FEASIBILITY STUDY FOR THE DEVELOPMENT OF A LAND AND AGRICULTURE BANK IN UGANDA





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Acronyms and Abbreviations

ABC Agriculture Bank of China ACF Agricultural Credit Facility

ACGSF Agricultural Credit Guarantee Scheme Fund

ADB Agricultural Development Bank AFC Agricultural Finance Corporation

AGRA Alliance for a Green Revolution in Africa

ANBC Adjusted Net Bank Credit

BOU Bank of Uganda CBR Central Bank Rate

CSO Civil Society Organization

DANIDA Danish International Development Agency

DFI Development Finance Institution
DRC Democratic Republic of Congo
EAC East African Community

FAO Food and Agriculture Organization

FI Financial Institution FY Financial Year

GASIP Ghana Agricultural Sector Investment Programme

GDP Gross Domestic Product GOU Government of Uganda

IBRD International Bank for Reconstruction and Development

IDA International Development Association

IFAD International Fund for Agricultural Development

IMF International Monetary Fund IPO Initial Public Offering IRR Internal rate of return KIIs Key Informants Interviews

MAAIF Ministry of Agriculture, Animal Industry and Fisheries

MDI Micro Finance Deposit taking Institution

MFI Micro Finance Institution

MoFPED Ministry of Finance Planning and Economic Development

MSME Micro, Small and Medium Enterprises

MUK Makerere University

NACRDB Nigeria Agricultural Co-operative and Rural Development Bank

NEC National Executive Committee NGO Non-Governmental Organization

NPV Net Present Value

PESTEL Political, Economic, Social, Technological, Environment, Legal

RCB Rural Credit Cooperatives RRB Regional Rural Bank

SACCOs Savings and Credit Cooperatives

SCB State Cooperative Bank

SPSS Statistical Package for Social Sciences
SWOT Strength Weaknesses Opportunities Threats
TADB Tanzania Agriculture Development Bank

TIB Tanzania Investment Bank

UCDA Uganda Coffee Development Authority UFCVP Uganda Farmers Common Voice Platform

UGX Uganda Shillings

UNDP United Nations Development Programme

US\$ United States Dollar

USAID United States Agency for International Development

VSLA Village Savings and Loans Association

WB World Bank

Executive Summary

Caritas Uganda is the social services and development department of the Uganda Episcopal Conference. Caritas Uganda is working towards positively influencing policies and laws geared towards enhancing the contribution of the agricultural sector to the economic and social welfare of Ugandans. In this regard, Caritas Uganda with the support from Caritas Denmark and DANIDA, undertook a feasibility study to establish the viability of establishing and sustainably operating a fully functional land and agricultural bank to specifically fund agriculture and related issues. The recommendations arising from this study are meant to facilitate evidence based advocacy.

The feasibility study was conducted in four (4) phases: Phase I: Inception and Planning, Phase II: Desk Reviews and Field Work; Phase III: Analysis and Synthesis; and Phase IV: Reporting. Key respondents selected to inform this feasibility study were 40 and included: Farmers, Farmer organisations, relevant ministries (MAAIF and MoFPED), the central Bank (BOU), Commercial banks, micro finance institutions, District agricultural officers, and suppliers of agricultural inputs, Exporters of agricultural produce, Agro dealers, processors and NGOs promoting agriculture.

A market analysis revealed that the agricultural credit market in Uganda is characterised by mainly marketing and production loans. Since 2010, lending to agriculture has increased. This increase has been largely due to lending for marketing mostly in coffee and grain. The agricultural lending by regulated FIs and MDIs was recorded as Ugx 837 billion in 2013 following a growth of about 20% from the previous year.

5 banks were visited; Centenary, Stanbic, DFCU, Finance Trust and Pride Micro Finance as well as Vision Fund which is an MFI. Some of the key aspects highlighted include; all these FIs had loans designed along the entire agriculture value chain, with interest rates on agricultural credit in line with the market rate of about 25% per annum. The lowest rates on agriculture loans were about 12% mainly for the ACF loan with the highest rates reaching 51% per annum on the small loans of less than Ugx 1 million. Our discussions with the farmers, agro dealers, marketers, farmer organisations, officials in the agricultural sector and NGOs dealing with farmers highlighted that the highest level of interest that farmers would be able to pay and still remain reasonably profitable would be 7-12% per year, and 10-15% for marketers and agro dealers.

Key critical success factors for agricultural credit highlighted included; the credit should be well formulated with an agricultural market focus and adequate and well-tailored preparation of intended beneficiaries through capacity building especially in management of loans and field support to ensure profit maximisation.

While some of the key challenges highlighted include; Diversion of agricultural credit to other activities and the weaknesses embedded in the agricultural sector which include dependency on rain fed agriculture, inadequate market information, price fluctuations, small land sizes, illiteracy, poor record keeping and management among others which result into low and irregular incomes from agricultural activities which in turn limits the credit demand and increases the credit risk.

It was noted that some of the challenges that led to the collapse of the Uganda Cooperative bank included: insolvency brought about by imprudent banking practices and poor internal governance, Capitalization issues, liquidity issues, and Staffing issues. Inadequate supervision by the Central Bank cannot be ignored as part of the issue as a judicial inquiry report by Ogoola cited the 1993 Financial Institutions Statute, 'it was slow and weak in remedy measures to deal with banks' problems'.

The gaps that need to be filled in the agricultural credit market were noted to include: The need for interest rates below market rates, micro credit as little as Ugx 50,000 (About US\$15) and Lending without collateral.

Comparative analysis with other countries was done and key highlights included: The reserve bank of India has set priority sector lending targets with Agriculture credit set at 18 percent of Adjusted Net Bank Credit (ANBC) or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher, 7 percent out of the 18% is prescribed for Small and Marginal Farmers, to be achieved by March 2016, failure of which attracts penalties. In August 2015 the Tanzania Agriculture Development Bank (TADB) was launched in Dar

es Saalam and government pledged to raise US\$ 500m capital requirement in 8 years. The bank was established to ensure agriculture is transformed by addressing challenges that have been retarding productivity such as lack of effective agricultural financing packages. TADB is to work with financial institutions such as commercial banks, community banks, savings and credit co-operatives societies and a variety of other groups to extend credit to farmers.

There was a proposal to draft a Land and Agricultural bank bill which was spearheaded by Honourable Geoffrey Ekanya in 2013. However it has been noted that this proposal didn't get to the level of a draft bill and there is a need to pick it up and have it completed.

Setup costs of Ugx 100 billion were computed for establishment of an agricultural bank in Uganda. Best case, most likely and worst case scenario were used to forecast profits for such a bank over the next 10 years and they all exhibited positive profits. The net present value (NPV) computation returned negative NPVs for the worst and most likely case scenario over the 10 year period. The best case scenario however produced a positive Net Present Value of Ugx 11bn at 4% cost of capital and Internal Rate of Return (IRR) of 5%. Given that the market rates are on average as high as 25%, gaining market share while lending at as low as 16% would not be difficult and this would still give the bank the flexibility to charge between 16% and 24% when required and still remain competitive. Based on this analysis, such a bank would be financially viable.

Like any other business the funding sources available for the Agricultural bank would include debt and equity. For this kind of bank it would be important to have government as a major shareholder or supporter given that some level of subsidisation is required in order to solve the current concerns in the agricultural credit market.

Based on the findings of this study it is quite clear that a Land and Agricultural bank is needed in Uganda due to the identified gaps that exist in the current agricultural credit market. In addition to the financial feasibility of the agricultural bank under the best case scenario, taking into consideration a cost benefit analysis, it should be noted that feasibility of such a venture is not only about numbers but should also look at the socio-economic as well as environmental costs and benefits. The fact that increased agricultural credit access would boost agriculture and in turn provide a source of livelihood, contribute to GDP, provide foreign exchange and food security. In respect to the above, the land and agricultural bank has been deemed feasible.

The study identified a number of challenges in the agricultural finance sector and as such the recommendations for the short, medium and long term are highlighted below are in this regard;

Short term

- There is a need to improve structures and skills from the grassroots in the agricultural sector so as to improve agricultural credit uptake. These include cooperatives, farmer groups and agro dealer associations, improved farming skills, business management and ethics.
- Similar to the ACF, government should avail subsidised credit through financial institutions however targeting specifically the smallholder farmers and smaller businesses along the agriculture value chain.
- Government should consider reforms and policies targeted at improving access to credit in the agricultural sector. These should include; implementing policies working elsewhere such as; setting agricultural credit targets for all financial institutions, providing incentives to financial institutions to encourage agricultural credit growth, insurance and enact the proposed land and agriculture bank bill.

Medium term

- Aggressive resource mobilisation should be done specifically for free or subsidised funds that can be lent out at below market rates. Likely sources for such funds are; government, CSOs, development partners and farmer organisations.
- Consideration should be made regarding the option of using already established and efficient structures such as the commercial banks and micro finance institutions to boost agricultural financing through wholesale financing/guarantee schemes which can be managed by the central bank.

Long term

• Setting up a land and agricultural bank to deal with the issues in the agricultural credit market. Once such a bank is set up, key learnings from the liquated cooperative bank such as political influence/interference and capitalisation issues should be monitored and dealt with appropriately.

Introduction and Background

1.1 Introduction

Caritas Uganda is the social services and development department of the Uganda Episcopal Conference. Caritas Uganda with the support of other development partners, and the Uganda Farmers Common Voice Platform is working towards positively influencing policies and laws geared towards enhancing the contribution of the agricultural sector to the economic and social welfare of Ugandans. This will be achieved through advocacy for policies and laws to ensure personal prosperity, economic growth through increased innovation, productivity, investment and trade, employment creation and ensuring food security.

In this regard, Caritas Uganda with the support from Caritas Denmark and DANIDA, sanctioned this feasibility study to establish the viability of establishing and sustainably operating a fully functional land and agricultural bank to specifically fund agriculture and related issues.

1.2 Background

The history of agriculture in Uganda is characterised by farmer co-operatives from the 1960s through to the 1990s that helped farmers in selling of their crops mainly coffee, cotton, tobacco, and maize. In each political district, there was a co-operative "union" which built stores and, eventually, with government money, processing factories: cotton ginneries, tobacco dryers, and maize mills. A co-operative bank was in place to finance agriculture and agriculture extension services were available to the farmers. The political insecurity, mismanagement, and a lack of adequate resources over the years seriously eroded incomes from commercial agriculture and disrupted the operations of the processing factories along with the co-operative unions.

The agricultural sector in Uganda continues to grow. Growth rate increased from 0.8% in FY 2011/12 to 1.5% in FY2013/14. The sector, employs the largest share of the country's labour force at 66%. The contribution of agriculture to GDP rose from 22% in FY2011/12 to 26% (23.178 trillion) in FY 2013/14. This indicates that 34% of the labour force that works outside the agricultural sector helps to generate over 74% of the total GDP, implying extremely low productivity in the agricultural sector. Productivity is negatively affected by the low application of modern technologies and prevalence of animal and crop pests and diseases. This situation is exacerbated by the fact that the sector is generally underfunded as a whole and farmers have limited access to usable funds.

Despite being the top employer and critical to economic development, the agricultural sector has been allocated only 2.75% of the total budget for the FY2015/16 which is a drop from 3.14% in the previous financial year 2014/15. This is still low in comparison with the Maputo commitment of at least 10% allocation of the national budget to agriculture development. Additionally, one of the key challenges in the agricultural sector is inadequate availability of appropriate financial institutions limiting the ability of individual farmers and farmer groups to open bank accounts to facilitate their financial transactions. ¹

The available agricultural financing in the commercial banks under the Agricultural Credit Facility (ACF) subsidized by government targets wealthy farmers and has stringent terms and conditions. This makes credit access difficult especially for the smallholder farmers who constitute the majority of farmers in the country. The rural financial services intervention that government opted for under Savings and Credit Cooperatives (SACCOs) does not explicitly target agricultural financing since the terms offered to rural farmers have a commercial rates connotation. SACCOs have been found to be expensive and exploitative which discourages farmers from applying for credit. The majority of farmers fear to get loans because of the harsh treatment that loan defaulters receive from the financial institutions but also the repayment period that does not coincide with the harvest season. Furthermore, most of the loans from commercial banks and other financial institutions are short term which constrains farmers. The Government should revive the cooperative arrangement, and revise the terms and conditions under the Agricultural Credit Facility (ACF) to avail affordable financing to all categories of farmers. As a long term goal government should explore ways of

¹ MAAIF, November 2012, Second Joint Agriculture Sector Annual review report

establishing a fully-fledged agricultural bank to provide a wide range of agricultural credit products that are affordable by the rural communities. 2

However, concerns with the performance of public agricultural development banks have prompted efforts to ascertain the determinants of their viability and sustainability. The main problem with the public agricultural development banks has been their lack of viability. The lack of viability of the agricultural development banks is characterised by a steady reduction of the flow of their loanable funds, in real terms. The lending capacity of the agricultural development banks has declined, in turn, because (i) they have not protected their portfolios from inflation, (ii) have not vigorously collected their loans in order to be able to grant new credit, (iii) they have not aggressively mobilized local resources to widen the range of their services, and (iv) in view of the poor quality of their services and the high transaction costs that they impose, they have lost the support of their clientele.

Determinants of viability include; the environment (infrastructure, technology, prices, legal and political system), macroeconomic management (inflation and exchange rate) and bank prudential supervision. Other determinants are, regulation and policies (interest rates, reserve requirements, rediscounting, and credit allocation), institutional organization and procedures, as well as financial technologies. Caution is recommended in the use of farm models and budgets in order to establish customer viability.

For an agricultural bank to remain viable, it must be self-sustaining and valued by its clientele. This calls for an institution that is able to cover its costs, provides high quality services and reaches an increasing number of customers. It must be dynamic in providing a rich and wide range of financial portfolio, and actively search for ways and means of improving its efficiency. Its consideration must reflect the level and degree of dispersion of the transaction costs incurred by its depositors, borrowers, and the intermediary itself. Viable institutions possess credibility and are able to mobilize deposits from the public and private sectors, recover their loans, and maintain professional management and staff³.

1.3 Objectives of the feasibility study

The main objective of the feasibility study was to determine the viability of establishing an agricultural bank and make recommendations on the same to facilitate undertaking evidence based advocacy and lobbying.

The specific objectives of the study were to;

- a) Establish the current bottlenecks affecting agriculture finance as a result of relying on the current financing structure of commercial banks and other micro deposit taking institutions.
- b) Establish the factors that undermined the sustainable existence and the eventual failure of the Uganda Cooperative Bank.
- c) Undertake a comparative analysis to establish the position of agricultural banks in other countries (including India, China, Nigeria, Ghana, South Africa, Tanzania and Kenya) with a view to borrow best practices and examine the national budgetary allocation to the agriculture sector and the ramifications
- d) Provide appropriate recommendations.

1.4 Scope of work and deliverables

a) An inception report detailing the framework for the assignment including the proposed methodology, implementation arrangements and the work plan to administer the study.

b) Collect and review primary and secondary information from the Bank of Uganda, Ministry of Agriculture, Ministry of Finance, Planning and Economic Development, Economic Policy Research Centre at Makerere University, Commercial Banks, any other relevant institutions and/ or stakeholders that may be identified.

² GoU, May 2015, Committee report on Agriculture, Animal Industry and Fisheries on the Ministerial Policy Statement and Budget Estimates for the Financial Year 2015/16

³ Richard L Meyer, "The Viability of Rural Financial Institutions and the System as a Whole," Report of the Fourth Technical Consultation on the Scheme of Agricultural Credit Development, Rome: FAO, 1988

- c) Design, pre-test and administer data collection tools to collect qualitative and quantitative information for the study. This shall be submitted to the Uganda Episcopal Conference, Steering Committee of the platform prior to commencement of the assignment for review and comments.
- d) Submit a draft report, receive and incorporate all appropriate comments. The fair draft of the report will comprise the introduction and background information, the key research questions, reviewed literature and empirical findings and the attendant recommendations.
- e) Presentation of the draft report during a validation meeting organized by Uganda Episcopal Conference Uganda/Uganda Farmers Common Voice Platform.
- f) Presentation of the final report to the different stakeholders during a national dissemination meeting that shall be organized by Uganda Episcopal Conference Uganda/Caritas Uganda and Uganda Farmers Common Voice Platform
- g) Undertake comparative analysis with countries i.e. India, China, Nigeria, Ghana, South Africa, Tanzania and Kenya.
- h) Reviewing the proposed Land and Agriculture Bank Bill and providing comments.

1.5 The feasibility study approach and methodology

The approach used was collaborative at all stages (Inception, fieldwork, data analysis/synthesis and reporting) and was guided more by best practice than by any other factors.

The feasibility study was conducted in the following four (4) phases:

- Phase I: Inception and Planning; Involved an initial kick-off meeting with representatives from Caritas to discuss and reaffirm the assignment goals and objectives and to ensure that all parties have a common understanding of the scope, timing and deliverables of this assignment. Following this meeting, detailed planning was conducted and an inception report was submitted to Caritas highlighting the agreed objectives, methodology and tools for the study.
- Phase II: Desk Reviews and Field Work; Involved the collection and initial analysis of all available documentation, and a review of relevant reports. The desk reviews prepared the ground for semi-structured interviews with selected respondents.
- Phase III: Analysis and synthesis; Involved analysis of all information collected and documentation including; Country analysis, Market analysis, Environmental analysis, high level site analysis and financial analysis in line with the feasibility study framework employed and objectives of the study.
- Phase IV: Reporting; feasibility study findings were summarized under each of the feasibility study framework headings and specific objectives and included in this study report. The draft report was presented to Caritas to obtain feedback, comments and suggestions incorporated into the final report.

1.5.2 Selection of Respondents

A total of 40 key respondents were selected to inform this feasibility study and these included: Farmers, Farmer organisations, relevant ministries (MAAIF and MoFPED), the central Bank (BOU), Commercial banks, micro finance institutions, District agricultural officers, and suppliers of agricultural inputs, Exporters of agricultural produce, Agro dealers, processors and NGOs promoting agriculture. In addition to these respondents, information from comparator countries was gathered and analysed to inform the feasibility study. (See **Appendix III** for detailed listing of respondents)

1.5.3 Data Collection Methods

In-depth interviews

In-depth interviews were conducted with relevant personnel from participating selected organisations, a broad range of questions were asked in line with the study methodology and objectives.

Telephone interviews

Some of the participants mainly from the selected comparator countries that could not be visited were called by telephone to obtain key information relevant to the study.

Literature review

Throughout the study a number of relevant documents were continuously reviewed and referred to, these are listed under appendix I of this report.

1.6 Organization of the report

The report is structured into four (4) Sections that are preceded by an executive summary. Section 1.0 is Introduction, background, approach and methodology. Section 2.0 shows the findings in line with the objectives of the study and the feasibility study framework employed. Section 3.0 gives the conclusions while Section 4.0 highlights the consultant's recommendations in line with the findings.

1.7 Limitations of the Study

As part of the study, the consultant was to comment on the proposed Land and Agriculture Bank bill. However this was not possible given that there is no draft bill yet. The other issue was that obtaining information from some key respondents and comparator countries proved a little difficult however the team eventually managed through employing alternative approaches to obtain the required information.

2. Findings

2.1 Country analysis

2.1.1 Country Overview

Uganda has an area of 241,550.7 square kilometres (sq. km) of which 41,743.2 sq km are open water and swamps, and 199,807.4 sq km is land. The altitude above sea level ranges from 620 metres (Albert Nile) to 5,111 metres (Mt. Rwenzori peak). Uganda is mainly a plateau astride the equator with favorable tropical climate (rainfall has averaged 1,000-1,100mm over the last 30 years), temperature normally ranging from 16-31 degrees centigrade. It is endowed with numerous natural resources and enjoys a unique location at the heart of Sub - Saharan Africa within the East African region.

Figure 1: Map and Flag of Uganda



Picture Source: cia.gov

Despite being landlocked, its central location gives her a commanding base for regional trade and investment. The Ugandan economy is predominantly agro-based, with emerging sectors such as oil and gas, manufacturing, services and tourism. It has a population of 34.8 million with 28.4 million of the people living in rural areas and a population growth rate of 3.03% per annum⁴.

Average life expectancy is 59, the poverty ratio 19.7 percent and per capita GDP is USD 715. The country was ranked 164 out of 186 countries on the 2014 UNDP Human Development Index. The discovery of significant oil reserves is expected to boost future economic growth. The National Development Plan 2, which is effective in 2015, focuses on improving agriculture, tourism and growth through the minerals/oil/gas industry.

In 2014, Uganda saw the consolidation of macroeconomic stability and a gradual recovery of economic activity. Real GDP growth in FY 2013/14 reached 4.5% (July 2013 through to June 2014), which was significantly weaker than expected (5.7%). This was mainly due to under-execution of externally financed public investment and depressed exports as demand from trading partners stalled. Nevertheless, Uganda's economy recovered as compared to the previous year. Growth prospects are expected to improve, with GDP growth projection for FY 2014/15 at 5.9% owing to the government's resolve to improve the fiscal space through domestic revenue mobilisation efforts, scaled-up public investment and a recovery in private demand as households and corporations start accessing bank credit. Although poverty has generally declined, rural areas continue to have the highest concentration of national poverty compared to urban areas. (http://www.afdb.org/en/countries/east-africa/uganda/uganda-economic-outlook/)

2.1.2 Agriculture Sector Overview

Agriculture is a core sector of Uganda's economy and the largest employer, it continues to employ the largest share of the country's labour force at 66%. The contribution of Agriculture to GDP is up from 22% in FY2011/12 to 26% (23.1738 trillion) in FY2013/14 however this indicates that 34% of the labour force that works outside the agricultural sector helps to generate over 74% of the total GDP, implying extreme low productivity in the agricultural sector. Productivity is negatively affected by the low application of modern technologies and prevalence of animal and crop pests and diseases despite this agriculture growth rate is up from 0.8% in FY2011/12 to 1.5% in FY2013/14.

Plantains, cassava, sweet potato, sorghum, finger millet and maize are major subsistence crops. The major export crop is coffee, but tea, tobacco and cotton are also important.

Livestock are an important element of the livelihoods of many Ugandan

Figure 2: Typical Ugandan Farmer



⁴ National Population and Housing Census 2014 Provisional results report

households. But despite increasing livestock numbers of cattle, sheep, goats, pigs and poultry, livestock productivity has declined due to cattle rustling, disease outbreaks and lack of pasture.

Having attained high quality and safety standards for production and export, fish exports are the second largest export earner for Uganda. But catches are declining due to destructive fishing methods, over-fishing, non-compliance of regulations and weed infestation due to pollution. Government statistics indicate that while catches from Lake Victoria are dwindling, fish populations in Lake Edward and George are almost extinct.

Poor management of natural resources has also affected forests, soils and wetlands, resulting in declining agricultural yields. Dwindling forest cover has been attributed to increasing demand for agricultural land and fuel wood from a rapidly growing population and weak enforcement of land use policy.

Uganda is one of the world's major *Robusta* coffee producers but some *Arabica* is also grown, primarily on the slopes of Mount Elgon and Mount Rwenzori. Coffee contributes between 20-30 per cent of the country's foreign exchange earnings. The sector is also almost entirely dependent on smallholder farmers, who generally intercrop coffee with food crops such as bananas and beans. Old trees coupled with poorly managed and leached soils result in low yields and quality. Since the 1990s the industry has also suffered from coffee wilt disease. According to the Uganda Coffee Development Agency, 50 per cent of the overall *Robusta* coffee tree population has been infected by the Coffee Wilt Disease and have died. The industry has also suffered from unstable coffee prices on the world market, which has caused farmers to abandon or uproot their trees. A rise in farm gate prices in the last five years has, however, stimulated demand for coffee plantlets.

According to Uganda's latest National Development Plan, sustainable economic and social development largely depends on exploitation of the country's environmental and natural resources. But increasing degradation of these resources, coupled with climate change, is seriously impacting Uganda's development and the livelihoods of millions of people. The government has therefore concluded that investing in agriculture to achieve higher growth rates is the most effective way of reducing poverty.

To tackle these challenges, the government is working to strengthen the national agricultural research system, provide farmers with quality advice, improve detection and control of pests and diseases and encourage more sustainable land use and better management of soil and water resources. Plans are also underway to rehabilitate and establish irrigation schemes, rehabilitate rural infrastructure, improve access to markets, strengthen farmers' organisations, and improve regulation and enforcement of food and safety standards to enable greater levels of export.

In FY 2015/16 budget, government has prioritized recruitment of extension staff in the Local governments under the Single Spine Extension System in order to harmonize agricultural production and extension structures across all local governments. At the Ministry, the Directorate of extension will also be operationalized. It is felt that agriculture in Uganda requires policy coordination and consistency, adequate and strategic investments in various subsectors, proper regulation, effective agricultural extension system, disease control, and provision of quality seed. Other strategic requirements are; farmer mobilization into cooperative groups for bulk marketing and value addition; agricultural infrastructure in both crop and livestock, an agricultural bank / affordable credit, and land reforms.

2.1.3 Country SWOT analysis

Endowed with significant natural resources, including ample fertile land, regular rainfall, and mineral deposits, it is thought that Uganda could feed all of Africa if it were commercially farmed. (https://en.wikipedia.org/wiki/Economy_of_Uganda). However while some steps are being taken to provide insurance against crop failures, access to finance for small-scale farmers is limited. The high cost and limited availability of improved farm inputs, including hybrid seeds and post-harvest technology, over-stretched extension services, poor transport networks, lack of market information, inadequate production and post-harvest facilities, and weak value chain linkages all hinder and frustrate subsistence farmers.

The SWOT analysis below points out some of the key strengths, weaknesses, opportunities and threats faced by the agricultural sector in Uganda.

Table 1: SWOT Analysis

Strengths

- Abundant natural resources for agriculture and fertile soils:
- Favourable weather with two rainy seasons a year
- The industry is a significant source of income for rural people with few financial resources.
- Women participation. Women have been very active participants in agriculture in Uganda greatly contributing to increased household income, food security and nutrition.
- Political Stability for the past 20 years or so, the country has experienced a remarkable level of political stability
- Favourable Central geographical location to serve markets in the isolated eastern DRC, Southern Sudan, Burundi, Rwanda and markets in western Kenya and northern Tanzania.
- Government support: There is fair commitment from the government to ensure orderly growth of the agricultural sector and enabling policies such as the Plan for modernisation of Agriculture and through activities such as construction of rural roads.

Weaknesses

- The agriculture sector in Uganda has remained significantly rain fed with limited use of irrigation despite the availability of water sources all over the country.
- Currently the sector is operating without a holistic Agricultural Policy and Legal framework to guide specific sub-sector policies and strategies.
- The sector is characterised by low earnings, due to low prices for produce, high costs for inputs and the limited progress made in agro-industry.
- Lack of appropriate training, extension materials and extension personnel
- Poor market access for producers and weak linkages between producers and buyers
- Lack of access or non-availability of affordable credit for farmers and the lack of collateral to aid borrowing
- Low level technologies and farming methods e.g. hand hoes remains the main tool for most smallholder farmers.
- Although there are many improved seed varieties and inputs on the market, most small farmers cannot afford them and use retained seed from the previous harvests and do not apply inputs for soil fertility improvement or for weed and pest control. This results into low yields, high losses to pests and disease and poor post-harvest handling.
- Proliferation of middlemen who all eat into what would have been a margin for the farmer.
- The road network, especially the feeder roads, is in a poor state which renders produce more costly.
- Marketing constraints such as the absence of market information, which in most cases results in the selling of produce at a price below the production costs and Unstructured markets (High transaction costs)
- Input supply systems not developed
- Poor processing capacity
- Lack of strong farmers' organizations.
- Lack of organisation among the farmers, professionalism and commercialisation.
- Uganda is a land locked country

Opportunities

- Poverty alleviation: with appropriate training, people can create livelihoods from farming towards helping themselves out of poverty.
- Established NGO's and projects are funding and working hard to improve agriculture in Uganda
- The potential for increased exports exists, particularly to South Sudan
- Deepening regional integration: The

Threats

- Increasingly volatile weather, blamed on climate change, has also begun to impact farmers and prolonged drought and unpredictable rainfall are beginning to cause problems
- Increasing international trade restrictions making it difficult for Ugandan agricultural products to enter the world markets.
- Calls for protectionist policies: In the wake of rising food prices and pockets of food shortages in Uganda there were calls for government to impose bans on

countries of the EAC are moving toward the establishment of a common market thus creating a market of over 130 million consumers. If production could be stepped up and research prioritised, Uganda would be able to supply this market.

- Growing urban population means that there will be a growing base of people consuming agricultural products thus creating opportunities for expansion in agriculture cultivation and in processing capacity.
- Growing economy. The growth of Uganda's economy offers expanded or new markets for agricultural products.
- Increasing population (urban and rural).
 Uganda has one of the fastest growing populations in Africa. This will lead to increased produce consumption, internal produce marketing and hence stimulate more production.
- No tariffs on exports for agricultural produce
- Low employment rigidity
- Weakening Uganda Shilling: For an economy trying to expand exports, a weakening local currency is a good thing as it improves the profitability of exporter firms. In addition to this World prices have risen and continue to rise and these have an impact on the regional and country level prices

- exportation of food products. The progress Uganda has achieved on the economic front has been based on the pursuit by the GOU of liberal economic and trade policies. If these are curtailed, then progress will be slowed down.
- Shifts to other economic activities: Because of the low prices that farmers often receive for their crops or produce, there has been a tendency in some traditional agricultural areas to shift to newer and better paying economic activities such as trading and construction. Also the newly discovered oil may lead to a major shift from agriculture to oil related activities. If this trend continues, local production will dwindle and national requirements will have to be met through imports.
- Although the World Trade organization has advocated the removal of subsidies on farm inputs the world over, still some countries offer both direct and indirect subsidies to their farmers to produce for export. These subsidies make the imported agricultural products cheaper than the locally produced ones and pose a threat to the industry.
- Unstructured trade causing price fluctuations
- Agriculture investors have an increasing choice of locations in Africa that offer competitive operating conditions. Ethiopia, Tanzania, Zambia, Ghana, and Kenya have growing and vibrant agriculture industries.
- The poor trade infrastructure caused by poor roads and railways. This hinders inputs and exports from reaching their destinations in efficient manner. Uganda is also dependent on Kenyan or Tanzanian ports, which are not sufficient to handle large amounts of trade

2.2 Market analysis

2.2.1 Agricultural credit market overview

The Government of Uganda has implemented a number of credit schemes in the past and these include:

Entadikwa Scheme: The scheme was launched by President Yoweri Museveni in March 1995, to reduce poverty and facilitate the small scale entrepreneurs. It was administered through the Ministry of Gender and Labour. It faced a large number of non-performing loans and thereby could not be sustained, for instance as of 2006 out of the sh9.92b loaned out under the scheme only sh358m had been recovered.

SACCOs: In 2006, GOU adopted Savings and Credit Cooperatives Organizations (SACCOs) as a means through which the rural Communities could access financial services. The model is based on the premise that SACCOs are community-based, member owned and independent with the aim of promoting the savings culture. Some of the draw backs of SACCOs have been reported as mismanagement and poor governance.

Prosperity for all program (Bona Bagagawale): launched by the president in 2007, Government was to establish Savings and Credit Cooperative Organizations in 1,000 sub-counties throughout Uganda. The organizations were intended to increase access to credit and low cost loans for a majority of Ugandans, enabling them to invest in projects to boost their household incomes. Investments in agriculture were charged annual interests of 13 percent on their loans, while people investing in commercial businesses were

charged 17 percent interest on their loans. This program faced challenges along the way, one of the reasons cited was the lack of a proper implementation plan and many SACCOs reported a failure to access the cash.

Agricultural Credit Facility (AFC): The Agricultural Credit Facility (ACF) was set up by the Government of Uganda (GoU) in partnership with Commercial Banks, Uganda Development Bank Ltd (UDBL), Micro Deposit Taking Institutions (MDIs) and Credit Institutions all referred to as Participating Financial Institutions (PFIs) to facilitate the provision of medium and long term loans to projects engaged in agriculture and agro-processing on more favorable terms than are usually available from the PFIs. Loans under the ACF are disbursed to farmers and agro-processors through the PFI. The scheme is administered by the Bank of Uganda (BoU). It operates on a refinance basis in that the PFIs disburse the whole loan amount to the sub-borrower and applies to BoU for the 50 percent GoU contribution. The Scheme became operational in the year 2009.

The agricultural credit market in Uganda is characterised by mainly marketing loans in terms of value, and production loans in terms of numbers and value.

Since 2010, lending to agriculture has increased. This increase has been largely due to lending for marketing mostly in coffee and grain. The graph below highlights the agricultural lending trends over the years with the most significant increase reported in 2011, where agricultural lending increased by 60% (from UGX. 353 Billion in 2010 to 566 Billion in 2011). In 2012, lending increased further by 23% (from UGX. 566 in 2011 to 699 Billion in 2012). In 2013, it increased yet again by 19.7%.

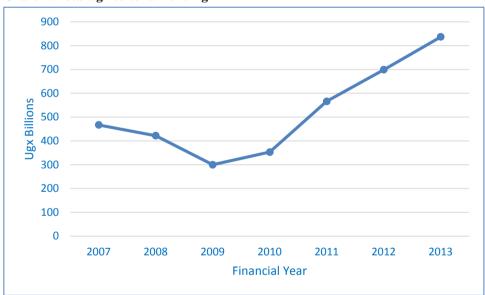


Chart 1: Total agricultural Lending

Source: Bank of Uganda Supervision Function and individual financial institutions

The increased lending to agriculture is attributed to:

- a) Creation and restructuring of agricultural credit departments for some banks and regulated financial institutions which has increased their capacity to make sound decisions, give out the loans, supervise and recover the money.
- b) Support from development partners, agencies and foundations towards lending efforts by the financial institutions.
- c) Government support towards investment in an Agricultural Credit Facility (ACF), with disbursements and commitments totalling to UGX 162.5 billion as at 30th June 2014⁵
- d) The widespread usage of mobile money has helped to foster greater interest by financial institutions to invest in the rural areas. Mobile money has further gained popularity due to Government support through the regulatory framework to the extent of being endorsed by Bank of Uganda, and Uganda Communications Commission.

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⁵ Bank of Uganda Annual report 2013/14

e) Improved communication to farmers about the importance and presence of agricultural loans.

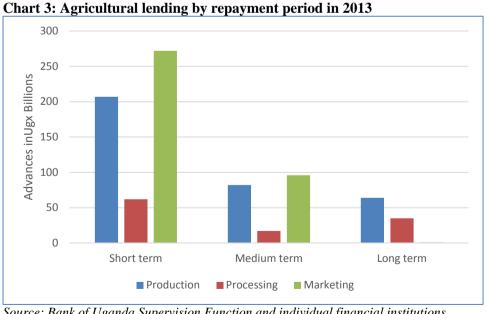
Agricultural credit is utilized by all players along the value chain, with the borrowers in marketing taking up the bulk of the money given that they are usually more organised and single players like Aponye (U) Ltd can take up as much as Ugx 10 billon in a year. The production side is also picking up steadily in agricultural credit uptake as the farmers are getting more organised and a number of commercial farms are coming up. The chart below highlights the trends of agricultural lending by activity over the years.

Chart Title 500 Advances in Ugx Billions 400 300 200 100 0 2007 2009 2008 2010 2011 2012 2013 Year ■ Agricultural Production ■ Agricultural processing ■ Agricultural Marketing ■ Agricultural Leases

Chart 2: Agricultural lending by activity

Source: Bank of Uganda Supervision Function and individual financial institutions

Given the nature of agriculture, most credit is for the short term in line with the farming seasons, farmers arrange to pay back as soon as their produce is sold off and the marketing businessmen borrow during the harvest season to buy off as much produce as possible which they resell within a few months. The chart below highlights the repayment periods for 2013.



Source: Bank of Uganda Supervision Function and individual financial institutions

Players in the agricultural sector currently mainly access their agricultural loans from Commercial banks such as; Centenary Bank, DFCU, Post Bank, Stanbic Bank, Uganda Development Bank, Standard chartered bank and Equity Bank, and from major Microfinance Institutions such as; Pride Microfinance, FINCA, Uganda Finance Trust, Opportunity Uganda, and Vision Fund.

Currently the total number of regulated banks in Uganda are 26, the latest being Finance Trust Bank Limited, formerly a Microfinance Deposit Taking Institution (MDI). The commercial banks are the biggest contributors to agricultural lending accounting for 95% of the total agricultural lending in 2013. These are followed by Tier 3 MDIs (3%), and Tier 2 credit institutions (2%) in descending order.

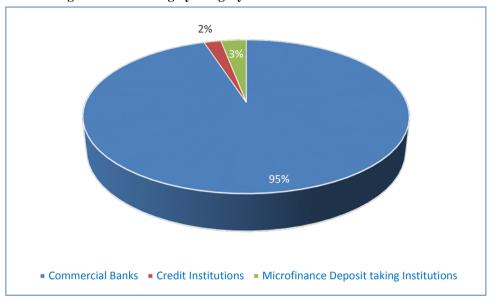


Chart 4: Agricultural lending by category of institution

Source: Bank of Uganda Supervision Function and individual financial institutions

Farmers also draw a lot of loans from their own and other Savings and Credit Institutions (SACCOs), Village Savings and Loans Associations (VSLAs). A number of farmers access informal loans from friends and Individuals. Traders were also cited as a major source of credit for farmers. Some farmers borrow money from traders against their expected produce that is close to the harvest.

A number of farmers get In-kind loans from various sources. The dominant sources are; traders (some of whom acquire and take ownership of produce that is not ready for harvest). This is common with coffee and as soon as the bloom is clear, farmers are willing to relinquish ownership over such fields to traders. Friends and input companies e.g. Pearl seeds, Victoria seeds and Nalweyo Seed Company (NASECO) are also involved in in-kind loans provision. In the latter case, the farmers enter into contracts with farmers to produce for the company say, seeds. Their fields are ploughed for them, they are provided with seeds, agrochemicals and advisory services, to which monetary values are attached and recorded with the participation of both parties. At the time of harvest, the produce is valued and the farmers are paid the difference between the value of the produce and the value of the inputs provided. These contracts are sometimes not respected leading to lower compliance rates. Farmers in some cases are forced to sell outside the contractual conditions due to need for cash and more remunerative offers.

2.2.2 Market Size overview

All farmers and agro dealers and processors along the entire agricultural value chain interviewed both directly and indirectly (through key informants like the district agricultural officers) during this study indicated willingness to take up some kind of agricultural financing the issue is the ability aspect. Many of these agriculturalists would not be able to take up such credit due to factors such as; lack of collateral, failure to form bankable groups, poor record keeping/illiteracy and poor farm management skills, acreage of production (unprofitable due to size), non-access or non-use of formal banking institutions.

The agricultural lending by regulated FIs and MDIs was recorded as Ugx 837 billion in 2013 following a growth of about 20% from the previous year. However it is worth noting that by 2013 only about 20% of adult Ugandans were noted as using banks⁶, reasons given included lack of income, notably 17.6% said the reason for not having an account was due to the lack of knowledge for opening an account and 13.3% said it was due to the distance to the bank.

BOU as of June 2014 recorded a total of 560 bank branches and 817 ATMs countrywide an increase from 506 branches and 719 ATMs in June 2013, which should improve access to financial services.

The Finscope survey also pointed out that the proportion of the financially excluded population fell from 30% in 2009 to 15% in 2013, the mobile money access strand being the major driver of this improvement. All this alludes to the fact that the market size of agricultural credit is bound to increase from its current state.

Demand forecast

The agricultural lending key drivers are said to be marketing credit for mainly coffee and grain. Coffee exports were at a 14 year high level of 3.58 million bags (60kg bags) in the financial year 2012-13 following a production of 3.8 million bags, according to Uganda Coffee Development authority (UCDA) production may rise to 5.87 million bags in 2019-20 because of the tree planting program, which is expected to reach 225 million new trees in the next 5 years. This translates into a production increase of 54% by 2020.

In the same light grain/cereal yield grew by 8.3% from 2010 to 2013 according the IDA, and the corn production according to the united states department of Agriculture grew from 2.374 million metric tonnes in 2010 to 2.750 million metric tonnes in 2014 which is a 15.8% increase, if such growth is sustained and this is likely given the steady growth in yield of cereals per hectare it is anticipated that the cereal production will have grown by about 35% by 2020 from the 2013 levels.

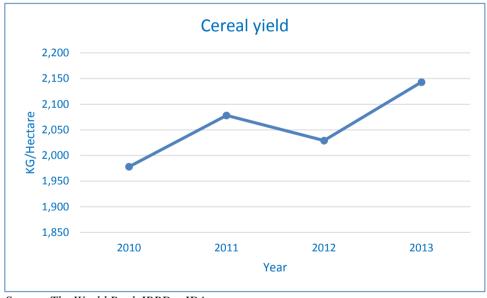


Chart 5: Cereal Yield in Kg per hectare

Source: The World Bank IBRD - IDA

The combined average growth rate for the coffee and grain would come to about 45% by 2020 deducing from the information above. Assuming that about 60% of the coffee and grain marketers take up agricultural credit, and an additional 40% from the production of these crops also take up agricultural credit, this would translate into a 45% growth rate of the agricultural credit from Ugx 837 billion in 2013 to about Ugx 1.2 trillion by 2020.

⁶ Uganda Finscope III Survey results, Munyambonera Ezra Francis, Economic Policy Research Center

2.2.3 Competition analysis

5 banks were visited; Centenary, Stanbic, DFCU, Finance Trust and Pride Micro Finance as well as Vision Fund which is an MFI. Some of the key elements to consider in a competitive environment were reviewed as highlighted below.

Agricultural Products on offer

The institutions visited had loans designed along the entire agriculture value chain i.e. Investment, production, processing, and marketing. The credit could therefore be used for inputs, land, labour, equipment, working capital. This goes out to show that the entire value chain is covered in terms of availability of agricultural credit.

Interest rates

It was noted that the interest rates on agricultural credit varied depending on the products and the financial institution, with the average rate in line with the market rate of about 25% per annum. The lowest rates were about 12% mainly for the ACF loan with the highest rates reaching 51% per annum on the small loans of less than Ugx 1 million. Notably Pride Micro Finance had a product for financing diary equipment with an annual interest rate of 7.7%, however funds to finance this product were availed by a development partner. This shows that interest rates for agricultural credit are in line with the general credit market rates pegged on the prime lending rates or higher given the level of risk involved, and only get lower once there is some level of subsidy involved for instance the ACF loans and the funds availed to the lending institutions for particular projects, interest free or at subsidised interest rates.

Discussions with the farmers, agro dealers, marketers, farmer organisations, officials in the agricultural sector and NGOs dealing with farmers revealed that the highest level of interest that farmers would be able to pay and still remain reasonably profitable would be 7-12% per year, and 10-15% for marketers and agro dealers.

Grace periods

The grace period ranged between 1 month and 1 year for mainly production and marketing agricultural loans and reached a maximum of 2 years for leasing and investment agricultural credit. This was found to be in line with the needs of the people in the agricultural sector accessing agricultural loans as the grace period provided by the financial institutions took into consideration the seasonality aspect of agriculture.

Payback period

The payback period like the grace period varied among the products depending on what the credit was for, production loans had the shortest payback period of 3 to 6 months following the harvest, with a maximum period of 12 months, processing and marketing loans were for periods of between 6 to 12 months with a maximum of 24 months. Investment loans or leases were noted to have the longest possible payment period of between 2 to 7 years.

Value of credit

The majority of the credit to farmers or under agriculture production was between Ugx 800,000 and Ugx 15,000,000 with the biggest number of farmers borrowing below Ugx 2,000,000. The average loan amounts for produce dealers and processors was Ugx 100 million. It was noted that some banks like Stanbic deal more with the high end market with loans amounts of at least US\$10,000 or its Ugx equivalence.

On the demand side the average range of credit the farmers are usually interested in starts from as low as Ugx 50,000 (to procure inputs at short notice, such as seeds, chemicals, animal feeds, and make labour payments) up to Ugx. 15,000,000 (which goes into investment in assets such as cows, ox-ploughs, machinery etc.) The produce dealers and agro processors indicated the need for about Ugx. 100 to 150 million while the large ones like KK Foods, FICA seeds, Afgri and Aponye (U) Ltd indicated an interest in agricultural credit between Ugx 2 billion and Ugx 20 billion.

Security or collateral required

The financial institutions interviewed all required some sort of security or collateral for the loans such as property, land, leased equipment, and stock. For the smaller loans the institutions also accepted chattels, motor vehicles, lockups, kiosks, Kibanja, Market stalls (Mudaala), and in some cases personal guarantees.

Performance of Agriculture portfolios

The non performing agricultural loans for each of the institutions interviewed were between 2.5% to 5%, this is in line with the national average ratio of nonperforming loans to total gross loans of about 6% reported as at June 2014 by BoU.

Agricultural credit as a percentage of total credit

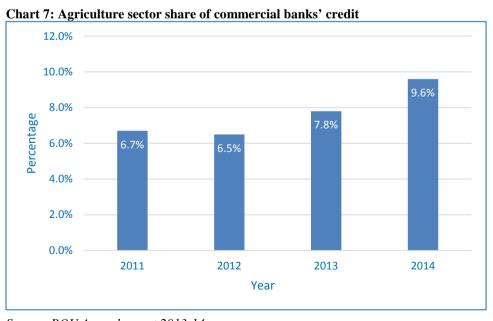
The agriculture loans as a percentage of the total loan book varied from 8% for Pride Micro Finance to as high as 50% for the Vision Fund, see details in the chart below. It should however be noted that this doesn't give a general picture of the market as a number of banks in Uganda do not extend agricultural credit citing the high risks involved.

Vision fund Uganda 50% Stanbic Bank 24% Pride MicroFinance 28% **Finance Trust Bank DFCU** 15% **CERUDEB** 20% 0% 20% 40% 10% 30% 50% 60% **Percentage**

Chart 6: Agriculture Loans as a percentage of total loans

Source: Feasibility study results 2015

The Agriculture sector share of commercial banks' loans as advances between 2011 and 2014 has shown growth as highlighted below. This confirms the growth of agricultural credit in Uganda.



Source: BOU Annual report 2013-14

Processing periods

The time period taken from application to getting the loan may take as short as 2-3 days for repeat customers to up to 6 weeks for new customers.

The results from the interviews with the customers point out that the period taken from application to getting the loans varies with institution and the source. For the informal sources such as friends and relatives, they can be instant or a few days. VSLAs and SACCOs usually take one to two weeks to a month. For the formal sources such as banks, the loans can be accessed from one month up to six months. Input companies that lend in kind take relatively shorter periods of 1-2 weeks.

The longer periods were said to be due to failure by the applicants to meet the required paper work and preconditions which results in a lot of back and forth before the loan materialises.

2.2.3.1 Success factors

Discussions with the lenders and borrowers of agricultural credit revealed a number of factors as being key to the success of agricultural credit. They include the following;

- Such credit should be well formulated with a market focus which calls for proper understanding of the
 agricultural sector, how it works, challenges involved such as being time bound as well as its
 profitability.
- Adequate and well-tailored preparation of intended beneficiaries through capacity building especially in management of loans and field support to ensure profit maximisation.
- Well-articulated and clear records for the farmers, agro processors and dealers to ensure easy tracking of business progress and profitability, this can include business plans where possible.
- Well-designed communication, follow up and monitoring mechanisms that are shared between the borrowers and lenders.
- Agricultural projects should all be insured against risks ahead of seeking agricultural credit which could also act as a basis of extending favourable interest rates.
- Structures such as cooperatives should be strengthened to the point of being able to seek, negotiate, obtain and monitor agricultural credit for its members.
- Where possible there should be a mechanism where agricultural credit could be in form of inputs and not all money as a way of ensuring that the loans for farm inputs are properly and effectively utilised.

2.2.3.2 Key challenges

Challenges faced by both the lenders and borrowers in the agricultural sector which are said to hinder the utmost success of agricultural credit include;

- Diversion of agricultural credit to other activities, as mainly the micro credit borrowers use micro credit finances on food, shelter, medical bills and clothing to meet their basic needs rather than investment in agriculture making repayment difficult.
- Formal insurance has yet to make an impact in Uganda. Only 2% of Ugandans use insurance facilities and most of them are third party insurance.
- The weaknesses embedded in the agricultural sector which include dependency on climate, inadequate market information, price fluctuations and small land sizes. Other factors are; illiteracy, poor record keeping and management among others result in low and irregular incomes from agricultural activities which in turn limits the credit demand and increases the credit risk.
- High interest rates ranging from 2% (for Commercial banks) to 8% per month for SACCOs and MFIs, and the need for collaterals which many borrowers do not have, combined with very stringent terms and conditions of agricultural loans (issuing and payment), limits the uptake of agricultural credit.
- The agricultural inputs market is not properly regulated hence a lot of counterfeit products on the market which farmers borrow to buy in the end get poor yields and in turn default on the loans.
- Poor structures in place such as cooperatives which would ideally be able to negotiate with the financial institutions on behalf of the farmers, agro dealers and processors as well as help monitor their

members and ensure proper loan repayments. In the end small groups are formed for the sake of the loan access without serious inclination to the group/association values and once such group loans are not paid according to schedule, all the members are reprimanded.

For the case of SACCOs and VSLAs that would be key in the provision of micro agricultural credit
given their local presence hence easier access in comparison with bigger financial institutions, there
are limited funds coupled with poor management, non-adherence to policies and governance issues
most especially during their infancy.

2.2.3.3 Challenges that led to the collapse of the Uganda Cooperative bank

In 1999 Co-operative Bank Limited an agricultural bank was foreclosed, the reasons that led to its insolvency and eventual foreclosure by Bank of Uganda were reviewed as part of this study. In the BOU annual supervisory and regulatory report of 1999, the reason for closure of Co-operative bank was stated as insolvency brought about by imprudent banking practices and poor internal governance.

Governance issues were partly due to the fact that previously the bank was being run in a decentralised way and there were many ghost borrowers and lots of frauds and inefficiencies due to the absence of robust systems at the time. The bank became better when they started running it with a centralised structure embedded with audit committees. However USAID in a bid to improve structures suggested that the bank reverts back to the decentralised way of running things which brought back the previous issues and inefficiencies.

Capitalization was a major problem as the bank did not have the mandatory core capital required, and with the introduction of Basel core principles making it even harder to comply. Some individuals managed to raise some capital but more was needed and the then shareholders did not want to dilute their shareholding. The USAID came in at one point, asked for a road map to be able to fund the bank, which the bank fulfilled however the funding did not materialize. USAID set conditions and proposals on how the bank was to be run ahead of the funding, however when applied only made the situation worse with the already weak structures and problems.

Liquidity was another problem the bank faced; having huge overdrafts with the central bank given the large non-performing loans mainly from the co-operative unions. By design the co-operative bank was more or less obliged to avail credit to.

Staffing issues were also prevalent with lots of political appointees who were not technically competent, the bank tried to improve this situation at one point and it actually became better when several staff (about 200) per year were being taken to India for training, however this came at a cost to the bank which was already struggling with liquidity issues.

Inadequate supervision cannot be ignored as part of the issue. As reported in a judicial inquiry report by Ogoola, the 1993 Financial Institutions Statute was slow and weak in remedy measures to deal with banks' problems.

2.2.4 Gap analysis

There is still a gap between those who seek agricultural credit and those that need it. Not all who need agricultural financing actually go ahead and seek it and a significant number of those that seek it don't eventually get it. Below some of the gaps that need to be filled in the agricultural credit market are highlighted.

Interest rates below market rates – The agricultural credit market in Uganda offers interest rates in line with the prime lending rates and only subsidised funds such as the ACF or funds from development partners are offered at below market rates with stringent conditions. The players in the agricultural sector on the other hand argue that the market rates are high for agriculture business and there is a need for lower rates for them to be able to make use of agricultural credit and still remain viable. There is therefore a need for institutions

that are able to offer agricultural credit at lower than market interest rates and still be able to remain profitable.

Micro credit – Agriculture in Uganda is dominated by smallholder farmers. These type of farmers require small amounts of credit to support their farming activities, some farmers need as little as Ugx 50,000 (about US\$ 15) in a season to purchase pesticides, improved seeds or fertilizers. The current nature of credit dictates that such small amounts are not viable and hence such people are excluded from agricultural financing which may result in little or no produce for them in that season. The smallholder farmers are willing to take such micro credit in terms of good quality farm inputs. There is therefore a need for agricultural financing for this market of smallholder farmers and possibly that can offer credit in kind in line with the needs of the farmers.

Non monetised payments – Many times farmers are in disarray with their farm outputs at home without market for them or being offered very low prices. Such farmers would be more than happy to pay off any outstanding credit in kind at a reasonable rate making it a win-win situation. There is therefore a need for institutions that are able to develop a mechanism that allows repayments of agricultural credit in kind to cater for this type of market. One such way is through promotion of collective marketing, where farmers have access to bulking centres and are able to store their produce especially cereals that can be stored instead of selling at low price and then use warehouse receipts to make payments.

Lending without collateral – One of the hindrances in obtaining credit by the smallholder farmers is the lack of collateral. Lending to groups without collateral has helped the situation however comes along with its issues given the different characteristics and individual objectives of the members in such groups. There is a need for institutions that can work with the structures in place such as local council authorities and village chiefs to do some back ground checks on potential customers ahead of extending them agricultural credit without collateral, or use the warehouse receipt approach where the stored produce is the collateral.

Reduced paper work – A McKinsey survey of 29 MSME lenders in Asia and Africa documents that one of the top three needs MSME clients universally desire is a reduction in paperwork. The survey shows that an African bank saved US\$ 13m just by cutting its MSME application form down to two pages, while maintaining the portfolio quality. The borrowers in the agriculture sector need access to credit quickly given its nature, the enormous paper work and bureaucratic nature of the loan processes scares away many borrowers. There is a need for institutions who can offer agricultural credit with minimal paperwork, through the use of new technology such as psychometric credit scoring, use of biometric technology such as fingerprinting and, making use of other relevant data like mobile phone history.

2.2.5 Comparative analysis with other countries

As part of this feasibility, benchmarking with other countries was done to ascertain how agricultural credit is handled elsewhere and thereby picking any key learning points and experiences where appropriate as highlighted below.

India

The reserve bank of India has set priority sector lending targets. Agriculture credit for domestic scheduled commercial banks and foreign banks with 20 branches and above (foreign banks with less than 20 branches given a phased schedule to be accomplished by 2020) set at 18 percent of Adjusted Net Bank Credit (ANBC) or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher, 7 percent out of the 18% is prescribed for Small and Marginal Farmers, to be achieved by March 2016, failure of which attracts penalties.

The National Bank for Agriculture and Rural Development owned 99.5% by the India Government and 0.5% by the Reserve Bank of India does both direct agricultural financing and refinancing at concessional rates of interest to State Cooperative Banks (SCBs) and Regional Rural Banks (RRBs) and conducts supervision of these banks on behalf of the Reserve Bank of India.

Despite the large number of institutional agencies involved in the disbursement of agriculture credit in India, the persistence of informal money lenders in the rural credit market is still a major concern in India, however it is evident that considerable effort is being made to address this issue.

China

Chinese policymakers are utilizing the financial system's liquidity to recapitalize banks and rural credit cooperatives and to increase lending to small farmers and agribusinesses. More than 80 percent of formal agricultural loans in China are made by the country's 30,000-plus Rural Credit Cooperatives (RCCs). During the 1990s, RCCs and banks were reluctant to lend to small farmers due to the high administrative cost and risk of such loans and a low ceiling on interest rates set by the central bank (Cheng and Xu). In 2001, China began a campaign to increase RCC lending to small farmers, and lending accelerated further following the issuance of a "Number 1 Document" in 2004 stating the government's intent to raise rural incomes and boost grain production. New "micro loan" programs grew quickly and, in 2004, the central bank injected funds into the RCCs to support increased production loans for grain producers.

Loans to agricultural enterprises come largely from the Agriculture Bank of China (ABC), one of China's four state-owned commercial banks. It was created in the late 1970s to carry out rural policy, but became a commercial bank serving both urban and rural markets after reforms in 1994. The ABC lends to agricultural enterprises, rural cooperatives, and village organizations, but not usually to individual rural households. However in 2015 it launched its farming finance policy aimed at ensuring the establishment of a specialized department at major levels of the bank with specialized staff to serve agro-related business. In 2014, ABC ranked 3rd in Forbes' 11th annual Global 2000 ranking of the biggest, most powerful and most valuable companies in the world.

Nigeria

Nigeria has a government owned agricultural bank, the Nigeria Agricultural Co-operative and Rural Development Bank (NACRDB). It was established in 2000 following the merger of Nigerian Agricultural and Co-operative Bank, the Peoples bank of Nigeria and the family Economic Advancement programme. The key objectives of the NACRDB include; provision of agricultural and rural development finance, provision of micro credit and provision of funds for processing and marketing of agricultural products. NACRDB in the Nigeria economy is said to be very vital in the sense that it contributes to a very great extent in the growth and development of the country. Mr. Ismail Radwan (interviewed by Emeka Ezekiel) the World Bank senior economist, finance and private sector development, Africa region, points out that the current NACRDB has a structural problem, their interest rate is capped at 8 per cent; the cost of capital is more than 12 per cent. This, he says is like taking something valuable and giving it away for less than it's worth which is a receipt for bankruptcy. He advises that the best way to restructure the NACRDB is to turn it into a wholesaling institution which it has done well in the past and given that it does not have the adequate resources for the required outreach in terms of branch network and human resources.

He cites part of the problem is that the bank is run by the Ministry of Agriculture and paid for by the Ministry of Finance and the central bank of Nigeria. The ministry of Agriculture has no incentive to improve the operations of the bank since somebody else is paying for it. He concludes that the bank is technically insolvent and it is only a matter of time before the money runs out.

The Agricultural Credit Guarantee Scheme Fund (ACGSF), managed by the central bank is available to provide succour to banks that lend to farmers under the program. The Nigerian model of credit guarantee scheme is targeted, funded and direct. It was established in 1977, it guarantees credit facilities extended to farmers up to 75 percent of the amount in default net of security realized. Recent innovations to the scheme by the Central Bank of Nigeria include Self-Help Group Linkage Banking, the Trust Fund Model and the Interest Drawback. Of these, the Interest Drawback Scheme seems interesting as it works to encourage bank lending at lower rate of interest (averaging 8 percent) which is cheaper for the farmer and easier to manage for the bank. This is expected to have profound effect on agricultural production and consequently on food security. One of the disadvantages highlighted of in regard to this fund is that benefits have always been to the major farmers.

Ghana

Agricultural Development Bank (ADB) was established by Act 286 in 1965 as the Agricultural Credit and Cooperative Bank, owned by the government of Ghana (51.83%) and Bank of Ghana (42.17%), on 3rd July 2015 ADB announced the commencement of its Initial Public Offer to enable it to list on the Ghana Stock Exchange. However, the IPO was suspended shortly after following the nation's high Court order for an

injunction sought by labor unions. The bank also had issues with the National Executive Committee (NEC) earlier in 2015 where they had wanted to pass a resolution for the removal of the Managing Director of the bank and the dissolution of the Board.

ADB has the third largest branch network and its interest rates are lower than those offered by other commercial banks, its performance has however been characterized by low repayment rates. As of 2010, only 29 percent of its lending went to agriculture. Rural Ghana is served primarily by numerous Rural and Community Banks (RCBs). According to the data collected from 11 RCBs in 2012, only 9 percent of their lending was disbursed for agriculture, forestry, and fishing.

Several mechanisms are being introduced to expand access to agriculture finance in Ghana. The Stanbic/AGRA loan guarantee program was signed in March 2010. For every US\$1 that Stanbic Bank invests in agriculture, AGRA will guarantee 20 percent of the loan in the first year, 15 percent during the second year, and 10 percent between the third and fifth years. The program intends to reach at least 5,000 smallholders with total lending of US\$ 25 million.

On 18 May 2015 the Government of the Republic of Ghana and the International Fund for Agricultural Development (IFAD) signed a US\$ 36.6 million loan and \$10 million grant agreement to finance the Ghana Agricultural Sector Investment Programme (GASIP).

Agricultural Finance Programme (RAFiP), a USD 41.87 million Government of Ghana funded programme, Implemented by the Ministry of Finance and Economic Planning, RAFiP works to provide poor rural people and smallholder farmers with improved access to financial services, technical assistance and risk management instrument with funding from the following sources: IFAD (USD 15.0m); Italian government grant (USD 1.51m); Government of Ghana (USD 3.41m); World Bank (USD 7.14m); African Development Bank (USD 4.94m); the beneficiary financial institutions (USD 2.34m); and other beneficiaries (USD 7.54m).

South Africa

The Land and Agricultural Development Bank of South Africa (Land Bank) is a development finance institution (DFI) established in 1912. Its mandate is to support, promote and facilitate the development and transformation of the agricultural sector through the objective of the Land Bank Act, it is wholly owned by the Government. The Bank receives no ongoing grants or subsidies from Government, raising its funds on the local and international money markets. Government support is mainly in the form of additional guarantees.

The Bank has had problems in the past that adversely affected the sustainability of many of its operations for instance in 2009, the non-performing loans were at 22.5% (R 3.2 billion), and due to such factors the Bank was unable to implement its development mandate as articulated in the Land Bank Act. While there may have been an acute awareness of the need to implement the objectives of the Act, the Bank struggled to create a balance between financial sustainability and implementation of its development mandate. The new strategy of the Land Bank represents a deliberate attempt to redirect the Bank to meet its mandate in alignment with the Land Bank Act.

Land Bank posted strong results for the financial year ended 31 March 2015 reporting continued strong levels of credit quality, revenue growth and net income. Nationally, the Land Bank now has approximately 31% market share of all agricultural finance in South Africa which is close to its target set by the Treasury of 35% market share by 2016.

Private banks play a key role in agricultural financing in South Africa however to mainly well-established commercial agricultural sector through their vast branch network for instance the 'big 4 bank' as of December 2011, Absa had 990 staffed outlets, Standard Bank 703 branches, First National Bank 722 representation points, and NED bank 121 staffed outlets.

Tanzania

Agricultural finance in Tanzania has traditionally been limited to providing credit to large agricultural producers and processors. Little emphasis has been to small scale farmers particularly in the provision of credit, insurance and payments facilities. The agricultural financing gap was projected to cumulatively be about US\$ 6.35 billion between 2011 and 2014/15.

As of July 2015 credit to agriculture was down to 7.6 percent a fall from 11.2% in July of 2014. However on the 7th of August 2015 President Jakaya Kitwete launched the Tanzania Agriculture Development Bank (TADB) in Dar es Saalam and pledged that government would raise US\$ 500m capital requirement in 8 years, this followed a decision to establish the bank back in 2008. He said that it is the plan of the government to ensure agriculture is transformed by addressing challenges that have been retarding productivity such as lack of effective agricultural financing packages. TADB is to work directly with farmers and as well as through other financial institutions such as commercial banks, community banks, savings and credit co-operatives societies and a variety of other groups to extend agricultural credit.

Tanzania Investment bank (TIB) a government owned development bank was in the past trying to support agricultural financing. However faced some challenges and in the recent past was recapitalized and its strategic development plans were re-vamped and its management re-structured, it will now focus on loans for investors and agro processing. The private banks such as Equity Bank have been the major players in Agricultural financing in Tanzania offering loans as small as Tshs. 100,000 (about US\$ 50) at flat rates of 18% per annum.

Kenya

The Agricultural Finance Corporation (AFC), a wholly owned Government non-bank Development Finance Institution, was established in 1963 initially as a subsidiary of the Land and Agricultural Bank. In 1969, it was incorporated as a full – fledged financial institution under the Agricultural Finance Corporation Act, Cap 323 of the laws of Kenya. It was then tasked in assisting in the effective and peaceful transfer of land to indigenous farmers, as well as injecting new capital to farm owners to spur development. After successful implementation of this task, AFC was further reconstituted in 1969 to assume a wider mandate by taking over the functions of the Land and Agricultural Bank of Kenya. Today AFC remains the leading Government Credit institution mandated to provide credit for the sole purpose of developing agriculture.

Complaints about AFC such as long loan processing times in comparison with other private financial providers have been made. Agricultural credit delivered through AFC faces challenges like: policy environment, operational prudency and poor lending practices.

The SME finance forum reported only 1 per cent total private financing towards agriculture in 2010 and in 2015 it was reported that about 36% of rural Kenyans have no access to any form of financial services. Treasury data for 2013 shows that the agriculture industry received only KSh 1.6 billion (US\$ 18.5m) worth of loans from commercial banks in eleven months, a relatively low figure compared to other sectors such as trade which received Ksh 48.2 billion (US\$ 557.87m) despite it being the backbone of the Kenyan economy. In 2011 the total lending to the agricultural sector was recorded at 7.58% of the total loan portfolio of the commercial banks⁷

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⁷ Dec 2013, Adeleke Salami and Damilola Felix Arawomo, African Development Bank Group, Empirical Analysis of Agricultural Credit in Africa

2.3 Environmental analysis

A PESTEL analysis (Political, Economic, Social, Technological, Environmental and Legal) was conducted as part of this feasibility study, highlighting the key aspects under each of the analysis areas for development of a land and agricultural bank.

	sis for establishment of a land and agricultural bank
Political	 Political stability in all parts of the country providing a conducive environment Political will and support is evident such as Agricultural Credit Facility (ACF) subsidized by government, it has however been criticised as targeting only wealthy farmers and still has stringent terms and conditions Government budget allocation to the agricultural sector is still small, 2.75% of the total budget for the FY2015/16 and 3.14% in the previous financial year 2014/15. Government level of interference in the proposed bank may be critical to its success or failure, this will also depend on the level of government ownership. Foreign direct investments, although FDI has been increasing over the years less of it has been directed at the agricultural sector
Economic	 The economy continues to grow and so is the banking sector and agricultural sector given its continued contribution to the country's GDP Headline Inflation rate, 4.8% as of August 2015 a fall from 5.8% in July 2015 Interest rates, CBR was at 16% in August 2015 up from 11% in June 2014 Exchange rate against the US dollar, 3,658 as of August 2015 from 2,580 in June 2014, this may have an adverse effect on input costs hence agriculture profitability Profitability of banks in Uganda continues year on year
Social	 Demand for credit has been growing year on year Greater involvement of the educated in Agriculture sector is likely to improve profitability, demand and management of credit Population growth continues in Uganda (at a rate of 3.7% per annum) and the world over, in turn demand for agricultural products will inevitably increase
Technological	 Mobile Money presents a huge opportunity for the previously financially excluded Mobile phone plat forms are continuously being used for market information Improved agricultural equipment and techniques are on the rise in line with technological advancement making agriculture more viable Banking software is more available which has greatly improved operations of financial providers
Environment	 Climate change is adversely affecting agriculture as it makes it less predictable and thereby increasing the risk level for credit financing CSOs have and continue to play a major role in areas such as; Advocacy and lobbying, Mobilization of the farmers to form groups, Capacity building, intense sensitisation about credit access and management and Linkages with financial institutions
Legal	 BOU supervision and requirements are strong which has ensured that banks operate within the set policies and regulations. Enabling Agricultural policies are in place such as the Plan for modernisation of agriculture There was a proposal to draft a Land and Agricultural bank bill, however this has not been completed. A number of Tax exemptions on agricultural products and inputs were removed in 2014/15 financial year well as the tax exemptions on agricultural interest earned There are no policies in place at the moment in regard to investment in agriculture or extending agricultural credit

The proposed Land and Agricultural Bank bill – In December 2013, Hon. Geoffrey Ekanya was granted leave by Parliament of Uganda to draft a bill that would lead to the creation of a Land and Agriculture Bank. The bill if passed into law will seek to redirect investment in agriculture sector to enable farmers to access subsidised credit. It was however noted that this proposal has not been followed through and a draft bill is yet to be completed.

2.4 High level site analysis

Location and convenience are some of the key critical success factors highlighted when setting up a bank. Since one of the key objectives of the land and agricultural bank is to increase access to credit to the smallholder farmers, it goes without question that such a bank would have to be located where the farmers are, unfortunately for Uganda's case that is everywhere. Agriculture in Uganda is majorly carried out by small holder farmers across the country and the only distinguishing factors are the agricultural activities conducted and the farming systems employed as highlighted in the map below;

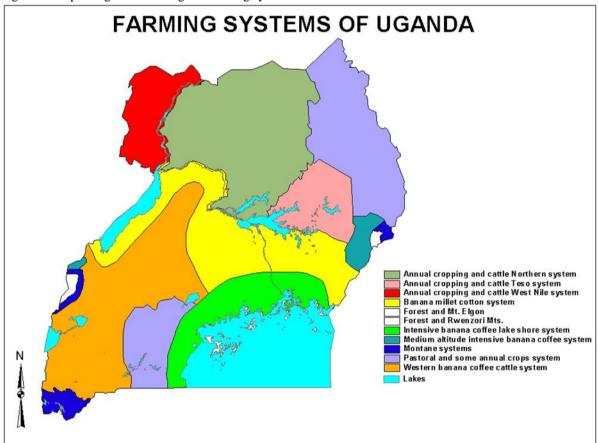


Figure 3: Map of Uganda showing the farming systems

Source: Global Yield Gap Atlas: 2010

The proposed land and agriculture bank would therefore require to have a massive branch network to cater for the smallholder farmers spread across the country.

Locations of agricultural bank branches will have to be in urban areas where availability of critical services such as; road infrastructure, water, electricity and mobile phone connectivity is assured. At the onset, few regional branches may be established, say 5 and monitored for performance. Over time, these branches can be out scaled.

2.5 Financial analysis

Setup costs of at least Ugx 100 billion are anticipated for establishment of an agricultural bank in Uganda. It is assumed that all offices including would be rented as opposed to building as this would escalate the setup costs. Ugx 90 billion of the start-up costs is expected to be used by the bank for business purposes i.e. loans and advances to customers, and government securities held for trading and maturity. Table 2 below highlights some of the anticipated start-up costs at prevailing market prices.

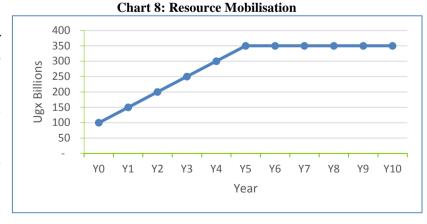
Table 2: Set up costs

Description Description	Amount (Million Ugx)
Fees for professional advice – accountant, lawyer, tax adviser	200
Working capital	90,000
Salaries and other operating expenses	4,500
Rental expenses (1 year)	660
Building alterations, security, alarms, cameras	450
Utilities for the first year	200
Office furniture – desks, chairs, file cabinets, shelves, locking drawers, safes	450
Electronic equipment – phones, fax, computer, printer, scanner	600
Insurances – buildings, equipment, vehicles, liability, loss of profits	1,000
Design and print – logo, business cards, letterhead and stationery, signage, branding	250
Website – design, production and hosting	20
Promotions – brochures, flyers, opening advertising	250
Intellectual property – trademarks, patents	30
Software – accounting, security and office packages	720
Vehicles	670
Total	100,000

The financial analysis was done for the 'best case', 'most likely case' and worst case scenarios in line with the following assumptions for a ten year period as described below. The 'best case' was based on the top performing banks in the Ugandan Market, the 'most likely case' was based on the market averages and the conditions faced by most of the banks in the market while the 'worst case' was based on the results of the low performers in the market.

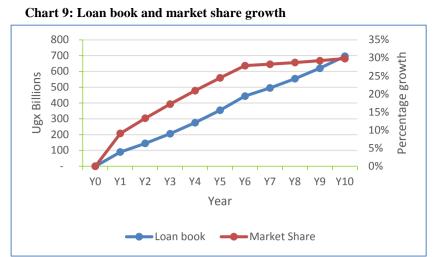
Assumptions

Mobilisation: Resource It assumed that an initial investment of Ugx 100 billion will be raised to establish the bank and thereafter Ugx 50 bn per year for the next five years to increase the bank's capitalisation hence increasing the money available for loans. We expect the be mobilised from to government, development partners, CSOs and farmer groups. See chart 8 for details



Annual Interest Income: It has been assumed that the annual interest rate charged on loans to generate interest income will be at 16%, 12% and 8% of the interest earning assets held by the bank for the best, most likely and worst case scenarios respectively. This has be arrived at basing on the preferred rates by the value chain actors in the agricultural sector and preferential market rates available.

Demand: It is assumed that the newly established land and agricultural bank's loan book will grow steadily over 10 years and 30% market share of agricultural credit by the 10th year. It is expected that accumulated profits from the bank are ploughed back into the business. This is believed to be possible given that it will be charging interest rates that are below the average prevailing market rates. See chart 9 for details.



Direct Expenses: These are the cost of funds which have been assumed to be at 5% for 40% of the total funds as it has been assumed that 60% of the funds shall be free from government while 40% of the funds shall be sourced from development partners, CSOs and farmer organisations at 5% per annum. Assumed also is no tax.

Operating and other Expenses: These include utilities, salaries and benefits, auditor and other professional fees, office expenses among others have been assumed at 55% of the interest income for the best case scenario in year 1 with an annual growth rate of 10% to cater for inflation and some growth in operations.

The cost of capital has been assumed at 4% which is the expected average cost of funds mobilised.

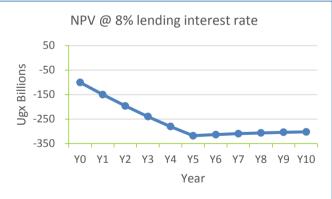
Based on the above assumptions, projections for the best, most likely and worst case scenarios were computed and NPVs for each scenario are highlighted below.

NPVs for the most likely and worst case scenarios are negative over the 10 year period as highlighted in chart 10 and 11 respectively. Despite returning negative NPVs they still returned positive profits over the 10 year period.

Chart 10: NPV for most likely case scenario



Chart 11: NPV for the worst case scenario



The best case scenario which considers loans to customers at 16% returns a positive NPV over the 10 year period. It also returns considerable profits year on year. See charts 12 and 13 below.

Chart 12: Best case Scenario NPV



As can be seen from chart 12, the NPV for the best case scenario where loans are at 16% interest rate per annum, becomes positive in year 10. The bank will however return profits year on year over this 10 year period as highlighted in chart 13 below.

Chart 13: Accumulated Profit - Best Case Scenario



Chart 13 shows that the profits for the best case scenario increase steadily over the 10 year period starting immediately in year 1, accumulating to a tune of Ugx 442 bn by the 10th year of operation of the proposed bank.

The best case scenario produces a positive NPV of Ugx 11 bn at 4% cost of capital, with an IRR of 5%. This would mean that the proposed land and agricultural bank would be viable under the best scenario conditions i.e. lending at 16% and above. Given that the market rates are on average as high as 25%, gaining market share while lending at as low as 16% would not be difficult and this would still give the bank the flexibility to charge between 16% and 24% when required and still remain competitive. Based on this analysis, such a bank would be financially viable.

Funding Sources

Like any other business the funding sources available for the proposed agricultural bank would include debt and equity.

New banks usually raise initial capital through issue of equity, however equity capital is said to be expensive, therefore, the only other time banks generally issue shares is when they need to raise funds for an acquisition, or when they need to repair their capital position, typically after a period of elevated bad loans.

Banks can also raise capital through debt issuance. Banks most often use debt to smooth out the ups and downs in their funding needs, and will call upon sources like repurchase agreements or the central bank system, to access debt funding on a short term basis.

For this kind of bank it would be important to have less expensive funding given that some level of subsidisation is required in order to solve the current concerns such as high interest rates charged in the agricultural credit market. Like many development ventures, the proposed bank can be private sector led, however since agriculture is also largely a public good, it cannot be left entirely to the whims of the free market.

Such sources may include equity investors keen on making a difference in the agricultural sector as opposed to only profit maximisation, the government, development partners, CSOs and farmer organisations.

3. Conclusions

Based on the findings of this study it is quite clear that a Land and Agricultural bank is needed in Uganda due to the identified gaps that still exist in the current agricultural credit market that were highlighted as:

High interest rates – The agricultural credit market in Uganda is characterised by interest rates in line with the prime lending rates which are deemed high for the value chain actors in the agricultural sector. There is therefore a need for a bank that is able to offer agricultural credit at lower than market interest rates.

Absence of affordable micro credit – Agriculture in Uganda is dominated by smallholder farmers who require small amounts of credit to support their farming activities. The desired amounts usually do not make business sense to most financial institutions and the FIs that are willing to offer such micro credit charge exorbitant rates. There is therefore a need for a bank that will be able to extend micro credit for smallholder farmers at reasonable rates.

Non monetised loans and repayments – Many times farmers struggle to get credit to purchase the right inputs and at the same time struggle to sell off their produce to pay off outstanding loans. There is therefore a need for an agricultural bank that can set up mechanisms that allow extending credit in kind say through partner input resellers (these should be several to allow for choice and non-exploitation) and accept payments of agricultural credit in kind say through cooperatives or linkages with produce buyers to cater for this need.

The proposed land and agricultural bank is financially feasible under the best case scenario analysis, in addition taking into consideration a cost benefit analysis, it should be noted that feasibility of such a venture is not only about numbers but should also look at the socio-economic as well as environmental costs and benefits. As pointed out by Dr Ezra Seruma (in an interview by Taddewo Senyongi in April of 2014), "we need the bank purposely to boost agriculture not to make profits."

The key cost in this case would be the non-viability at lower interest loan rates in the first few years of operation, while the key benefit is boosting agricultural production through increased agricultural credit which comes along with numerous benefits such as:

Source of Livelihood: Enhanced livelihood given that a large percentage of people directly rely on agriculture as a means of livelihood. Once this sector is boosted, employment increases and in turn poverty reduces.

Contribution to National Revenue: Enhanced agricultural production results in increased contribution to National revenue leading to economic development.

Significance to international trade: Agriculture is a major foreign exchange earner hence saving foreign exchange as well as reducing the country's unfavourable balance of payments.

Source of raw materials: Agriculture provides significant volumes of raw materials for several industries.

Food Security: A stable agricultural sector ensures a nation of food security. Food security prevents malnourishment that has traditionally been believed to be one of the major problems faced by the developing countries. This would also reduce inflationary pressures if food is available and hence prices are stable.

Modernisation and commercialization of agriculture is made possible with increased access to finances which in turn reduces land and environmental degradation through improved farming methods and techniques.

Based on the above findings, it is concluded that the proposed land and agricultural bank is feasible.

4. Recommendations

The study identified a number of challenges in the agricultural finance sector and thereby the following recommendations have been made in this regard:

Short term

- Improvement of structures and skills: There is a need to improve structures and skills in the agricultural sector from the grassroots so as to improve agricultural credit uptake. These include cooperatives, farmer groups and agro dealer associations, improved farming skills, business management and ethics. CSOs, NGOs, private organisations and the government should through a concerted effort undertake agricultural credit sensitisation campaigns, agricultural extension services, training and capacity building in governance, improved agriculture methods, business and management skills among others.
- Subsidised Micro Credit: Similar to the ACF, government should avail subsidised credit through financial institutions however this time round targeting also the smallholder farmers and smaller businesses along the agriculture value chain (micro credit).
- Enabling Legal Framework and Policies: Government should consider reforms and policies targeted at improving access to credit in the agricultural sector. These should include; implementing policies working elsewhere such as; setting agricultural credit targets for all financial institutions, setting up guarantee schemes for agricultural loans, and providing incentives to financial institutions to encourage agricultural credit growth such as tax waivers on income from agricultural credit and agricultural insurance to reduce risks. The land and agriculture bank bill should be revived and passed by parliament.

Medium term

- Making use of existing structures: Consideration should be made regarding the option of using already established and efficient structures such as the commercial banks and micro finance institutions to boost agricultural financing through wholesale financing/guarantee schemes which can either be managed by the central bank or a state owned bank such as the Uganda Development Bank (UDB).
- **Resource Mobilisation:** Aggressive resource mobilisation should be done specifically for free or subsidised funds that can be lent out at below market rates and set up the land and agricultural bank. Likely sources for such funds are; government, CSOs, development partners and farmer organisations.

Long term

- Establishment of the Land and Agricultural Bank: Setting up a land and agricultural bank to deal with the issues in the agricultural credit market. Once such a bank is set up, key learnings from the liquated cooperative bank should be monitored and dealt with appropriately, i.e a combined effort from both the private and public sector to ensure the following:
 - Good internal governance, adequate capitalization and liquidity should be ensured when running the bank.
 - Government should avoid political influence/interference in the operations of the proposed bank and ensure adequate supervision from the central bank.
 - Farmers should form co-operative unions and farmer groups, improve their farming and business skills
 - CSOs should devise means of increasing agricultural credit uptake such as creating awareness, training of farmers on loan management and improved farming skills

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Appendix II: Tools Used

a) Central Bank (Bank of Uganda)

- What banks or financial institutions are very actively involved in offering agricultural credit products to farmers?
- What is the range of interest rates that are charged?
- What is the range of grace period?
- Range of payback period?
- What amounts (range) of money do farmers mainly borrow?
- What security / collateral do they mainly use?
- What is their payback performance?
- Performance of agricultural finance portfolios in banks that offer such credit?
- Are you aware of any feasibility study conducted earlier in respect of establishing an agricultural bank? If yes, what were the major challenges of the proposal?
- What agricultural credit products and funding options are currently available in the market?
- What is the Agriculture Credit Fund and how does it operate?
- What is the usage rate of the existing ACF facility, and is it effective?
- What plans does BOU have to improve on the farmers' ability to access these funds?
- What gaps exist in regard to agricultural credit to farmers in Uganda?
- What is being done to address such gaps?
- What were the key issues that led to the closure of the Uganda cooperative bank?
- In your view is there a need to open up an agriculture and land bank in Uganda?
- What would be the challenges of such a bank? Do you know of any success stories with agricultural banks (please ask for write ups from all the respondents as written evidence)
- Why are banks hesitant to lend for agricultural investments?

b) Financial institutions with agriculture credit products (Commercial Banks/MFIs/SACCOs)

- What agricultural credit products are currently on offer by your bank?
- What is the range of interest rates that are charged?
- What is the range of grace period?
- Range of payback period?
- What amounts (range) of money do farmers mainly borrow?
- What security / collateral do they mainly use?
- What is their payback performance?
- Performance of agricultural finance portfolios?
- Give an indication of the pricing structure of such facilities?
- What risks are involved with such products?
- What is the average percentage administration cost of such products?
- What would you say is the market potential and growth rate of loans and deposits for the agriculture sector?
- How much income does the bank generate from lending to farmers (as a percentage of total loan income)?

c) Farmers/buyers and resellers/Agro dealers

- What agricultural credit products are you aware of or have access to?
- Where do you currently access agricultural loans from?
- What are the challenges of such sources?
- What collateral do you give?
- What period is taken from application to getting the loan?
- What is the average range of credit you would be interested in?
- What is the highest level of interest you would be able to pay and still remain profitable?

- Do you have any suggestions on how agricultural credit should be designed?
- Would you be interested in borrowing money from an agricultural bank once established?
- What would you like the loan mainly for?

d) District Agricultural Officers/ Agricultural cooperatives/NGOs

- Where do farmers currently access agricultural loans from?
- What are the challenges of such sources?
- What collateral do farmers usually give?
- What period is taken from application to getting the farmer loans?
- What is the average range of credit the farmers are usually interested in?
- What is the highest level of interest would farmers be able to pay and still remain profitable?
- Do you have any suggestions on how agricultural credit should be designed?
- What role can the CSOs play in ensuring a successful farmer credit system?
- What percentage of farmers do you think would be willing and able to utilise banking services (in your district/Organisation or from reliable sources)?

e) Ministry of Finance/Ministry of Agriculture

- What agricultural funding options are currently available in the market?
- In your view is the proposed land and agricultural bank bill adequate for the establishment and management of an agricultural bank?
- What good and relevant practices can Uganda borrow from elsewhere in regard to agricultural credit?
- What priority does the government give to agriculture in terms of budgeting and funds allocation?
- How do these funds get to the actual farmers?
- What has taken so long to establish an agricultural bank?
- What are the main reasons for reducing government funding to the agricultural sector from 3.14% to 2.75%?
- What can be done to increase government funding to 10%?

f) Liquidated Banks

- What were the main reasons that led to the closure of the bank?
- What products were available for farmers?
- What was the range of grace period?
- Range of payback period?
- What amounts (range) of money were farmers mainly borrowing?
- What security / collateral did they mainly use?
- What was their payback performance
- In your view is there a need to open up an agriculture and land bank in Uganda?
- What advice would you give for the successful operation of such a bank?
- What would be the challenges of such a bank? Do you know of any success stories with agricultural banks (please ask for write ups from all the respondents as written evidence)

g) Makerere University (Economic Policy Research Center)

- In your view is the proposed land and agricultural bank bill adequate for the establishment and management of an agricultural bank?
- How can it be run (ideas on location, structure etc)
- Have there been any studies done regarding establishment of an agricultural and land bank that you are aware of (please provide available reports of such studies if any)

Appendix III: List of Key Respondents

The table below shows key respondents that provided information for the feasibility study;

Type of Institution	Name of Institution	Personnel Interviewed	Title
Central Bank	Bank of Uganda	Ben Sekabira	Director Commercial Banking
Government Ministries	Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)	Tom Mugisa	Programme Officer, Technical Services
Willisules	Ministry of Finance	Kasangaki Stephen	Commissioner Financial Services
		Wandera Samuel	Principal Economist
	Finance Trust Bank	Anthony Gumira	Head of credit
	DFCU Bank	Arnold Tijdens	Head of Agri Business
Commercial Banks	Centenary Rural Development Bank	Evans M Nakhokho	Chief Manager Agricultural Credit
	Pride Micro Finance Limited	Justine Bagenda	Manager – Agricultural Lending
	Stanbic Bank	Richard Wangwe	Head: Agriculture Uganda
Legislators	Parliament of Uganda	Kasamba Mathias	MP, Chairman of Agricultural Committee
Micro Finance Institutions	Vision fund Uganda	Otala Emanuel	Credit officer
	Wakiso District	Dr. Oyine Patrick	District Agricultural officer
	Gulu District Local Government	Jackson Lakor	District Agricultural Officer
Local Government Officials	Gulu District Local Government	Jimmy Oruut	District Community Development Officer
Officials	Mukono District Local Government	Mukasa Steven Mabila	Senior District Agricultural Officer
	Wakiso District	Waiswa Mpakibi	District Commercial officer
Agro Dealers Associations	The Grain Council of Uganda	Chris Kaijuka	Chairman
	Sasakawa Global 2000	Ande Okiror	Coordinator Public Privet Partnerships and Market Access
	Sasakawa Global 2000	Frances Nakakawa	M, E and L Coordinator
Civil Society Organisations	Eastern and Southern Africa Small Scale Farmers Forum –Uganda ESAFF-Uganda)	Namatovu Rashidah	Program Assistant
(CSOs)	Acholi Private Sector Development Centre (APSEDEC)	Nelson Tasenga	C.E.O
		Otim Micheal	Programme Officer (Dimat)
		Patrick Opobo	Financial Controller
	PELUM Uganda	Ruth Nabaggala	Programme Officer, Agricultural Market Development
Research	EPRC	Swaibu Mbowa (PhD)	Senior Research Fellow
Institutions	Zi iio	Ibrahim Kasirye (PhD)	Principle Research Fellow

Type of Institution	Name of Institution	Personnel Interviewed	Title
	Buyana Stock, Makerere University, Seeta Institute of Animal Production and Management (SIAPROM)	Dr. Wasswa Mathias	Manager, Farm, and Stockist
F	POULTRY FARMER- Mukono	Nalweyiso Christrine	Farm owner
Farmers	TOMATO GROWER- Mukono	Nsaale Sammel	Farm Owner
	Wakiso District Farmers' Forum	Mr. Bamutire Willie Seppie	Chairperson
	Kisubi United Farmers Diary Cooperation	Mr.Deo Sseerwanga	Chairperson
Suppliers of	Farm Inputs Care Centre (FICA) Ltd	Dennis Serunkuma	Finance and Administration manager
agricultural inputs/Agro	Afgri Kai Ltd	Isaac Mukole	Finance Manager
dealers	Aponye Uganda Ltd	Nyegamehe Apollo	Managing Director
	Equator Seeds Limited	Tonny Okello	Managing Director
Agricultural	Kisubi United Diary Farmers Coop. Soc. Ltd	Deo SSerwanga	Chairperson
cooperatives	Uganda Cooperative Alliance	Sserubula Patrick N	Manager Microfinance Unit
Exporters of Agricultural Produce	KK Fresh Produce Exporters Limited	Dr. James Kanyije	Chief Executive Officer
Agricultural Banks	Tanzania Agricultural Development Bank	Robert Pascal	Director of Credit and Business Management
Liquidated Uganda Cooperative bank	Liquidated Uganda Cooperative bank	Godfrey Nsubuga	Former CEO - Uganda Cooperative Bank

Feasibility Study for the Development of a Land and Agriculture Bank in Uganda

Study Team,

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The Uganda Episcopal Conference

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