/Kg, pre-qualified traders received a purchase price above UGX 900/Kg from WFP. According to conventional wisdom, the price-taking nature of maize farmers can best be addressed by farmers offering good quality maize, investing in storage so as control when and where to sell, while at the same time being able to access credit or part payment for produce in storage. Future development partner strategies need to put more emphasis on catalysing intra-value chain financing instruments such as the warehouse receipt system coupled with investments in a network of good/certified storage structures. In the next 5 years, aBi has prioritised support to the warehouse receipt system and insurance.

Creating alternative value-added maize products such as high grade maize flour for export instead of grain, and processing maize into alcohol and biofuels is an important strategy for future MVC financing, reducing susceptibility to low maize prices, increasing MVC export competiveness and attracting further investment in the MVC. Globally, the largest share of maize production is used as animal feed and biofuel production. Animal feed can be generated from the by-products of breweries and ethanol production. There is need to investigate the bottlenecks that have hindered development of markets for these products, assessing their feasibility, and prioritising investment areas.

As observed earlier, capital investment has been a major component of FSD maize financing. Many grant applicants are interested in cheap capital that subsidises investments in the enterprise. There has been almost no interest in sustainably funding extension and business development services. Lessons learnt show that this gap can be reduced by investing in strengthening FOs to collectively demand for quality extension services that can; increase returns on investment, and finance use of profit-oriented service providers (rural aggregators; input providers such as veterinary, feed, irrigation, fertilizer and seed traders).

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Endnotes

2 Such as digital financing, new technologies like solar powered irrigation, energy saving equipment, new varieties

3 The impact monitoring studies started in 2017, because significant outcomes and early impact were expected starting from year 3 of the business plan. Therefore only one round of data was available for this business plan period.

4 Quasi- Experimental design requires a comparable baseline and is the recommended method for social impact assessment.

5 Percentage of beneficiary agri-businesses and smallholder farmers, indicating at least 30% increase in income/gross profits due to aBi support

6 Number of Full Time Equivalent jobs created in supported businesses

7 The financial sector in Uganda is divided into Four Tiers: Tier-1 – Commercial banks; Tier-2 – Credit Institutions and Finance Companies; Tier-3 – MDIs; and Tier-4 –SACCOs, financial NGOs and all other non-deposit taking financial institutions.

CHAPTER 4
FINANCING FOR AGRICULTURAL INVESTMENTS

4.1 EQUITY FINANCING FOR AGRO-INDUSTRIALISATION IN UGANDA

Job Lakal[1]

Picture credit : EPRC

4.1.1 Introduction

Uganda's budgetary allocation to agriculture has consistently been below 5 percent since the 2006/7 national budget (FAO, 2019).[2] This is not commensurate to the sectors' importance in Uganda's economy. The financially-challenged agriculture sector has had visible and chronic funding gaps. For instance, five out of the 12 priority commodities under 2015/16-2019/20 Agriculture Sector Strategic Plan (ASSP) have an estimated funding deficit of UGX 1.052 trillion (EPRC, 2018).[3] Instead funding agricultural developments priorities has been relegated to juggling of government 'ways and means' (borrowing). Funding of the sector has therefore been selective, focused on knowledge and innovation, agro-inputs and research and development rather than infrastructure such as storage and off-farm irrigation (Sserunjogi, Katunze and Kasirye, forthcoming). Agricultural funding has also been limited in combating weather-related risks and shocks to agriculture (PARM, 2015). The mode of financing has not been supportive to sustainable agro-industrial development in the country (Mbowa and Odokonyero, 2019). For example, the World Bank Enterprise Survey (WBES) 2013/14, reported that manufacturing firms mainly use retained earnings to finance operations (83 percent) as well as investments in fixed assets (78 percent) (*ibid)*.

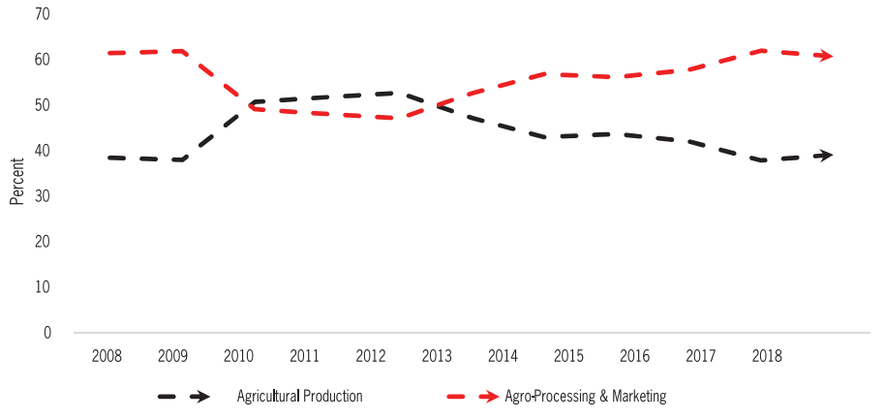
Domestically, debt financing dominates lending to agro-industry. Though private sector credit has not seen a significant increase over the decade, data from Bank of Uganda show that agriculture's share has been increasing since 2010. This increase coincides with the establishment of facilities supporting agro-industry like; the agriculture business initiative (aBi) trust and the agricultural credit facility (ACF). Bank of Uganda (2019) shows the percentage distribution of private sector credit to 11 sectors, starting January 2010. According to the data, on average, each sector receives 9 percent of the total credit from the private sector. However, the data shows that the agriculture sector's share — which was below 9 percent since 2010 — climbed to 9.6 percent in June 2014 and gradually increased to 12.9 in February 2019. (Bank of Uganda, 2019), with a significant share going to agro-processing.

Figure 23 illustrates the distribution of private sector credit between agricultural production, and agro-processing and marketing[4].

The figure indicates that agro-processing and marketing take the bigger share of private sector credit to agro-

1 Programme Associate at the United Nations and Sheila Depio is a former Research Analyst at EPRC (joblakarl@gmail.com)

Figure 23. **Distribution of private sector credit for agro-industry in Uganda, 2008-2018**



Source: (Bank of Uganda, 2019)

industry in Uganda. This could be a reflection of the perception that risks reduce and returns increase at the higher level of the agricultural value chain. At the sub-continental level, Sub-Saharan Africa (SSA) registered an increase in ODA for agro-industries from USD 22 million in 2015 to USD 283 million in 2017 (OECD, 2019). However, Uganda registered a decline from USD 5.5 million to USD 0.6 million over the same period (OECD, 2019). Within the context of external finance, this manifests a deteriorating state of financing for agro-industrialisation in Uganda.

There are other modes for financing of agriculture in Uganda. Blended finance[5] includes; guarantees, shares in collective investment vehicles, direct investment in companies and credit lines[6] and it is increasingly being used to attract private financing to agro-processing. Between 2012 and 2015, US$ 127.8 million worth of blended finance was mobilised in Uganda.

This article attempts to make a strong case for equity financing as a means of diversifying the financing sources accessible to agro-manufacturing industries.

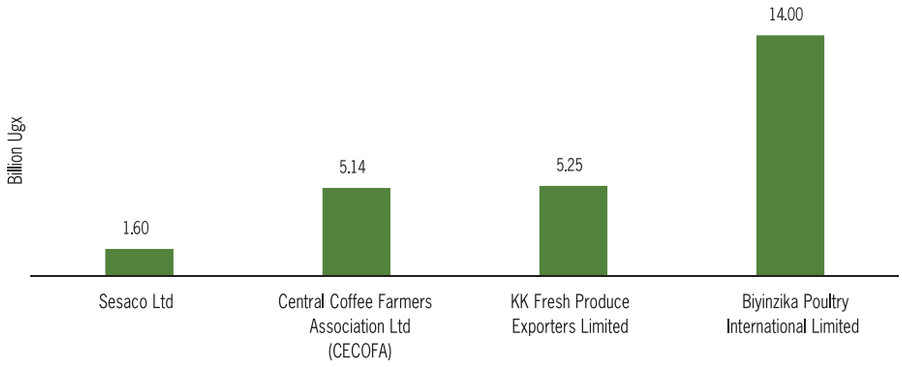
4.1.2 Private equity as a source for financing agro-industrialisation

Equity financing involves raising capital through the sale of shares of a company to the public, to institutional investors, or financial institutions. Over the last decade, the prominence of equity as an alternative to debt financing has slowly increased in the Ugandan market. However penetration into the agribusiness sphere is still limited. In exploring options of equity financing, we note that so far, the Uganda Securities Exchange (USE) is dominated by firms trading in financials and consumer goods and services. Agro-manufacturing firms that are looking out for equity financing must therefore leverage on Private Equity (PE). Private equity in this context is funds and investors that directly invest in private companies.

Despite the potential of equity to augment other relatively expensive debt options, it is not yet a common instrument in Uganda's financing space. This is attributable to financial knowledge gaps, informality, and lack of trust—challenges related to corporate governance of businesses (Kizza and Wakyiku, 2017). There exist private and public equity financing, but given Uganda's low developed capital market and the small and medium nature of agri-businesses, PE may seem more plausible currently, hence the focus.[7] Under PE, investors purchase shares of operating companies, taking ownership stakes in the company in exchange for their capital. Shares are held for a period between three to seven years by PE investors, in expectation of generating attractive risk-adjusted financial returns before exiting (Divakaran, *et al*., 2014).

The number of PE firms have gradually increased and there is increasing awareness and willingness to invest

Figure 24: **Private equity financing for select agro-enterprises in Uganda (billion UGX)**



Source: Pearl Capital Partners - http://pearlcapital.net/index.php/our-investments/uganda

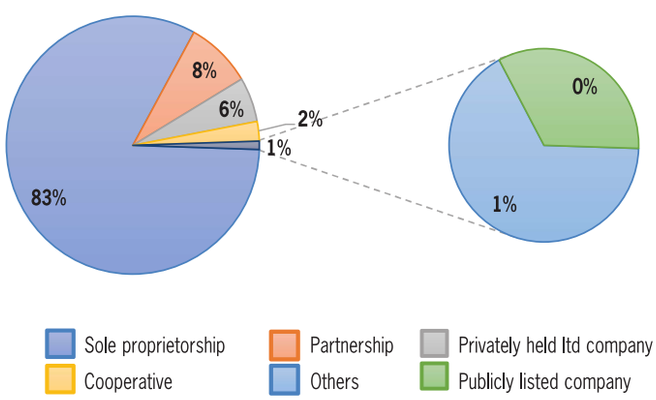
in agro-industries. Between 2013 and 2018, different agribusiness firms benefited from PE financing (Figure 24). The amounts of PE obtained varied between UGX 1.6 and 14 billion.[8] Within these agro-firms, PE funds were utilised at different segments of the agro-value chains including expansion of seed production, purchase of processing equipment and expansion of capacity, among others.

Between 2010 and 2016, Uganda reportedly had 31 PE deals (Kizza and Wakyiku, 2017). The number of deals is however low, compared to Kenya's 88 deals over the same period. To be more feasible, PE requires certain mechanisms to be in place. The major ones include; (i) formal registration of businesses with partnership options: (ii) good regulatory environment; and (iii) demonstrated high growth or high growth potential. PE investors fund small companies with high growth potential and which are looking to expand. They buy shares in the business, become part owners, usually for a given period of time during which their expected returns will have been reached. At the end, equity investors usually sell back the shares to the company and move on to the next project. Furthermore, PE investors bring in more than financial resources, they also contribute business management expertise—that most small businesses need to successfully expand. For example, by getting board membership and voting on key decisions, they help to steer the strategic direction of businesses.

4.1.3 Incentives for uptake of equity financing

To begin with, there must be a mindset change in terms of corporate ownership among business owners. Figure 25 below shows that most Uganda agri-business owners are sole proprietors who aim to keep control of the business within their families. They do not trust that external people

Figure 25. **Agri-business ownership in Uganda, 2015**



Source: National Small Business Survey, Financial Sector Deepening Uganda (2015)

can invest in their business without threatening family control. Similarly, businesses are not open to the idea of external scrutiny and accountability. Consequently, many are reluctant to opening up their corporate structure such as governance boards to investors.

Agri-businesses need to keep proper corporate records, especially credit records. Investors usually evaluate business credit history to get a fair understanding of the business' financial performance and growth potential.

Agri-businesses registration is paramount. Businesses should register as companies limited shares that can be sold. This is because the only way PE investors can safely come in and out of the business is through buying shares. As indicated in Figure 3 above, over 83 percent of agri-businesses are sole proprietorship, this means they cannot attract PE even when they have high growth potential. Cooperatives can also be structured in ways that allow them to attract equity investments by their more well-off members.

There needs to be a proper regulatory environment covering both equity investors and agri-businesses. Uganda's financial sector regulatory framework is strong on debt financing, but relatively weak for equity finance. There have been many cases where equity firms have taken advantage of the Ugandan public. Example in 2017, Global Finance—a PE firm, collapsed with millions of shillings belonging to more than 3,000 unsuspecting Ugandans unrecovered (Bagala, 2017). This, among several others, is a manifestation of a weak regulatory framework for Uganda's financial sector. The sector needs to be strengthened to boost investor and investee confidence.

Uganda's current tax regime is not very competitive compared to Kenya. Table 25 compares PE tax regimes across three countries. The table shows that Uganda's capital gains tax, and withholding tax (WHT) on dividends, interest and management fees for PE firms are significantly higher than that of Kenya and Mauritius. This is a disincentive for PE firms. For example, Pearl Capital Partners, a PE firm managing funds in Uganda has had to domicile some of its funds in Mauritius.

Table 25. **Taxation of private equity firms**

Tax category	Uganda	Kenya	Mauritius
Corporate income tax (%)	30	30	15/3/0[9]
Withholding tax (WHT) on dividends (%)	15/0-5[10]	5/10[11]	0
Withholding tax (WHT) on interest (%)	15	10/25[12]	0
Withholding tax (WHT) on Management fees (%)	15	5	0
Capital gains tax (%)	30	5	0

Sources: (Deloitte, 2016; URA, 2017; Mutua, 2012)

Figure 26: **How private equity can help agro- enterprises grow: the case of biyinzika poultry limited**

Photo Courtesy: Biyinzika Poultry Limited

1990	Biyinzika Poultry Limited (BPL) was incorporated. The company trades in bio-assets with production of day-old chicks as its core business. Although it was established as a limited liability company, from inception, it was managed and operated as a family enterprise. Challenge: The founders of the firm had a good understanding of the business, but could not grow it into a significant market player due to capital constraints. Their small hatchery could barely meet half the demand for day-old chicks. At the same time, business operations were periodically affected by seasonal fluctuation in availability and price of feeds. To address these challenges, the then directors of BPL obtained financing through debt. However, the collateral requirement and planned repayment schedules which were based on the company's financial position at the time limited the amount of credit. In effect, the financing was inadequate to meet their growth demands.
2006	BPL opened to PE. The African Agricultural Capital Fund (AACF) made an initial investment of USD 800,000 and later an additional USD 400,000 in 2009. These investments were aimed at increasing production of day-old chicks to a target of one million per annum. BPL invested appropriately, increased cash flows and grew.
2011	BPL increased earnings enabled the business to repay these investments by 2011. With entry of new owners, the company also rebranded to Biyinzika Poultry International Limited. However, BPL still had unexplored growth opportunities.
2013	In 2013, BPL obtained PE of USD 4million from African Agricultural Capital Fund and the Voxtra East Africa Agribusiness Fund. This time, the funding was to enable further integration in the chain by establishing grain storage facilities and a feed mill.
2014	A Pan-African PE firm, *8 Miles*, acquired a major share in BPL including that of the original owner. At the moment BPL is owned by AACF & Voxtra (20%) and 8 miles (80%). However, it should be noted that with the entry of *8 Miles*, the original owner opted out of this business at a considerable gain.
Associated Key Achievements	• Increased annual production of day-old chicks to over 10 million broiler and over two million layers. • Acquisition of a modern grain handling and storage facility for production and storage of feeds. • Diversification of poultry feeds to include three types of broiler pellets - broiler starter/crumbles, broiler grower and broiler finisher. BPL also produces feeds for dairy and pigs. • Expansion of business with outlets across the country. There are 34 branches spread across the country • Capacity building of farmers through training sessions and production of training manuals which are available online. Technical support and after sales services are provided at no additional cost.

Lessons from BPL's Experience	**Funding:** Venturing into PE is primarily driven by capital requirements for business growth. PE allows businesses to meet a significant proportion of their financial needs without posting collateral or paying interest. **Management:** Equity investors expect good management. Where it doesn't exist, an overhaul of management may become a conditionality for financing. For BPL, people with appropriate qualifications and skill sets were employed and motivated to undertake the tasks expected of them. **Operations:** At BPL, modern equipment has been assembled to standardise production, ensure quality and keep pace with new technologies. This has resulted into increased efficiency. **Ownership:** Entry of new shareholders or co-owners inevitably dilutes the level of control that an individual would have. However from BPL's experience, variation of ownership does not necessarily mean reduced shareholder's worth in money terms since the business grows significantly. To mitigate their risks, firms should undertake due diligence before accepting new owners. **Compliance:** PE firms only invest in the formal sector. This calls for compliance especially to statutory matters. For example, all employees must be protected as provided for in the employment act and the business should be tax compliant. Businesses must therefore formalize before considering PE.

All these achievements improved the performance, asset base and customer base of BPL. Although the core business is production of day-old chicks- for which they have a considerable market share, the dream is far from over. In the next phase, BPL will invest in a state-of-the-art abattoir and start trading in dressed chicken.

4.1.4 Conclusion and policy implications

Equity financing for agro-industrialisation is more likely to work where agro-industrial businesses are formally incorporated, as was the case of BPL. Investors interested in acquiring equity in agro-industrial ventures tend to concentrate their monies in the less risky segments of the value chain – mainly processing and marketing. They look for business with the highest growth potential which biases what they invest in. Nevertheless, PE does offer an opportunity for viable agribusinesses to grow and/or expand their operations. With a good investment case, agro-enterprises can benefit from investors who specialise in or at least commit some of their portfolio to agricultural investments. However, potential agro-industrialists looking to venture into equity finance must come prepared- to transform the corporate governance of their businesses.

There is need for government, investors, and development partners to create more awareness on equity finance as an alternative or a complement to debt financing. The current efforts by Enterprise Uganda and Uganda Investment Authority (UIA) in training and bringing investors and entrepreneurs together through the Annual PE and Venture Capital Conference would be a good starting point. The importance of formal business registration and good corporate management should be emphasized. While the former is being done by Uganda Registration Services Bureau (URSB) and Uganda Revenue Authority, their reach is still quite low and could be scaled up. Viable agribusiness will also require financial literacy, sound management and good knowledge of potential investors.

As a regulator, the Capital Markets Authority (CMA) needs to play a stronger role in monitoring equity investors and protecting shareholders from illegitimate businessemen. To increase competitiveness for PE firms within the region, Government could explore the option of reducing withholding and capital gains taxes. This will make it cheaper for PE investors to buy and sell shares. This could possibly reduce government revenue in the short run, but considering that Uganda's PE industry is relatively small and under developed, the multiplier effects of new investments from a boosted PE industry could potentially offset the opportunity cost (Deloitte, 2016).

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Endnotes

2 The 5 percent figure is less than the Comprehensive Africa Agriculture Development Program (CAADP) target of 10 percent.

3 Government of Uganda prioritized 12 commodities: bananas, beans, maize, rice, cassava, Irish potatoes, tea, coffee, fruits and vegetables, dairy, fish, livestock (meat) and four strategic commodities: cocoa, cotton, oil seeds, and oil palm. Prioritisation was majorly based on their contribution to household income and food security.

4 Available data not separate values for agro-processing and marketing

5 The use of public or development finance to de-risk investment and attract private capital.

6 Due to data limitations, the sectoral distribution of this flow cannot be established at the moment, but estimates show that agriculture, energy, and transport sectors dominate blended deals in Uganda.

7 Equity financing is the process of raising capital through the sale of shares in an enterprise

8 Investments in USD have been converted to Ugandan Shillings at a conservative rate of 1USD: 3,500UGX

9 Global Business Companies with Category 1 License (GBC1) can claim 80% foreign tax credit, reducing overall tax to 3%. Entities with GBC2 license are tax exempt but no double tax treaties.

10 For unlisted companies, 15 percent for non-residents and between 0 to 5 percent for residents.

11 For dividends paid by a resident entity to another resident entity, the WHT rate is 5% and can reduce to 0% if paying company holds >12.5% voting power; For non-residents, the rate is 10% and be reduced by treaty between Kenya and the recipients country.

12 Rate depends on the type of debt instruments and can be reduced by a tax treaty; deemed interest rules exist and WHT is 25 percent.

4.2 OPPORTUNITIES EXIST FOR EQUITY INVESTMENTS IN UGANDA'S AGRICULTURE SECTOR

Adolfo Cires Alonso[1]

Picture credit: aBi Development Limited

4.2.1 Introduction

Agriculture enterprises require capital to operate and expand; depending on the size of the company and the duration of the financing needs, various institutions play a role in the provision of the needed capital (Figure 27). Micro enterprises generally rely more on informal means of financing i.e. family, friends, money lenders, and microfinance institutions (MFIs). Small and medium enterprises use commercial banks—which offer a variety of products depending on the financial needs of the enterprises. Services offered range from trade financing and leasing to private equity financing. Large enterprises on the other hand, usually rely on capital markets to raise the capital they require.

Private equity investors provide long term financing to companies and there are a wide variety of equity investors such as direct equity investing arms of development finance institutions[2] (OECD, 2009), pension funds, investment clubs, traditional private equity funds, impact investors (Musiiwe and Baasha, 2015), venture capitalists, family offices and direct equity investments of Government owned institutions (i.e. Uganda Development Corporation) (KPMG and EAVCA, 2017). These private equity investors then invest in small and medium companies either by providing debt or purchasing shares of those companies.

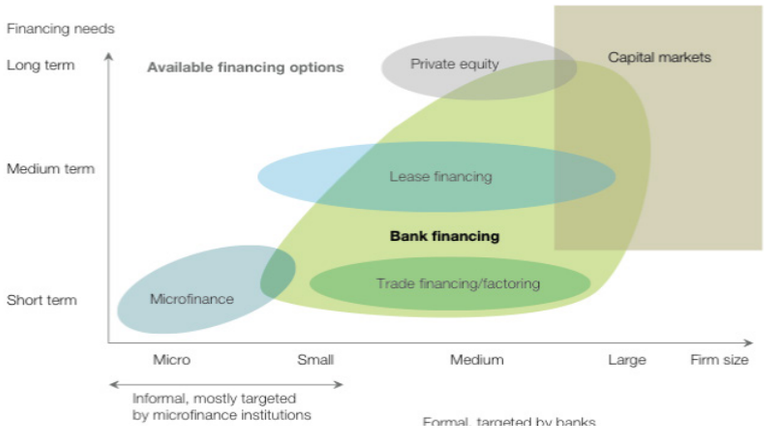
4.2.2 Recent development in equity investments in Uganda

The volume and value of equity investments in East Africa has constantly increased since 2007 (Anyanzwa, 2019). During the period 2007-2014, at least USD 1.6 billion was raised for private equity investments in East Africa. More recent figures (for East Africa) indicate a steep jump in equity investments—rising to USD 1.1. Billion during 2015-2016. The number of equity funds with presence in the region has also doubled from 36 (2007-2014) to 72 in 2016 (KPMG and EAVCA, 2018). Although Uganda has lower deal activity compared to its neigbhours, the value of private equity investments for the period 2010-2017 surpassed US$ 6 billion, mainly driven by the investments in oil and gas explorations (ibid). In Uganda, Agriculture, Financial Service, Manufacturing and Telecommunications sectors registered other substantial equity deals.

In terms of the primary source of funds, development finance institutions are the most common source of equity investments; however, there is a substantial increase in the participation of regional pension funds in private equity and venture capital deals. This is mainly caused by changes in retirement's benefits regulations in several

1 Finance and Investment Expert, European Union , Kampala, Uganda

Figure 27: **Financing instruments per company size and term needs**



Source: IMF, SME Finance Forum

East African countries that now allow investments of pension fund's assets in private equity funds. For Uganda, the National Social Security Fund (NSSF) participated in a private equity fund focused in agriculture in 2017.[3]

Even if the number of equity deals has increased in Uganda in the recent past, the required legislation to guide and support the operations of equity funds is still inadequate. Most of the private equity funds are registered, not in Uganda but in other countries (i.e. Netherlands, Mauritius, South Africa, etc). These other countries provide advantages to the investors in areas such as; the smooth transfers of funds; favourable taxation; and quick resolution of disputes.

4.2.3 Equity as an alternative source of investment financing in Ugandan agriculture

Given the substantial contribution of the agricultural sector to Uganda's gross domestic product (GDP) i.e. at 24.2 percent in FY 2017/18 (MoFPED, 2018), equity investments are a relevant alternative source of investment financing to the sector.

The dominance of small and medium agribusiness firms in Ugandan agriculture is a challenge for private equity investments. This is because many of these firm are family-owned businesses, often managed by one entrepreneur and with poor record keeping practices (CDA,2018). Similarly, the ownership structure of productive assets in many of these enterprises can be confusing. For example, while the machinery and transport equipment of the firm are owned by the company, the real estate on which the factory is located can be owned by the individual owner.

Although the overall development level and structure in the agribusiness sector in Uganda is not ideal for equity investments, substantial demand has emerged in the last years from small and medium companies requesting investments from private equity funds rather than the traditional bank financing. Equity investors, in response to those challenges, carefully analyse the owner´s willingness to adopt professional governance and management structures and prepare detailed execution plans with clear milestones prior to disbursements in the investee company. Often, finance and internal control experts are deployed to the enterprise before disbursements of any equity investments. Even then, the long due diligence processes, stringent disbursements conditions or lack of knowledge of equity instruments by company´s owners make it difficult for the completion of equity investment deals.

Difficulties in accessing records of previous credit performance of agribusiness companies make collaboration of private equity funds difficult (World Bank, 2017). Given the increase of equity funds operations in

Uganda, an association of private equity funds operating in Uganda is being created (under the umbrella of the East African Venture Capital Association) to facilitate; collaboration co-financing possibilities and influence on policy developments.[4] Despite the challenges, private equity investments are definitively an alternative source of capital with major development potential for agribusiness companies, smallholder suppliers and employees.

4.2.4 Incentives for uptake of equity investments in Uganda

There is need for incentives for equity investments targeting the Uganda agriculture sector. A bill—The Investment Company Act—is at drafting stage and this would help regulate the setup of private equity funds in Uganda and address issues such as taxation of equity funds. In the interim, equity investment funds in the country are registered under the Partnership Act. Consequently, available local capital (i.e. pension funds and investment clubs) do not invest in available Investment Funds given their inefficient tax regimes; the majority of private equity funds prefer to register in other countries (i.e. Mauritius). For the development of the private equity industry in Uganda, the development and passing of the Investment Company Act is key.

From the small and medium agribusiness companies' perspective, the delivery of business development services associated with equity investments can play an important role of attracting more company owners' interest. Business development services are varied, ranging from improved financial management systems to product certification, depending on the needs of agribusiness companies. In this line, the provision of business development services prior to investments facilitate the completion of deals as they contribute to improve governance and management structures of the companies.

4.2.5 Case study on equity investments in Uganda's agricultural sector

Case 1: AA Fisheries and Consultancy Ltd

AA Fisheries and Consultancy Ltd (AAF) started to produce fingerlings in 2011. In addition, the firm experimented with tilapia caged farming on Lake Albert in 2013. By September 2017, AAF had 16 ponds for fingerling production (its primary source of income) and 9 cages for fish farming. In 2017, Iungo Capital[5] invested USD 140,000 in AAF through a mezzanine debt structure (3 year tenure). The investment targeted to expand AAF's cage business while diversifying the customer base of its established fingerling production. With the investment, AAF also subscribed to an aquaculture insurance cover against disease and theft, upgraded its water pump system at the fingerling production site with a solar driven installation, built up a storing and staff housing structure at the lake site, and acquired two motorised boats for feeding (the fish) and security purposes.

Photo 1: **AA Fisheries and Consultancy Ltd ponds**

Source: Iungo Capital 2018

Photo 2: **Ugandan farmer using NASECO seeds.**

Source: Pearl Capital Partners 2018

At the end of 2018, AAF had replaced its old cages with bigger ones, increasing its total fish harvests 2.5 times; and added two ponds and three new tanks to increase its production capacity of fingerlings by 100 percent. After only one year and a half, AAF managed to increase revenue by 85 percent, created ten new jobs (45 percent of whom are women workers). While most of AAF's fish is exported to neighbouring countries, more than 1,000 small Ugandan fish farmers access quality fingerlings through AAF. In addition, AAF has built the necessary facilities to receive and host small fish farmers for purposes of knowledge and expertise sharing. Iungo Capital investment has allowed AAF to improve their production capacity and operational efficiency while increasing fish farmers' capacities.

Case 2: NASECO – A leading certified seed company in Uganda

Incorporated in 1996, with original investment from the Belgium Government and the Roman Catholic Diocese of Hoima, NASECO is now one of the leading producers of commercial seed in Uganda. It produces maize, rice, beans, groundnut and sorghum seeds. Between 2006 and 2017, the firm doubled its production from 1,700 metric tonnes of seed in 2006 to over 3,500 metric tonnes by 2017.

The equity investor for NASECO was Pearl Capital Partners (PCP).[6] The relationship between NASECO and PCP dates back to 2006, when the company required significant investment to address its immediate working capital challenges and increase production capacity. Through two Funds (African Agriculture Capital and Africa Seed Investment Fund), PCP has invested USD 800,000 in NASECO in both equity and debt. The investment was primarily used to upgrade and expand production, creating capacity for up to 7,000 metric tonnes of seed production per annum. The key impacts of this financing has been provision of free seed, free transportation, extension, external resources such as fertilizer for hybrid seed, and sprays for beans to more than seven hundred and fifty out growers farmers. NASECO has also organised out growers into farmer groups and appointed group leaders who are provided transportation to carry out fieldwork.

PCP made a successful exit from this investment in 2017, with the ownership and management of the company still in place. The investment in NASECO was seen as pioneering at the time. In 2006, PCP was the only investment house operating at this scale within the East African agricultural sector and NASECO was its first seed business transaction. The opportunities for growth especially within the region still abound, with NASECO now in a more effective position to take advantage of this growth. The investment has helped create a market-leading Ugandan seed business, providing smallholder subsistence farmers with up to three times more crop yield.

4.2.6 Conclusion and policy implication

Equity investments in Agriculture have been growing both in volumes and number of deals in Uganda. In order to achieve the full potential of equity investments in Uganda's Agriculture, alignment between Government priority value chains as referred in the Agriculture and the Export Strategies, Private sector development programmes (mainly industrial parks set up and Special Economic zones programme) and private equity funds Investment Strategies is needed.

In this line, the creation of a dialogue platform between private equity funds, Capital Markets Authority, Ministry of Finance, Planning and Economic Development, Uganda Investment Authority, Ministry of Trade, Industrialisation and Cooperatives and Ministry of Agriculture could have a substantial impact at policy level (PSFU, 2018)

The industrialisation and Special Economic zones programmes combined with capital investments in agribusiness has great economic transformation potential in Uganda. To attract equity investments (both local and international) to the sector, enactment of the Investment company Act needs to be expedited. The Act will help the sector to attract local capital, improve the tax regime and facilitate the resolution of disputes arising out of equity finance partnerships.

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Endnotes

3 NSSF invested in Yield Uganda Fund in January 2017.
4 http://eavca.org/
5 Iungo Capital is a private equity fund operating in Uganda since 2015.
6 Pearl Capital Partners (PCP) is a Ugandan based private equity fund investing in agribusiness since 2006.

4.3 USE OF CREDIT GUARANTEES IN FINANCING UGANDAN AGRICULTURE

Agnes Nakkazi[1]

Picture credit: aBi Development Limited

4.3.1 Overview of credit guarantee mechanisms

The agriculture sector faces major constraints in accessing finance—especially at the production level. Smaller farmers face greater hurdles compared to large scale farmers in accessing finance. Formal lenders avoid financing agriculture for a variety of reasons, including; (i) the high cost of service delivery (ii) information asymmetries (iii) lack of branch networks (iv) a general lack of collateral; (v) high levels of poverty; (vi) low levels of farmer education and financial literacy; and (vii) high degree of risk and fluctuation in production and price.

In a bid to reduce the financing constraints faced by the sector, players have developed Credit Guarantee Schemes (CGSs). A credit guarantee is a promise from a guarantor to make good, payments to the lender in case of default by borrowers on a guaranteed debt. Three parties are involved, a borrower who lacks collateral, a lender providing the loan or overdraft facility and a guaranteeing agency. A guarantee provides part security to enable the borrower to obtain a credit facility, and for agriculture, addresses constraints such as lack of sufficient and/or acceptable collateral, especially within the Agri-SMEs by the formal lenders. Uganda has three CGSs commonly used, namely: the Agribusiness Loan Guarantee, the Agriculture Credit Facility and the Development Credit Authority.

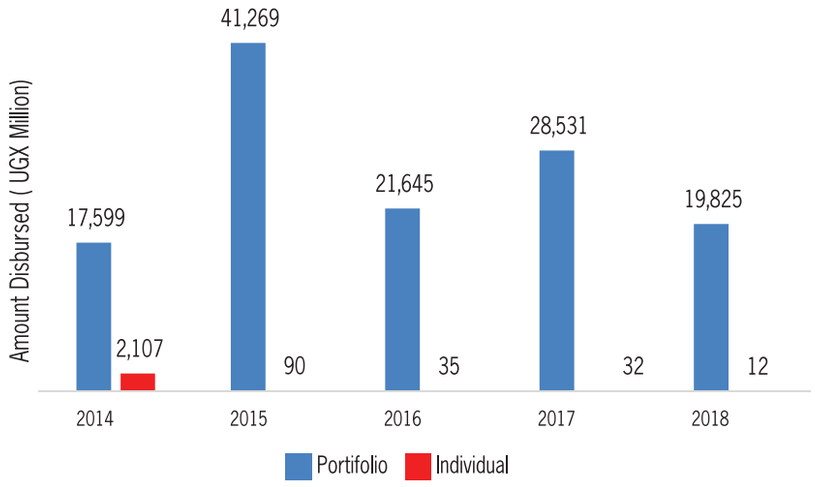
There are three major types of credit guarantee covers—the difference lies in the extent of the potential borrower's interaction with the guarantor and the delegated approval limits to the FI.

A portfolio guarantee, where the guarantor enters into an agreement with one or several lending FIs that allows for an automatic placement of a pool of unidentified borrowers under the guarantee mechanism without consulting the guarantor but within the agreed terms of the agreement between them. The guarantee is usually not know to the borrowers since guarantee cover is sought by the lender. The automatic placement also allows for quick turnaround of credit processes. This, therefore, makes it suitable for most FIs given that there is no need to consult the guarantor, for this reason, this is the type of cover that is commonly used in Uganda (Figure 28).

An individual guarantee, is where the guarantor carries out its independent appraisal and review of a known borrower, in addition to that carried out by the lending FI, to determine if a borrower qualifies for both the loan and the guarantee. The guarantee may not be known to the borrower since guarantee cover is sought by the lender.

1 Credit Officer-Guarantees , aBi Development Limited (agnes.nakkazi@abi.co.ug)

Figure 28: **Guarantees booked by financial institutions (2014 to 2018)**



Source: aBi Trust (2018)

A portable guarantee involves direct interaction of the guarantor and potential borrower. The guarantor conducts an independent appraisal and review of the potential borrower upon which approval is based. Once approval is granted by the guarantor to the potential borrower, the latter can then scout the market for the best credit terms. Guarantee cover is sought by the potential borrower. The credit assessment takes a lot longer given that the lender has to conduct an independent due diligence in addition to that of the guarantor. The portfolio guarantee in most cases caters for small loans which do not require approval from the guarantor. Hence, most of the SMEs in agribusiness belong to this category as compared to the individual guarantee where loans require approval from the guarantor.

This article illustrates how CGS can solve various constraints faced in agricultural value chains. The article focuses on two of the three main CGSs used in Uganda. Section 2 of the article discusses the types of CGSs, the different types of credit guarantee covers, the level of investment required for guarantees to work and the financial instruments covered by the CGSs. The impact of CGSs (on expanding agricultural finance in Uganda and lessons learnt) is discussed in Section 3 and in Section 4, the challenges, strategies opportunities of CGSs are presented. The final section (Section 5) discusses the policy gaps that need to be addressed in CGS operation in Uganda.

4.3.2 Types of credit guarantees schemes in Uganda

There have been a number of agriculture CGSs that have operated over the last decade, these include the Agribusiness Loan Guarantee (ALG), the Agriculture Credit Facility (ACF) and the Development Credit Authority (DCA) which are administered by aBi Finance Limited, USAID and Bank of Uganda respectively. The ALG and DCA schemes were funded and set up by development partners, while the ACF was set up by the Government of Uganda with BoU,as its implementing agency.

Although only the ALG is specific to the agribusiness sector, two schemes (ALG and DCA) focus on supporting SMEs. All the three CGSs (Table 26), support the agribusiness sector and work through financial institutions to reach the beneficiaries. They all guarantee 50 percent of the principal outstanding amount only, this means that both the guarantor and the guaranteed party, usually the FI, share the losses if any; indicating a true-risk sharing partnership between the CGSs and the FIs. All schemes have a claims' verification process to ensure that eligible claims are settled.

Table 26: **Credit guarantee schemes in uganda**

Types of scheme	Eligible borrowers	Sector/s	Guarantee coverage percent	Eligible financial institutions (PFIs)	Pricing	Tenure / duration	Claims process management	Mode of operation
Agribusiness Loan Guarantee (ALG)	SMEs in Agribusiness	Agribusiness	50% of the outstanding principle amount only	All Tiers in the Financial Sector	1% or less of the Global limit	3 – 5 years, subject to renewal	FI communicates to aBi Finance Limited with all the supporting claim documentation, assessment is done by aBi Finance as per the agreement, if criterion is met, settlement of 50% of the principle outstanding amount is made to the FIs account.	Revolving
Development Credit Authority (DCA)	SMEs in the supported sectors	Agriculture, Health & Renewable Energy	50% of the outstanding principle amount only	Regulated FI, with a FI's strategy in alignment with the particular DCA program.	Origination fee, 0.5% -1% and utilization fee 0.5% of the outstanding balance on a bi-annual basis	4 – 7 years	FI communicates to USAID, preliminary assessment is done by USAID, USAID sends request to DCA with supporting documentation, DCA reviews & releases money to FI	Un- revolving
Agricultural Credit Facility (ACF)	All farmers, agro-processors, Grain traders with viable projects and with bank accounts in their respective Financial Institutions	All businesses along the agricultural value chain except planting trees, refinancing existing facilities, purchase of land	50%	All FIs operating in Uganda and regulated by Bank of Uganda & Uganda Development Bank (UDB)	12% p.a.	6 months to 8 years; with a grace period of 1 year. Grain working capital is for a maximum of 2 years	Claim verification process by the Auditor General and Parliamentary approval.	

Source: Author's compilation from interviews with contact persons managing the respective CGS

4.3.3 CGS in financing agriculture in Uganda: The case of the agribusiness loan guarantee (ALG) scheme

The ALG Scheme was set up by the Danish International Development Agency (DANIDA), under the Agricultural Sector Program Support (ASPS) intervention under the ASPS's Agri-Business Development Component. The scheme was established as a Loan Guarantee Scheme (LGS) in 2007 to encourage the FIs to lend to MSMEs. When the ASPS intervention came to an end in June 2009, the LGS was incorporated into the Agribusiness Loan Guarantee Company (ALGC), which for the purposes of continuity, was transferred to aBi Trust. The Trust was set up to provide grants to selected agricultural value chains and provide financial support through FIs and SMEs. The ALGC was capitalised for the purpose of indemnifying the guarantee scheme and started operating as the investment arm of aBi Trust. It was renamed aBi Finance in 2013.

aBi Finance provides guarantee facilities to FIs across all Tiers of the financial sector, provided that they have at least 3 percent of their total portfolio in agribusiness, a branch network in the rural areas and internal structures to support agribusiness. The Scheme guarantees 50 percent of the outstanding principal amount which makes it a risk sharing partnership with the FI. aBi Finance charges an annual guarantee fee of 1 percent or less on the total global limit guaranteed based on the prevailing market conditions.

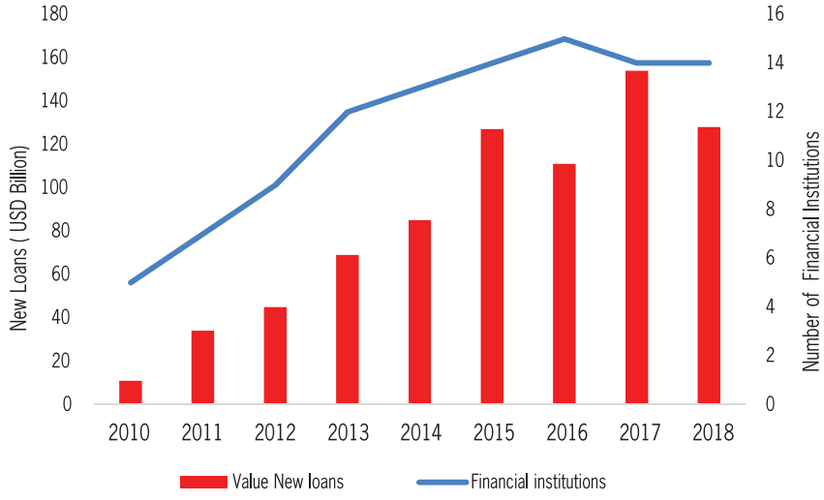
Performance of the ALG

An evaluation on the impact of the scheme, revealed that the ALG has been instrumental in stimulating FIs to initiate and/or expand financing agricultural businesses (Carnegie Consult, 2017; Serunkuma, 2014). The results revealed an increase in the amount of portfolio guarantees that were accessed under each Tier over the years (*ibid*). The largest growth was observed among Tier 1 commercial banks, which also increased their total limits to book more loans on the CGS. The least growth was registered in Tier 4 credit institutions because few FIs in this Tier have participated in the ALG and for those which have, they disburse low loan amounts. Between 2010 and 2018, the ALG settled claims worth UGX 3.3 billion. Settlement of claims has given FIs confidence to trust the ALG and they have financed more agribusinesses. An increasing number of FIs have appreciated the benefits of the ALG and have increased use of the guarantee over the 2010 – 2018 period as indicated Figure 29.

The development credit authority guarantee

The DCA has made USD5.5 billion credit available in 80 countries, Uganda being one of them through its guarantee

Figure 29: **Agricultural loan guarantee utilisation (2010-2018)**



Source: aBi Finance, 2018

products such as; loan guarantees; loan portfolio; portable and bond guarantees. The DCA guarantees both local and foreign currency and covers 50 percent of the principal loss amount. This facility has operated in Uganda since 2001 and four guarantee facilities have since been provided. According to Meyer and Ocaya (2012), the DCA component was set up to run from September 2016 to September 2018 and has so far facilitated agribusinesses through the four guarantee facilities as follows;

DCA 1 which targeted SMEs, allowed maximum loan size of US$ 1 million and a maximum duration of 5 years. In terms of impact, it was designed to strengthen the capacity of banks to service SME needs and/or to permit development of new products for those already in the sector. Seven banks investigated using the facility, but only four purchased the guarantee.

DCA II was designed to foster lending to smaller-scale borrowers than DCA I, i.e. it targeted MSMEs, had a maximum loan size of US$ 250,000 and a maximum duration of 4 years. Four banks and one MDI initially participated in DCA II but one bank opted out, leaving only three banks and one MDI as clients of the guarantee.

DCA III was targeted at banks financing warehouse receipts. It had a maximum loan size of US$ 250,000 and a maximum term of 3 years. Its impact on the financial market was minimal, with only one loan guaranteed. In retrospect it was concluded that the maximum loan limit was a constraining factor on demand.

DCA IV is currently focused at banks financing agribusinesses; the maximum loan size for the guarantee is US$ 250,000 with a maximum term of 4 years. This is currently an ongoing facility and is intended to increase lending to agriculture, stimulate new product development, and increase lower-end lending in participating financial institutions. This facility is still ongoing, with no readily available information on performance.

The Agricultural Credit Facility (ACF)

The ACF was set up in 2009 by the Government of Uganda in partnership with Participating Financial Institutions (PFIs) like commercial banks, the Uganda Development Bank (UDB), Microfinance Deposit-taking Institutions (MDIs) and Credit Institutions, to promote the commercialisation of agriculture through financing projects in agriculture, agro-processing and mechanization, and to facilitate the provision of medium- and long-term loans to projects engaged in agriculture and agro-processing[2].

4.3.4 Challenges, strategies and opportunities

In the implementation of CGSs, guarantors and guaranteed parties are faced with a number of challenges and opportunities, including:

Challenges

(i) Moral hazard which reduces the willingness of borrowers to service their loan obligations. Loan beneficiaries tend to abuse guarantee schemes once they know that their loans are guaranteed.

(ii) The additional cost of guarantee administration charged by the guarantor to the lender is passed on to the borrowers, increasing the cost of credit.

(iii) Claims' recovery and refunds are restrained due to lack of well integrated systems within the FIs. There is need for FIs to setup integrated systems and where challenged, they should access technical assistance from development partners such as aBi.

(iv) The procedure of handling claims can be slow, if the recovery efforts of the FIs are insufficient. FIs need to boost the capacity and staffing of their recovery teams.

(v) Sustainability of the CGS may not assured basing only on guarantee fees and investment on capital fund. This could be worsened by high defaults/ claim rates, which could wipe out the fund. Loss of funds through inadequate appraisal processes by the FIs can also happen. This challenge can

be mitigated by FIs establishing rigorous due-diligence processes.

(vi) Guarantee fees and earnings from placement of funds contribute to the sustainability of the fund. Where such earnings are not made, the funds can easily be depleted. For continuity and sustainability of CGS operations, proper planning and selection of investment options of the CGS indemnity fund has to be made. Fortunately, no fund in Uganda has ever been depleted.

Opportunities that could be explored include;

(i) Expansion of the guarantee utilisation to new underserved markets still exists. As many agri-SMEs lack sufficient collateral to cover their financing requirements. Opportunities also exist in guaranteeing agribusinesses dealing in processing and marketing, as most FIs initially focused on production;

(ii) FIs could explore extending medium and long term finance to qualifying borrowers, particularly in the processing and marketing since guarantees cover longer periods of exposure (when compared to seasonal production period);

(iii) Development finance institutions (DFIs) can provide much-needed technical assistance for lenders to experiment with new financial products and services that can meet the varying financial needs of agri-SMEs.

4.3.5 Policy gaps in the operation of guarantees

There is no known policy and legislation under which the CGSs operate in Uganda. Development partners and other guarantors that set up the CGSs institute internal policies in place to manage their respective CGSs. While this may work for some, the legal gaps can constrain confidence and operations of CGSs, especially the speedy and fair handling of guarantee claims. The specific policy gaps include; lack of legal and regulatory framework to establish a CGS as an independent legal entity; legal provision for adequate capitalisation and effective CGS supervision; an active platform for CGSs to share information, foster innovation and lobby for enabling reforms.

4.3.6 Conclusion

CGSs have enhanced agri-SME financing and their full capacity to contribute to improved agricultural financing can be tapped further. With 72 percent of Uganda's working population being employed in agriculture, policy and legislative support to CGSs could create a more conducive business climate for more guarantors to guarantee more agri-businesses. The enabling environment would also improve the sustainability of CGSs and their capacity to experiment with more innovative agricultural finance products and services.

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Endnote

2 More details on the operations of the ACF can be obtained from article 1.2 of this Yearbook

4.4 BOOSTING AGRICULTURAL FINANCE? MIND THE GOVERNANCE OF SAVINGS AND CREDIT COOPERATIVES ORGANIZATIONS

Andrew Obara[1]

Picture credit: Andrew Obara

4.4.1 Background

Does it bother experts that in East Africa, discussions of agricultural finance is incomplete until the word "SACCO" is mentioned? Why are Uganda's rural folk of advanced age so nostalgic about SACCOs and producer cooperatives? And why must SACCO issues loom so large in the discussions about agricultural finance when there are (apparently) many other sources of finance for the sector – development banks, commercial banks, non-bank financial institutions, MDIs, Tier IV microfinance companies and others?

To these three questions there is one short answer: SACCOs matter in provision of member-responsive agricultural/ rural finance. SACCOs seem to matter so much in Uganda's rural finance that in their absence, smallholder agricultural financing is incomplete or inadequate. The reason is ecology of the rural economy. When financial services are offered by local, member-owned institutions, responsiveness to users' needs almost always results. The same cannot be said for most formal financial institutions. However, responsiveness to user needs happens best when SACCOs are well distributed throughout the country and are closely connected to production/ marketing cooperatives/entities also owned and used by the members of the SACCOs.

Attempts by the Government to revive the cooperatives are, therefore, not only well founded, but they are also developmentally sound but the revitalisation must ensure a strong and well-governed SACCOs.

4.4.2 Structure, scope and governance of SACCOs in Uganda

Any discussion of the structure and governance of SACCOs in Uganda needs to differentiate between principle and practice. Why? Because in Uganda, the cooperative and financial principles (on the one hand) and practical realities of SACCOs (on the other) are in most cases, misaligned. Owing to several factors (not least among them, the breakdown of the cooperative sector which came with the wave of privatisation in the 1980s and the 1990s), many SACCOs in Uganda have structures and form but not substance.

The start-up, governance, management, control and general running of SACCOs need to be aligned both

1 Managing Director, FRIENDS Consult Ltd (aobara@friendsconsult.co.ug)

Table 27: **Rural SACCOs alignment with cooperative principles**

Principles	Prevalent reality in Uganda	Comment
1. Voluntary and open membership: Cooperatives are voluntary organizations, open to all persons able to use the services and willing to accept the responsibilities of membership, without gender, social, racial, political, or religious discrimination.	Membership is voluntary in all SACCOs in Uganda	Full alignment
2. Democratic Member Control: Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. The elected executives are accountable to the membership. In primary cooperatives, members have equal voting rights (one member, one vote)	Save for a few, older SACCOs in rural areas and employee/ trade-based SACCOs, member control exists in principle but in practice, one or a few powerful people/elites control the SACCOs	Significant misalignment
3. Members' Economic Participation: Members should contribute equitably to, and democratically control, the capital of their cooperative. Members should benefit from the cooperative in proportion to their transactions with the cooperative society	Members benefit according to their capital in the SACCO, not in proportion to the transactions they have – thus by default, vitality of members' economic participation is de-emphasised	Significant misalignment
4. Autonomy and Independence: Cooperatives should be autonomous, member-centred organizations controlled by their members. If they enter into agreements with other organisations, including government, or raise capital from external sources, they should do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.	Employee/ trade based SACCOs are fully controlled by their members as are a few very autonomous, often fairly large rural SACCOs. A majority of the weaker, often youngster SACCOs are usually controlled by lenders/benefactors through terms and conditions	Mixed. A few very well aligned and others significantly misaligned
5. Education, Training, and Information: Cooperatives should provide adequate training for their members, boards/ committees, managers, and employees so they can contribute effectively to the development of their cooperatives. They inform the general public, particularly young people and opinion leaders, about the nature and benefits of cooperation.	Training of SACCO members and executives is often either externally induced or very brief and shallow, at times confined to AGMs	Significantly misaligned
6. Cooperation Among Cooperatives: Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional, and international structures. Most importantly, SACCOs should have close linkages with production/ marketing cooperatives owned and used by more or less the same members	Many SACCOs do not belong to UCSCU, the national SACCO union, many others do not have a paired production/ marketing cooperative and, generally, SACCOs' cooperation in the cooperative sector exists but not enough to harness the advantages of intra-sector cooperation.	Significantly misaligned
7. Concern for Community. While focusing on member needs, cooperatives work for the sustainable development of their communities through policies accepted by their members.	SACCO are good at their concern for local community because they are part of such communities	Well aligned

Source: Author's analysis from various engagements in the SACCO sub-sector[1].

1 The alignment of Ugandan SACCOs to prudential financial practices is covered in section 3 of this article.

with cooperative principles and with prudent financial practices. There are seven widely recognised cooperative principles against which Uganda's SACCO experience can be benchmarked. These are; (i) voluntary and open membership; (ii) democratic member control; (iii) members' economic participation; (iv) autonomy and independence; (v) education/ training and information dissemination; (vi) cooperation among cooperatives; and (vii) concern for community.

Table 27 tries to highlight the key misalignments between good principles of cooperatives and practical realities of SACCOs in Uganda.

4.4.3 Forward and backward linkages of SACCOS

The issue of linkages in SACCOs is important because savings are derived from economic activities. Only those SACCOs whose members are economically active and who generate a surplus can be relied upon to boost agricultural finance in form of savings and successful borrowing and repayment of loans. Members of such SACCOs usually belong to other cooperatives – mainly producer and marketing cooperatives. SACCO linkages should also extend into the financial sector, which enables the SACCO to access technical and financial services that they cannot provide on their own. While the strong, somewhat-older area-based SACCOs and employee/ business based SACCOs have good linkages within the financial sector, the weaker, struggling SACCOs (which are the majority) do not.

Good SACCOs are therefore well linked to the cooperative sector as well as the financial sector. Save for a few cases, most of the SACCOs in areas with commercially tradeable produce like tea, tobacco, coffee and sugarcane, are generally not well linked with the rest of the cooperative sector.

Backward linkages in the cooperative sector- the traditional linkage to production, bulking, sorting and product quality control functions seldom exists in a meaningful way. The deterioration of the cooperative sector has had adverse effects on SACCOs though production and marketing cooperatives have suffered even more. In many areas of the country, produce is sold to buyers who have nothing to do with the cooperative sector, and whose profit motives do not include the development of the farmers' capabilities or knowledge for improved productivity. When isolated, SACCOs become just another MFI with a weak common bond between local economic activity and the financial services

Forward linkages in the cooperative sector – Marketing cooperatives are very weak or non-existent in many areas of the country. Often, the few production cooperatives sell to purely private buyers. This absence of forward linkage weakens the primary production cooperatives and SACCOs alike.

Backward linkages in the financial sector – There are lower level financial service outfits like community savings and credit groups (CSCGs), VSLAs and other community based financial service setups. These should and in some cases are linked to SACCOs through their members, or through group membership in the SACCOs. These very local financial services setups are also targeted by regulated institutions like Microfinance Deposit Institutions (MDIs) and commercial banks as customers for both loans and deposits. Since these higher level financial institutions are formal and licensed, they are sometimes preferred to SACCOs.

Forward linkages in the financial sector – In principle, there are at least two financial cooperative unions that SACCOs would link with as higher level partners of their own type: the Uganda Cooperative Savings and Credit Union (UCSCU) and the Uganda Central Co-operative Financial Services (UCCFS). These two, while enjoying fair levels of membership among SACCOs, are by no means the '*linkage financial institutions of choice*' for SACCOs. The financial services provided by the two national level financial cooperative unions are seen by most SACCOs

as just wholesale funds like can be obtained from any wholesale lender – like MSCL, Stromme Microfinance Limited, aBi Finance Limited. The only difference seems to be that the money is more available and reliable with non-cooperative wholesale lenders than it is with the two financial cooperative unions. This view is validated by SACCOs' borrowing records and unions' own explanations of their lending capability. Outside wholesale lenders and financial cooperative unions, each SACCO has a bank or MDI where it keeps deposits and in some cases from where it sources loans.

4.4.4 Effectiveness of SACCOs in financing agriculture

For small scale primary producers in Africa, the appropriate providers of financial services are SACCOs that are linked to a producer cooperative and the agro-marketing system. Financing cycles and total business of the SACCO in such a case rotates around the crop/animal cycles. Information asymmetries are minimised because SACCO officers and board members know what is best for members because they live and work in the same localities as the savers and borrowers.

In the context of agricultural finance, rural SACCOs are the most relevant entities to provide the appropriate product and services in the rural areas. SACCOs are, in a sense, in a unique situation in that they are both cooperatives and financial institutions, and must adhere to sound practices of both the cooperative and financial sectors. As institutions that take deposits (albeit from members only), SACCOs need to adhere to sound practices pertinent to financial institutions if they are to become financially sustainable. Additionally, to be effective at financiers of agriculture, SACCOs must develop and implement sound risk management practices, which even some fairly well established MFIs have not yet perfected.

SACCOs in Uganda can largely be categorized according to their financial health and performance as follows;

i. The well-organized, member-initiated and fairly mature SACCOs. These typically have between 1,000 and 4,500 members. These are few in number, perhaps not more than 50 in the whole country (and there are more than 4,000 registered SACCOs in the country). These typically have from 5,000 to more than 20,000 members;

ii. The modestly performing SACCOs – those that were formed by their members in response to clear need but have since been run down, or those that started/ were derailed by expectations of free Government money. These typically have between 1,000 and 4,500 members. These are modestly or poorly governed, not well managed and tend to deteriorate into non-performing institutions. These could number between 600 and 1,000 in the country.

iii. The Poorly run, poorly governed, dead or dying rural SACCOs are the majority, perhaps numbering more than 3,000, with many of them technically non-existent hardly opening for business. They are critically short of cash, often in a net liability position, little patronised by members and what keeps some from being closed is either hope that someday there will be Government or free money to bail them out or the power of politics will constrain the regulator from closing them.

SACCOs as financial institutions

Well-run financial institutions observe sound practices in good governance, management effectiveness, asset and liability management, leverage, prudent intermediation, liquidity, asset quality management, anti-concentration, financial management, accounting and reporting. On these aspects, informed views on Ugandan rural SACCOs follow in Table 28;

With the advent of Tier IV regulation (assuming Uganda Microfinance Regulatory Authority -UMRA) is left with a free hand that all effective financial regulators must have), many SACCOs would be closed for non-conformity/ noncompliance with financial sound management benchmarks. This might not happen since the closing

Table 28:**Rural SACCOs alignment with sound practices for financial institutions**

Good financial cooperatives should have…	**Most rural SACCOs in Uganda have…**
A good governance structure and system that promotes accountability, responsibility and planned growth	Good governance structures exist but rarely filled by people capable of holding management and each other fully accountable
Management Effectiveness	Management is usually either unable to hold everything together or they are so shrewd and fraudulent that they steal funds without the modestly capable boards/ committees even being aware
Prudent management of their assets and liabilities	Fair management of liabilities and poor management of assets. Loan appraisals are in most cases a ritual and not based on the known conventional aspects that make a borrower viable. Quite often for these rural SACCOs, the very members of the executive committee or board are the chief defaulting borrowers which is not good asset management. SACCOs often take demand deposits and from this, they lend for both short and long term. The maturity mismatch between assets and liabilities also causes illiquidity and failure
Prudent capital leverage, with a debt/ equity ratio of at most 6	Debt / Equity ratio exceeding 10 in many cases much higher
Adequate liquidity at all times	Frequent and severe cash shortages caused by poor financial management, inept governance, sometimes unqualified or dishonest management
Excellent asset quality	Poor asset quality. A typical Ugandan rural SACCO has the Portfolio At Risk (PAR, the measure of how vulnerable the loan portfolio is based on missed/ defaulted repayments) of between 20% and 100% The sound practice level is a maximum of 5%. High PAR usually gets worse, often resulting into massive total default and severe illiquity which causes many rural SACCOs to close
Low concentration in lending and deposits	High concentration in lending. In Uganda's poorly governed rural SACCOs, it is not uncommon to find 50% or more of the loan portfolio accounted for by less than ten people sometimes including SACCO executives
Financial management, accounting and reporting	Poor book keeping, incomplete records and inadequate internal controls, worsened by the absence of professional annual external audits
A savings-first focus	Loans-first focus.
Largely self-financing	High affinity for external financing
Good at developing and offering responsive financial products to their members	Poorly designed financial products which are generic/ similar, but only different in names

Source: Author's compilation

of SACCOs in Uganda is more of a political issue than a professional one. In the long run, however, Government will most likely listen to the logic of financial sector prudence and SACCOs' need for compliance with financial management principles.

There are, however a few robust and effective SACCOs. Examples are Kyamuhunga and Ebirungi Birig'Omutuutu (EBO) SACCOs in Western Uganda. These are well governed, well managed and have good operational systems in place. They are exceptions which ought to be the sound practice examples for the others to follow. They have a number of savings products and a lot more loan products which are well differentiated and sector-tailored, for trade, business, agricultural production, education/ schools, consumption and other member needs. Their asset quality is quite good,

maintaining a Portfolio at Risk (PAR) of 5 percent or less, which is in line with international sound practice.

4.4.5 Challenges, risks and opportunities for SACCO's growth in Uganda

Rural SACCOs, which should be the preferred providers of agricultural finance, face a number of practical difficulties which other SACCOs do not face as much. Some of these are;

i) *Uninformed leadership and membership*: even when they would like to, SACCO leaders and members in some places do not have adequate knowledge to ensure smooth running of the SACCOs for safety and growth;

ii) *Lack of member patronage* – the passion of ownership characteristic of cooperatives is, quite often, lacking in Uganda's rural SACCOs. Many times the members join the SACCO to obtain a service rather than become 'joint owners of a financial institutions';

iii) *Poverty of membership*, leading low capitalisation – rural SACCO can only thrive and grow in relation to the growth and prosperity of the local economies. In places like the North and North-Eastern Uganda where poverty is chronically prevalent, there is scarcity of good rural SACCOs;

iv) *Low linkage to economic activities* – Unlike in countries like Kenya where most rural SACCOs are locally linked to economically sound agricultural activities, in Uganda SACCOs tend to be stand-alone, almost existing in-spite of the lack of strong local economic activity;

v) *Politicisation* – the expectation that Government will come up with money to give to people through SACCOs is detrimental to the spirit and even survival of SACCOs. In the years past, local politicians have peddled populist but very harmful and wrong idea that people should form or join SACCOs because Government would give them free money. In many places, this changed members' relationship with their SACCOs – from exercising ownership responsibilities to waiting for the free money. Whereas there are far less of these disruptive messages doing rounds presently, not all people (much less SACCOs) have recovered from them;

vi) *Inability to develop responsive products* – in most rural SACCOs, there are generic products, mainly suitable for short term trading activities, which are offered under various product names but with the same or similar product features;

vii) *Thefts and fraud* – In a true sense, this is the culmination of many other challenges. Rural SACCOs have suffered serious thefts of funds by managers, sometimes in connivance with board members, causing needlessly high levels of mistrust within SACCOs ;

viii) *Lack of clear planning* – Few rural SACCOs have strategic or business plans, and few of the existing plans are well thought out and documented;

ix) *Severe competition* from other financial institutions that are only profit oriented, now penetrating rural areas using *fintech*, an aspect (IT) at which SACCOs continue to lag behind

x) *Absence of effective supervision and regulation* – SACCOs, like other cooperatives were up until recently, regulated and supervised by the office of Commissioner for Cooperative Development. With the enactment of the Tie 4 MFIs and Money Lenders Act, not all SACCOs will be regulated/ supervised by the new regulator - UMRA. Similarly, it is doubtful whether the regulator will have better prospects of getting the funding, facilitation, independence and logistics required for effective regulation and supervision of SACCOs and the rest of Tier 4.

4.4.6 Conclusion

While acknowledging that SACCOs are potentially the best providers of financial services to low income, small scale agricultural producers, the author of this article has come to the following conclusions;

a) Efforts at improving SACCOs will remain piecemeal and yield little positive result until full cooperative linkages with SACCOs are restored. The Area Cooperative Enterprise model, introduced in Uganda by UCA over several years, has demonstrated that once SACCOs are linked to production and marketing aspects, they perform far better than when they remain isolated;

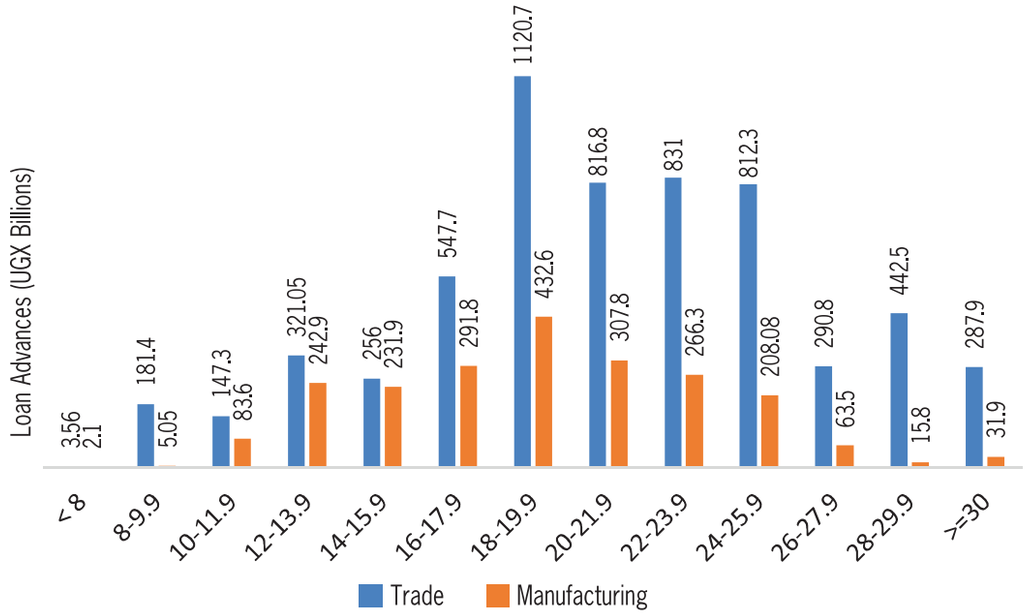
b) SACCOs must struggle to become competent at providing responsive financial services. Years of capacity building have had mixed results – some very good and others dire or nil. SACCOs cannot succeed as benign recipients of training and capacity building. In this regard, leaving the chronically *'unhelpable'* SACCOs die in peace while helping the *'helpable'* ones would seems to be the best option;

c) Where the local populace has not seen a reason to start their a SACCO, they should not be induced to form one;

UMRA should have full powers to regulate and supervise all SACCOs, including closing down ones which are persistently noncompliant. National and local politics should be strictly delinked from SACCOs. UMRA should devise innovative ways of collaborating with other regulators e.g. Bank of Uganda and also learn from other jurisdictions like India, on how they have managed to bring order to segments of the financial sector that have many small scattered institutions.

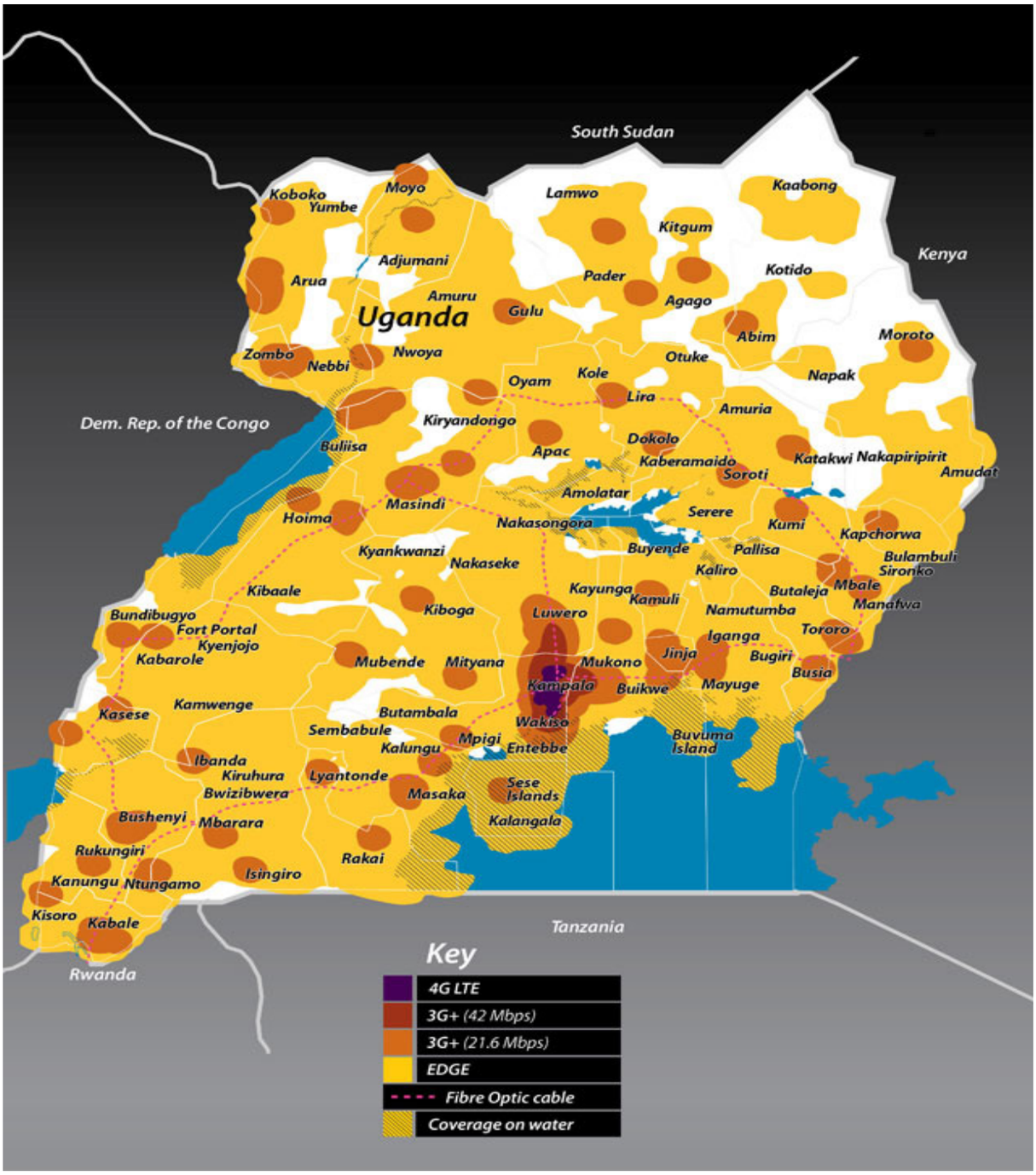
Annex

Figure 1: **New advances to trade and manufacturing sectors by lending rates (2015-2018)**

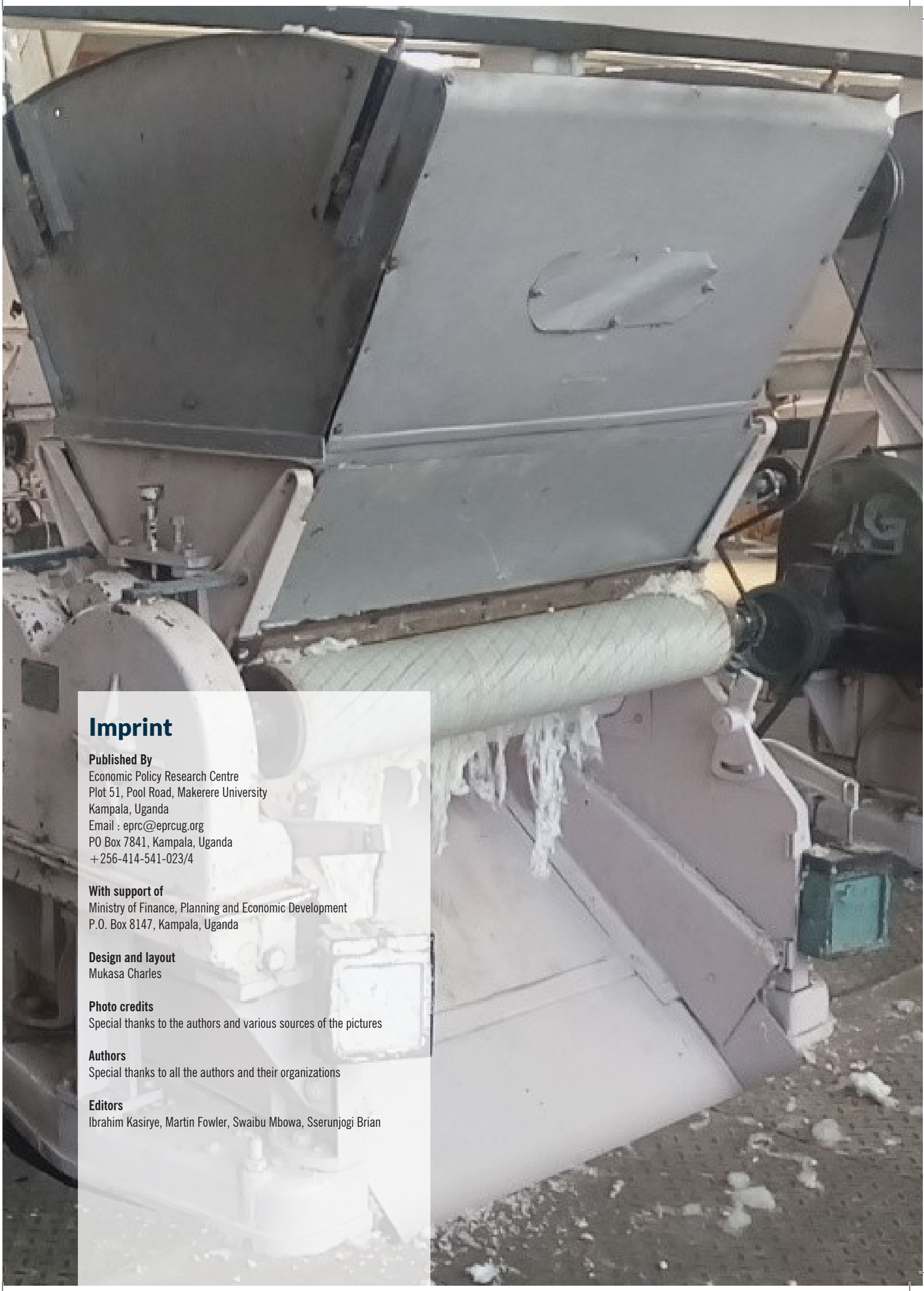


Source: Authors computation based on BOU Supervision Department data

Figure 11: **National coverage by MTN**



Source: http://beta.mtn.co.ug, 2018



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Authors
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Editors
Ibrahim Kasirye, Martin Fowler, Swaibu Mbowa, Sserunjogi Brian

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