CASA
Commercial Agriculture for Smallholders and Agribusiness

Rapid Market Assessment – Uganda

SESAME SECTOR

May 2020

UKaid
from the British people

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Acronyms

BCI	Business Climate Index
CASA	Commercial Agriculture for Smallholders and Agribusiness
DFI	Development Finance Institution
DFID	UK Department for International Development
EPRC	Economic Policy Research Centre
MSMEs	Micro, Small and Medium Enterprises
NGO	Non-Governmental Organization
RMA	Rapid Market Assessment
UNECA	United Nations Economic Commission for Africa
UOSPA	Uganda Oil Seed Producers and Processors Association
WHO	World Health Organization
WoB	Women-Owned Business

Executive summary

Coronavirus Disease 2019 (COVID-19) has continued to spread across the world, leaving death and economic devastation in its wake. Although the number of confirmed cases in Uganda remain very low in comparison to other countries, the containment adopted to curb the spread of the virus has affected business operations. A Rapid Market Assessment (RMA) survey was undertaken on a cross-section of agribusinesses, smallholder farmers and other support services providers in the sesame value chain, using a mixed methodology approach with the ultimate goal of understanding the current situation of agribusinesses dealing in the sesame sector during the COVID-19 outbreak and the nationwide lockdown imposed by the Government of Uganda.

Uganda is the world's fifth largest producer of sesame. The Northern, West Nile and Eastern regions are the main centres of sesame production. Almost all the responding sample indicated that they were active in the sesame sector either as smallholder farmers, agro-input dealers, processors, aggregators or exporters for at least the last five years. On average 85% of the sesame produced reached the local market, especially during the pre-COVID-19 pandemic period, which was later exported. These results suggest that sesame can make a significant contribution to household income in the Northern and West Nile regions. The challenges to sesame production at the farm level include lack of equipment for land preparation, which leads to late planting; crop losses from pests and diseases due to poor harvesting technologies, which reduces yields; non-availability of seed; and labour, particularly for weeding the crop, which is sown broadcast. Smallholders produce small amounts; their bargaining power is weak and prices are low, especially while dealing with middle traders.

A sesame value chain map was developed showing the volume handled by the various actors along the chain as the commodity moves from farm gate to the consumers and export markets based on the responses analysed. The assessment found that, of the total sesame produced, 85% is sold. Of the total sesame produced, 32% is exported, 13% is sold to urban consumers and 40% is sold to rural consumers. Therefore, more than half the sesame that is produced leaves the production regions to go to regional and export markets. The market structure involves numerous traders, which reduces the farmer's share of the final price. On average, the farmer receives 70% of the ex-local assembly level price and 60% of the ex-regional level price. Thus, if farmers were to sell collectively at regional level, there is the potential for a 10% increase in prices compared to selling at the farm gate.

The majority of traders had no shape preference in either buying or selling sesame grains. Interviews with traders indicated that buyers were satisfied with the quality of sesame on offer and 80% reported that the quality of sesame in the market had improved in the last season not until the recent COVID-19 pandemic context, where market access has been limited by lockdown measures that have affected the transport sector. Unlike traders, exporters and rural aggregators give a higher priority to cleanliness, yet there are limitations due to poor harvest handling of sesame produce. For example, the problem of cleanliness of arises during the shelling and drying stages of sesame harvesting. Most farmers thresh and dry sesame on the bare ground; this leads to unclean sesame grains, since sesame becomes mixed with soil. Uganda is the world's 16th largest exporter by volume. All sesame exports from Uganda are as raw seed rather than oil and other processed products; therefore the quality of the sesame seeds is key. Yet there are limitations.

The three major sesame export markets are Europe (Austria, Denmark, Germany and Switzerland), the Middle East (Turkey, Egypt and the United Arab Emirates) and the Far East (Singapore, Japan and China). Sesame exported to Europe and the Middle East is used primarily in the cuisine and confectionery industry, while exports to the Far East are used primarily for extracting sesame oil. Access to the European market has stringent certification and

standardization requirements. Targeting the European market will increase the average unit price of exported sesame and the total value of exports. Consequently, farmers and traders have no incentive to invest in practices that will increase eligibility of sesame for access to higher-value markets.

With respect to the outlook, the major concerns highlighted by agribusinesses in the sesame sector – in the event that the COVID-19 situation persists for more than six months – relate to reduced product demand and the potential inability to meet the costs of operations. The majority of micro- and small businesses indicated they would exit business in one to three months in the event of the current situation persisting. On the other hand, the majority of medium and large firms (especially those in export) do not foresee closure. There is also slightly higher resilience among agriculture and manufacturing firms compared to service sector firms. In terms of the workforce in the agribusinesses in the event that COVID-19 persists for the next six months, about four (4) out of ten (10) workers would lose their jobs temporarily while two (2) employees would lose their employment permanently. Over 75% of employees projected to lose their jobs permanently are from the service sector (Business Climate Index [BCI] Survey Report, 2020).

Key strategies that the Commercial Agriculture for Smallholders and Agribusiness (CASA) Project would adopt are double-layered (i.e. implemented with partners and government through advocacy/engagements).

(i) There is a need to consider investing in the formation of producer groups and to increase the traceability of producers, as well as to invest in mechanized cleaning and sterilization equipment

(ii) Formation should be facilitated of sesame smallholder farmers into business interest groups that can be linked to existing co-operative societies/aggregation centres where a farm produce check-off system (or e-Voucher system) can be deployed, including support towards IT systems that can provide real-time market information

(iii) Other important inputs for sesame farmers are pesticides, which are often supplied by primary co-operatives and aggregation centres in the regions. However, interviews with representatives of several co-operatives revealed that they were often unsatisfied with this service, and so providing avenues for access to quality agro-inputs is a key consideration

(iv) The promotion of innovative business solutions, e.g. support towards digitizing the sesame value chain continuum – farm-level, marketing, payments, services deliveries – is another area of need by the partners in the sesame value chain sector

(v) Consider establishing a financial guarantee fund with a reliable financial service provider to stimulate and catalyse access to affordable agriculture-related loans

(vi) Support micro, small and medium enterprises (MSMEs) to activate the business continuity plan to enable businesses to activate their strategic and operational framework to increase resilience

(vii) To free up more cash for businesses, CASA may consider advocating the government on policy considerations such as tax rate reduction, reducing taxable income, offering tax credits and offering tax refunds

1.0 Introduction

1.1 CASA Project overview

The UK Department for International Development's (DFID) approach to economic development and agriculture relies on an increasingly commercial approach to its agricultural programming by:

- boosting agribusiness investment, financing agricultural infrastructure and supporting smallholder farmer access to markets
- helping farmers and their families to have opportunities and jobs outside of their farms and supporting small and medium-sized enterprises (SMEs) in rural areas
- supporting subsistence farmers without other economic opportunities to avoid hunger, malnutrition and extreme poverty
- encouraging commercial approaches that reduce the cost of nutritious diets

In support of this approach DFID has launched the five-year flagship CASA Project, which seeks to change how investors, donors and governments view and invest in agribusinesses that work with smallholder supply chains. In doing so, CASA will increase economic opportunities for smallholders by:

a) demonstrating the commercial viability of SME agribusinesses with significant smallholder supply chains and attracting more investment into these businesses
b) deepening the smallholder impact of existing investments made by Development Finance Institutions (DFIs; CDC) and impact investors
c) enabling poor smallholder farmers to engage with and trade in commercial markets
d) researching and communicating the case for successful engagement with smallholder-linked agribusiness

CASA has three components, two of which (Components A and C) are managed by NIRAS-LTS in partnership with Swisscontact and CABI. CASA's Component B is separately implemented by Technoserve and focuses on technical assistance and investment promotion for larger agri-enterprises on the global development stage.

Component A will demonstrate high-impact interventions in the three target countries (Malawi, Uganda and Nepal), leading to (a) mobilization of investments for partner agribusinesses (which can include commercially-minded farmer associations and co-operatives) and/or expanded outreach to smallholders; and (b) improved access to markets for smallholders. The ultimate target group for CASA is the "missing middle" of "stepping-up" smallholders – i.e. those that wish to engage in commercial agriculture but are largely not engaged to date (including 40% living on less than US$ 2/day and 50% women). The initial CASA target sectors in Nepal are dairy and vegetables.

Component C is a learning and knowledge-sharing component that will *inter alia* leverage knowledge gains from Component A interventions and other research to inform donors and investors about the merits of investing in agribusiness SMEs with significant outreach to smallholders. CASA's sector focus in Uganda is on beans and sesame. Specific indicative interventions are under development to improve smallholder commercialization in both value chains.

1.2 Context of the RMA

The Coronavirus (COVID-19) pandemic is currently causing significant adverse impact on the global economy. Governments around the world are implementing various fiscal measures to mitigate the adverse effect and provide relief for businesses and households. As of 9 May 2020,

over 280,000 Coronavirus-related deaths had been registered globally, with more than 4m laboratory-confirmed COVID-19 cases, portraying not only the alarming levels of spread of the virus but also its severity (World Health Organization [WHO], 2020).[1] WHO declared COVID-19 a global pandemic on 11 March 2020. Given its geographical spread, the pandemic is projected to have devastating effects on the global economy. According to the IMF Global Economic Outlook, the world economy is projected to contract sharply by 3% in 2020 as a result of the pandemic.[2] In the same vein, the sub-Saharan African economy is expected to contract by 1.6%. The United Nations Economic Commission for Africa (UNECA) (2020) shows that African businesses are being severely impacted by the COVID-19 crisis. Four out of five business in Africa are significantly affected by the current COVID-19 crisis, rating the effect as highly severe or severe.[3] The proportion of severity is relatively uniform across the size of enterprises and the sector of business.

Upon registering its first case, the Government of Uganda came up with a number of containment measures to curb the spread of the virus in the country, such as the closure of schools, restrictions on internal and international travel, wearing of protective gear, use of hand sanitizer and lockdown. These measures are believed to have affected the economy in various ways. For instance, due to border closures, the economy suffered from supply chain disruptions and a reduction in the number of visitors who contribute to revenue from tourism. Consequently, many importers, traders and consumers in Uganda have been seriously affected. The effect is more severe among the small-scale business and traders because they earn their livelihood trading products such as textiles, whose importation has been suspended (African Union, 2020). There have also been reports of private employers laying off and effecting salary reductions of workers to cut costs and also deal with the loss of market opportunities/demand arising from extending the duration of the lockdown.

This report examines the effect of the risk presented by the COVID-19 pandemic on Uganda's agribusinesses in the sesame value chain using a rapid survey. In particular, the report:

- examines the effects of the COVID-19 pandemic on various indicators of agribusinesses performance in the sesame sector
- assesses the future expectations of the businesses in the event that the pandemic and containment measures persist
- advises on how SHFs can be engaged effectively to reduce the food gap likely to emerge in the coming year
- provides possible policy options to revive businesses in Uganda in the post-COVID-19 era

1.3 Purpose of the RMA

Prior to the outbreak of COVID-19, the global financial situation was promising, with various businesses expanding and investing more. A report by the Organisation for Economic Co-operation and Development on 2 March 2020 showed that the global economic situation was stabilizing before the outbreak of COVID-19. This economic stability in turn encouraged business investment, which has been partly financed through borrowing. The Bank of Uganda, in its State of the Economy Report released in September 2019, indicated an increase in private sector credit due to the improved state of the economy.

As a first step, CASA commissioned an RMA to get first-hand information on the realities on the ground. This information would help CASA develop response strategies and activities to help the

[1] WHO (2020) 'Situation Report No. 93, 22 April 2020', https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports.
[2] IMF (2020) 'World Economic Outlook', April.
[3] https://www.uneca.org/sites/default/files/PublicationFiles/ eca-iec_survey_covid-19_africa_english_final.pdf.

farmers that depend on sesame sales for their income. The RMA would also inform strategies to support producer organizations and agribusinesses that are struggling for survival and looking to re-establish themselves.

CASA's RMA has four components:

a) *a production level analysis*: to understand the impact and implications among smallholder sesame farmers
b) *an aggregation level analysis*: to appraise the impact on operations among sesame agribusinesses and/or wholesalers/retailers
c) *a processor level analysis*: to understand the impact among beans and sesame processors
d) *a regulatory and competitive environment analysis*: to understand how the regulatory and business environment may shift and how these policy shifts may affect businesses in the short and long term

This document is a consolidated report of the all four components of the CASA RMA.

2.0 Methodology and data

2.1 Research design and approach

The data used in this analysis was obtained from a rapid survey of agribusinesses, smallholder farmers, financial institutions and policy/decision actors based on standardized methodology for conducting RMAs. Surveyed firms were a panel of businesses based on the CASA scoping study conducted in 2019 and also using the Uganda Bureau of Statistics Census of Business Establishment 2011. A structured questionnaire was sent electronically (via email) to 20 agribusiness establishments that are dealing in the sesame value chain. These were asked questions in relation to business risk associated with COVID-19 and subsequent containment measures (such as lockdown).

Specifically, the questions focused on investigating business risk indicators of:

- changes in sesame supply
- level of business activity
- access to raw materials
- price of inputs/raw material
- operating expenses
- domestic and international demand
- price of output
- revenue of the business
- productivity loss/increase
- employment
- disruptions in transportation and/or other logistics systems
- credit and liquidity constraints
- support received from local government and/or other projects
- mitigation measures planned or in place

Out of the 20 questionnaires circulated to farmers' co-operatives (4), input suppliers (4), small-scale sesame seed producers or local seed business units (4), micro and small businesses in the sesame sector (4) and medium and large businesses, processors, exporters, etc. (4), only 12 questionnaires were returned from farmers' co-operatives (2), input suppliers (2), small-scale sesame seed producers or local seed business units (2), micro and small businesses in the sesame sector (3) and medium and large businesses, processors, exporters, etc. (3). All these were located geographically in the Lira, Gulu, Kitgum, Amuru and Arua districts.

For each of the indicators, respondents were asked to express their perceptions on a Likert scale as follows: "Severely reduced (by more than 50%)", "Moderately reduced (by about 50%)", "No change", and "Increased". These responses were coded as 0, 0.5, 1 and 2 respectively. In this case, if a respondent's perception of the effect of a business risk associated with COVID-19 on an evaluation indicator is that it severely reduced, such a response would be coded as 0. It would be coded 0.5 if the effect of a business risk associated with COVID-19 on an evaluation indicator was "Moderately reduced (by about 50%)". It will be coded 1 if there was "No change" and 2 if the effect of a business risk associated with COVID-19 on an evaluation indicator was "Increased".

During data collection, business managers were asked to assess their expectations on business continuity/survival in the post-COVID-19 era. Questions were also asked to establish expectations of laying off of workers and, if yes, the estimated number of employees they would lay off temporarily and permanently in case the situation persisted for six months. This enabled the estimation of the number of workers likely to lose their jobs temporarily and permanently.

The analysis entailed both the construction of indices and other measures of descriptive statistics. Indices were constructed mainly for overall business activity and price changes (both for inputs and outputs). Note that these indices do not consider the magnitude of change in the data but rather the general direction of movement in the key indicators. As such, they are sensitive to the direction as opposed to the magnitude of the change in business conditions due to COVID-19. Other indicators were analysed, mainly using descriptive statistics. To mimic the whole business community, sample weights were applied in the analysis. These were provided by the Uganda Bureau of Statistics as part of the Census of Business Establishment.

The focus of this report is on:

(i) business activity
(ii) access to raw materials
(iii) prices paid for raw materials
(iv) domestic demand for products
(v) employment
(vi) the future outlook in the event the crisis persists for six months

Other business aspects captured by the survey but not reported in this report include (i) prices of output, (ii) revenues of the businesses and (iii) productivity changes.

2.2 Survey limitations

All key findings of this assessment are indicative, as the sample is not representative of the whole populations of interest. In addition, due to the restrictions around data collection at the time of the assessment coupled with the limited timeframe (only 12 days), data was collected from either partner to the CASA Project or prospective ones. All data was self-reported by respondents and is therefore subject to a degree of bias.

3.0 Results and discussion

Agriculture employs about 70% of the country's population and contributes close to 25% of the country's GDP. This contribution is set to increase because of the numerous investments made by government and development partners into the sector. The investments made are targeting increasing production, agro-processing and value addition as well as streamlining the market system for the benefit of smallholder farmers and their transformation from subsistence to commercial agricultural production. The agricultural sector already provides a livelihood for the majority of Ugandans, contributes highest to the East African Community region's food balance sheet and the country's export base and therefore foreign exchange earnings. There is therefore potential for an even a bigger crisis if the sector is not carefully catered for during this crisis.

In presenting the RMA results, these have been categorized into three sections in consideration of the Terms of Reference that stipulated four CASA RMA components:

a) *a production level analysis*: to understand the impact and implications among the sesame smallholder farmers
b) *an aggregation level analysis*: to appraise the impact on operations among sesame agribusinesses and other support services sector
c) *a processor level analysis*: to understand the impact among beans and sesame processors
d) *a regulatory and competitive environment analysis*: to understand how the regulatory and business environment may shift and how these policy shifts may affect business in the short and long term

Even though there are a number of actors along the sesame sector, during this RMA, the following were identified and studied as guided by the Terms of Reference.

3.1 Sesame actors

Farmers: Sesame is produced predominantly by small-scale farmers. The farming methods employed in sesame production are simple and have not changed over many generations. Farmers interviewed indicated that they use animal draught for land preparation, broadcasting for planting and manual weeding, harvesting, drying and threshing. As such, sesame farming is characterized by low resource use with little mechanization or use of inorganic fertilizer and chemical pesticides. Farmers have been producing sesame for subsistence consumption and increasingly for income through the marketing of surplus production pre- and during the COVID-19 pandemic.

Farmer groups and farmer associations: These are associations of farmers who are brought together by common interests, such as collective marketing, learning activities in Farmer Field Schools or participatory testing of improved sesame varieties with research organizations. Membership of the association is from the local community. Farmers were also found to engage in collective activities involving other crops besides sesame.

Traders: Due to the fragmented and small-scale nature of production, considerable effort is required to assemble sesame into an economically viable volume for trade. Sesame marketing is therefore characterized by numerous transactions involving small volumes and equally many traders with variable capacity. These traders can be categorized based on their location, volumes handled and hierarchy along the sesame marketing value chain: (i) **agent buyers/rural aggregators:** actors involved in moving sesame from the farm gate to the market, including traders on foot, bicycle traders, rural open-air market traders, rural wholesalers and rural shopkeepers; and (ii) **regional urban wholesale traders:** commodity traders found at regional

market centres such as Soroti, Lira, Jinja, Arua, Kampala and Gulu with well-established businesses and the capacity to handle large volumes of sesame.

Exporters and processors: Most exporters and processors are found in the capital city, Kampala. However, some exporters have buying centres in the production regions, mainly West Nile Gulu and Lira. In Kampala, exporters screen, clean and bag sesame into 50 kilogramme bags. The bagged sesame is then packed into 20 and 40 metric ton containers, which are transported to the shipping lines for onward shipment to the export destinations through Mombasa. Domestic processors are smaller in scale. They handle limited quantities of sesame, which they process into snacks for the confectionery industries and into sesame paste for distribution to retail shops and supermarkets. Other small-scale processors operate in urban markets in lockups that mill and blend sesame with groundnuts into sesame paste for application on bread.

Governmental bodies and the National Agricultural Research System: The Ministry of Agriculture is involved in framing agricultural policy and regulations, while the National Agricultural Research Organisation is involved in research. Sesame research is carried out by NaSSARI, based at Serere in Eastern Uganda. Several improved varieties of sesame have been released to farmers. SESAME II is the most popular, as established through participatory varietal selection with sesame farmers in the mandated regions.

The Uganda Oil Seed Producers and Processors Association (UOSPA) was formed in 1995 as an organization of producers, processors and other stakeholders, including traders of oilseed products. UOSPA's strategy has been to work through clusters of farmers in oil seeds production and processing and to develop an integrated enterprise farming system through the adoption of improved technologies, such as improved agronomic practices, use of improved seed, proper post-harvest handling and establishing savings and loan schemes. UOSPA has been dedicated to fostering development of the Uganda's oil seed processors and producers and the edible oil subsector.

Non-governmental organizations (NGOs): Several NGOs operate in northern and eastern Uganda, working with clusters of farmers to promote improved livelihoods through the promotion of improved technologies, linking farmers to markets through the formation of groups and the dissemination of market information, the promotion of organic agricultural practices through farmer training and the facilitation of certification of organic produce. The NGOs included NGETA and Concern International, which work on improving rural livelihoods; and Lango Organic Farming and the National Organic Agricultural Movement of Uganda, two NGOs that promote certification of organic products in Uganda.

3.2 Characteristics of survey respondents

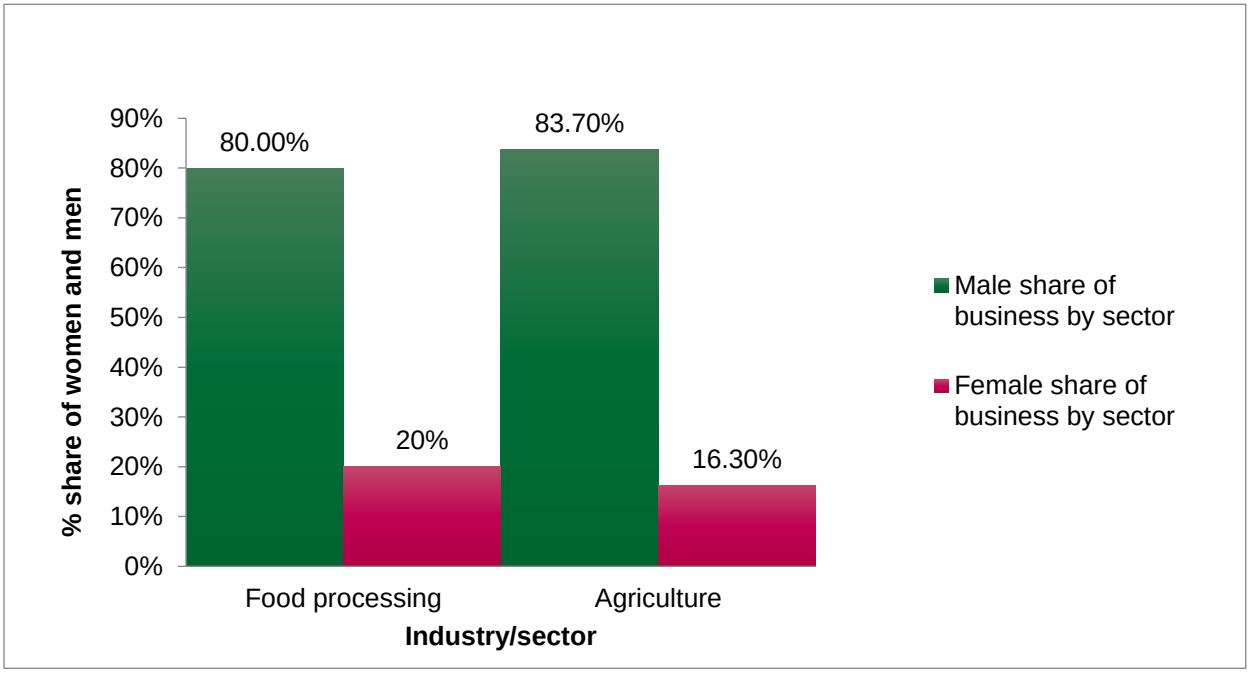
3.2.1 Business ownership

Of the 20 sampled agribusinesses to which online questionnaires were sent, only 12 agribusinesses managed to return questionnaires and therefore participated in survey. On average, 12% were run by women and 88% were run by men. Despite the small number of women-owned businesses (WoB) (in the traditional sense of the world), 33% (4) of the businesses said that women played a role in senior leadership in the following aspects of the company:

- **as business partners** and shareholders (e.g. women had a financial stake in the business)
- **in strategy decision-making (e.g. when and how to expand the company and how to market the business):** for example, 45% of one agribusiness was owned by women who were involved in strategic decision-making policies and business expansion and marketing activities
- **as board members:** other businesses mentioned that women made up 33% of the board and participated in strategic decision-making; one company said that 30% of the board members were women
- **as directors**: for one company, 40% of directors were women and 60% were men; for another, 57% of the business was women-owned, with women sitting on the board of directors.

Most businesses said that, although the business was owned by men, most of the work in the processing plant is done by women but they do not own the business. **Across Uganda, WoB make up 20% of the market share of food processing companies and 18% of the market share of agricultural companies (Figure 1).**

Figure 1: Ownership of businesses by gender

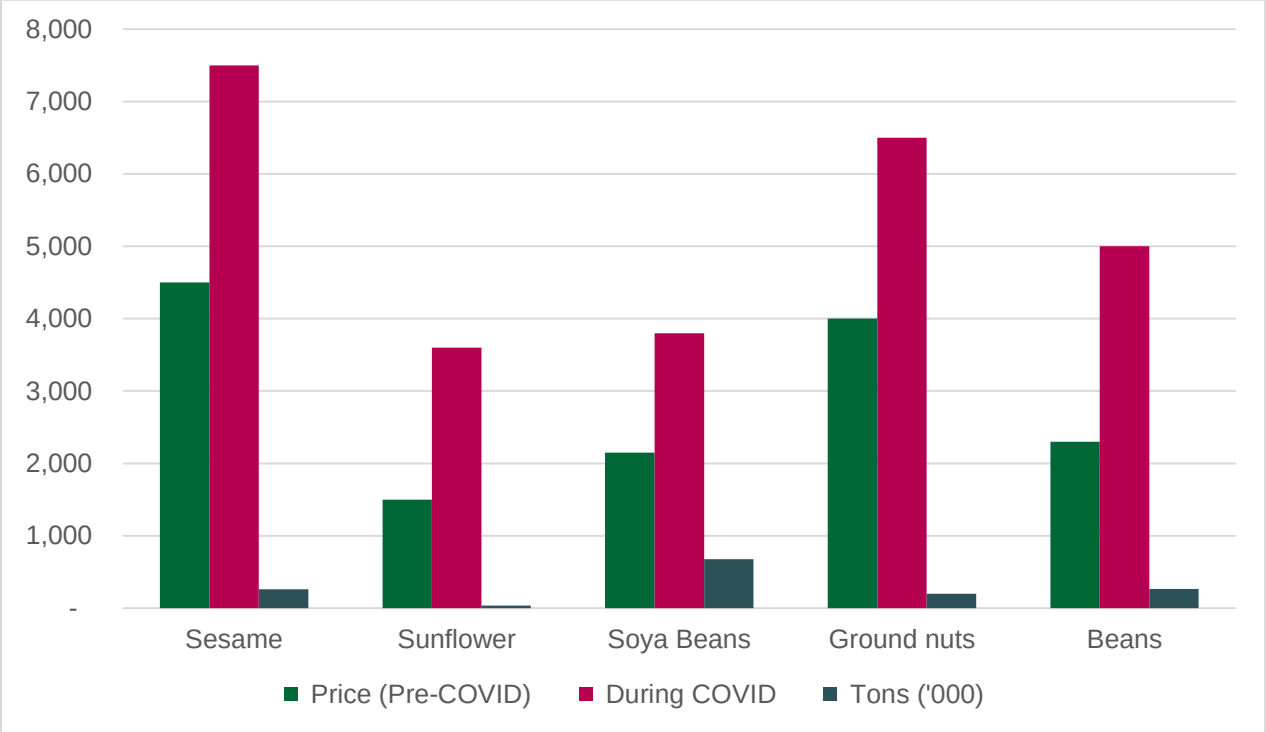


3.2.2 Commodity average market price

The RMA considered the analysis of some sampled commodity market prices, with key consideration focused on sesame before and during the COVID period. From Figure 2, it is very clear that, across all sampled agricultural commodities, market prices have almost doubled. Although this presents an opportunity to agribusinesses and smallholder farmers, there are limited supplies on the market due to the impact of COVID-19 lockdown measures on farmers or agribusiness buying agents. For example, it is very clear from the analysis below that, prior to COVID-19, a kilogramme of sesame cost UGX 4500 and that, during the COVID-19 period, each kilogramme was valued at UGX 7500. This 68% increase in the market price of sesame was attributed to the low supplies due to COVID-19 lockdown restrictions.

It was further revealed by the agribusiness owners that they would not risk storing more products in their warehouses because of the storage holding costs involved and poor storage facilities. At times, too, due to poor testing kits at the agent aggregation centres, there were low-quality products that were exposed to aflatoxins and later rejected at export markets.

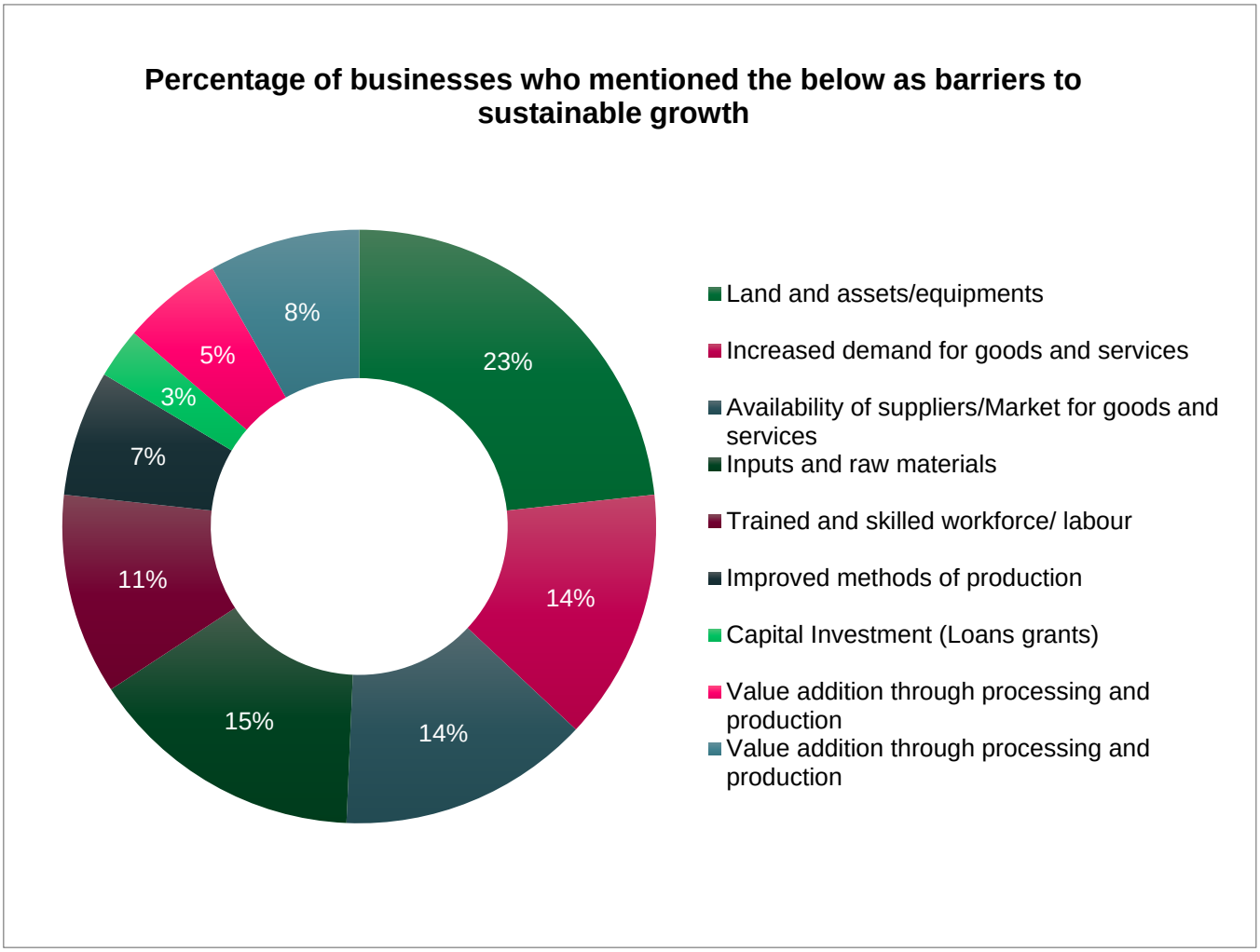
Figure 2: Average commodity market prices



3.2.3 Current COVID-19 market constraints

The RMA methodology interrogated market constraints that agribusinesses and smallholder farmers have faced during the COVID-19 pandemic period and these are presented in Figure 3.

Figure 3: Barriers to sustainable growth for businesses



3.2 Impact on smallholder farmers

Smallholder farmers, who make up 70% of all farmers in sub-Saharan Africa and rely solely on their farms as a source of livelihood, are engaged in a battle to keep up the supply despite the challenges they continue to face during this COVID-19 pandemic. In response to the global COVID-19 pandemic leading to catastrophic loss of human life and harms to livelihoods across the world, the Government of Uganda announced a strict national lockdown effective mid-March 2020 to reduce virus transmission and spread and its related consequences. The agricultural sector is particularly affected and faces unprecedented challenges that threaten food security and nutrition at the household, community and country levels. It is against this background that the Ministry of Agriculture Animal Industry and Fisheries released official guidelines on 28 March 2020 to assist with managing the situation.

Farming communities were encouraged to take advantage of the current rains, to plant and manage crops accordingly and to look after livestock and fisheries so as to ensure their food security, nutrition security and income during and after the pandemic. To capture some emerging

impacts of the epidemic, NIRAS/LTS, in partnership with DFID, is implementing CASA in Uganda. As a result, NIRAS/LTS commissioned a 12-day RMA that involved conducting quick phone interviews and the distribution of 20 online questionnaires to the agribusiness owners/contacts from the regions of Northern and West Nile. Only 12 agribusiness respondents provided feedback and desk reviews were conducted comprising randomly selected farmers and extension agents to understand the dynamics at play at production level (smallholders).

Farming generally continues unrestricted as the government guidelines advise against abandoning cultivation, and instead recommend that farmers take advantage of the long rains to begin planting. Despite the appearance of abundant family labour due to school closures and other closures freeing up time for farming, the lockdown and related COVID-19 restrictions have had the following impacts.

- **Group labour is constrained** due to rules on social distancing. Smallholder farmers are observing social distancing in their fields, drastically reducing the number of people per farm and consequently limiting the manpower available for land preparation; this is expected to limit the productivity in the next post-COVID season of agricultural produce, including sesame
- Without adequate access to enabling financial systems, smallholder farmers often rely on manual labour to prepare their fields due to the cost of acquiring and maintaining mechanized tools and equipment. Human and animal drudgery and time wastage are among the challenges that face farmers every day. **Hiring labour is difficult** because of low farm-level incomes and farmers' low purchasing power
- **The cost of inputs (seeds, fertilizers, farm tools, etc.) has skyrocketed** due to increased transport costs and lack of access to stockists, who are mostly located in towns far away from farms
- As a result of closures, **many farmers have lost their most important buyer** – schools, hotels, etc. – for key crops including maize, beans, sesame, rice, bananas and sweet potatoes, as well as horticultural crops such as tomatoes, onions and greens. Sesame products, for example, would be brought to market centres to process, the locally known "***odhi***". However, during the #stayathome recommendations, such farmers cannot easily access markets or even processing centres
- Restrictions on social gatherings, such as weddings, meetings, hotels, bars and restaurants, mean the **loss of other major markets for farm produce**
- Finally, **no market surveys inform small farmers and enable them to bargain better prices**. Consequently, **farm gate prices remain very low** and **middlemen are taking advantage of farmers** by buying at low prices and selling produce at higher-than-usual prices to markets inflated by pandemic fears
- Another emerging challenge is that of **accumulated agricultural produce with a low shelf-life**, demanding innovative post-harvest practices and new processing opportunities. At the same time, there are reports of **massive populations to feed in villages due to heavy urban-to-rural migration**, driven especially by families' worries about their ability to meet their needs in urban settings during lockdown as well as by fear of lockdown-related crime. Many poor rural families currently need food rations; however, these rations are restricted to urban poor. Loss of farm-level income will lead to **reduced savings and loss of investment in efforts to improve and innovate smallholder farming, marketing and processing**, with long-term implications of increased poverty.
    - Nonetheless, a **few farmers are developing some coping mechanisms,** including short-term bulk pooling of produce and collectively organizing to access better marketing opportunities, increase their bargaining power and purchase inputs at reasonable prices

- **Extension delivery**: government guidelines are clear on ensuring farmers' access to extension services. However, **most extension agents cannot afford current increased transport costs**. As a result, delivery of extension services has been undermined and very few farmers are being reached. Additionally, extension agents usually organize and advise farmers in groups, but such group gatherings are presently prohibited, as explained in the following verbatims:
  - "Extension workers have not appeared since the announcement of COVID-19 restrictions and [we] have also not called them because [we] have not had serious issues, except black ants, called '*ngini*' in the local language" (Mr and Mrs Ongai, farmers in Nwoya District)
  - "Farmers said [the lockdown] has restricted their movements and staying at home is a must after their farm work. Most of them said they are working hard in their individual farms, putting into practice the knowledge and skills they got from extension last year" (Lawlence Ogwal, Ngetta Zonal Agricultural Research and Development Institute)
  - At the same time, some **innovations have been reported, including increased use of short message services, interactive voice response, radio, TV, online marketing and social media** to access extension services, as well as efforts to divide farmer groups into acceptable sizes in line with government guidelines

3.3 Impact on agribusinesses (MSMEs)

The incidence of COVID-19 in Uganda is very low in comparison to other countries – the country has so far recorded 260 cases, with 63 recoveries, and no COVID-19 related deaths as of this report compilation. Indeed, early on, Uganda adopted a number of containment measures to curb the spread of the virus, including the closure of schools, restrictions on internal and international travel, use of hand sanitizer, improved handwashing stations, social distancing and even complete lockdown. While these measures may have contributed to the successful reining in of the virus, those same restrictions have hit business operations hard at all levels (upstream and downstream).

A recent rapid survey of businesses by the Economic Policy Research Centre (EPRC) in Uganda reveals that three-quarters of the surveyed businesses **have laid off employees** due to the risks presented by COVID-19 and subsequent containment measures. Indeed, the results suggest that lockdown measures have reduced business activity by more than half. In terms of sectors, the RMA researcher finds that businesses in agriculture have experienced the largest constraints in access to both inputs and markets for outputs due to control measures such as transport restrictions, quarantine, social distancing and bans on weekly common agricultural local-level markets.

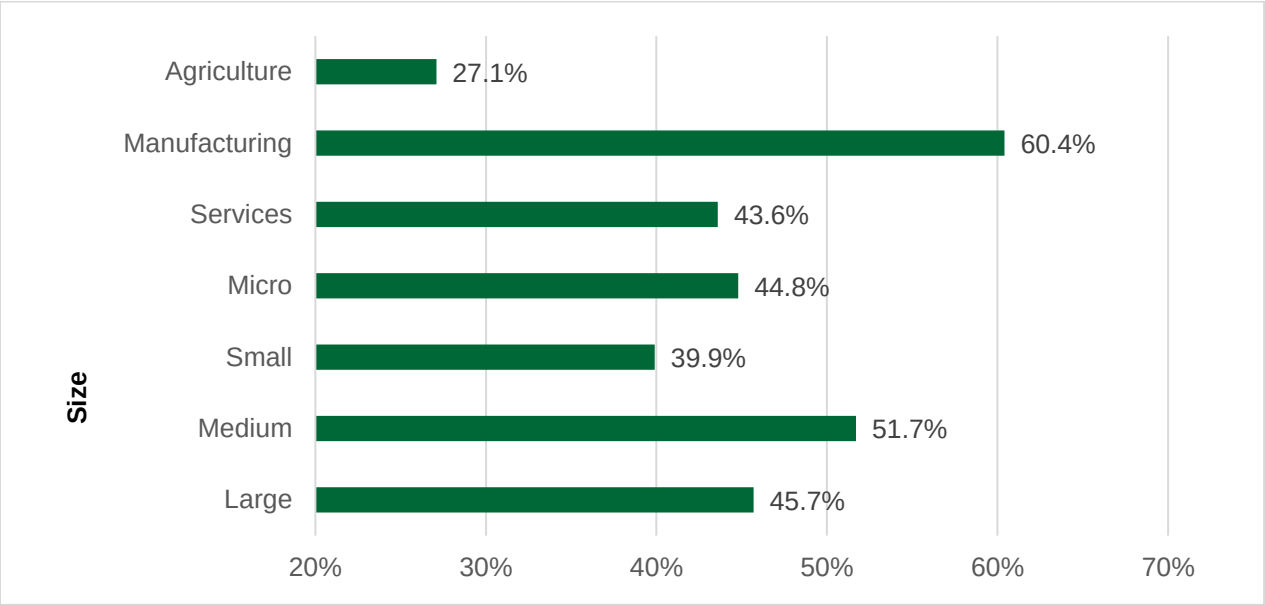
While assessing the current impact of COVID-19 on sesame agribusinesses, the following parameters were investigated: business operations; changes in the supply and demand of sesame; changes in existing workforce or labour; availability and cost of inputs; disruptions in transportation/logistics systems; and estimated losses due to the current situation.

3.3.1 Business operations

The COVID-19 pandemic and subsequent lockdown has reduced business operations by more than 50 percentage points. As shown in Figure 4, business operations have fallen below 100 due to the risk presented by COVID-19, implying agribusinesses are performing below potential across the board. Further sectoral analysis (not shown in the figure) shows that businesses in agriculture experienced the largest decline in business activity, with 76% of the firms reporting a severe decline and 12% reporting a moderate decline. This could be largely

attributed to COVID-19 containment measures such as transport restrictions, quarantine, social distancing and the ban on weekly markets, which have hindered farmers' access to input and output markets, thus undermining their productive capacities (Mutegeki, 2020). Micro and small businesses reported experiencing a larger decline in business activity compared to medium and large firms. This is not surprising, as most of the micro and small businesses halted operation due to their inability to implement Standard Operating Procedures such as the provision of onsite accommodation for market entrepreneurs. In addition, employees of SMEs use public transport, which was banned on 25 March 2020.

Figure 4: Index of business activity by sector and size



COVID-19 containment measures such as hand sanitizer, soap, hand washing facilities and social distancing have resulted in a slight increase in operating expenses for businesses. Overall, nine out of 10 businesses have reportedly experienced an increase in operating expenses due to preventive measures instituted by government to curb the spread of the virus.

In short, the consultant finds that **micro and small agribusinesses experienced a larger decline in businesses activity compared to medium and large agribusinesses** – an unsurprising finding as most of the country's micro and small businesses halted operations due to their inability to implement preventive health measures, such as the provision of onsite lodging for employees and sanitizers and handwashing equipment for customers. These preventive measures have resulted in an increase in operating expenses for businesses that have continued to stay open. Consequently, a majority of micro and small businesses, particularly in the support services sector, predict they will have to close within one to three months if the pandemic persists and current restrictions are maintained (Table 1). On the other hand, most of the medium and large agribusinesses do not foresee closure. Sectoral analysis reveals slightly higher resilience among agriculture and manufacturing firms compared to service sector firms.

Table 1: Business survival duration by size of business

	1–3 months	3–6 months	More than 6 months	More than a year	Do not foresee closure	N
Sector						
Agriculture	12	31	7.2	19	30.7	20
Manufacturing	9.9	25.7	15	12.1	37.2	32
Services	23.9	18.7	7.4	10.8	39.2	95
Size						
Micro	58	24.9	0	16	1.1	16
Small	27.7	25.1	13.9	9.8	23.5	59
Medium	8.3	19.1	5.3	10.4	56.8	44
Large	0	1.2	8.3	13	77.5	28

Source: Rapid BCI Survey (2020) Note: N is number of surveyed businesses

3.3.2 Access to raw materials/inputs

The COVID-19 pandemic has severely affected access to inputs used by micro and small businesses, particularly in the manufacturing and service sectors. Whereas the majority of small, medium and large businesses reported a moderate reduction in access to inputs, the highest percentage of microbusinesses (38%) reported no access to inputs at all, while 36% reported a severe decline. Similarly, 49% of the small businesses reported a severe reduction in access or no access to inputs at all. Regarding sectors, a high percentage of businesses in the manufacturing sector reportedly experienced a severe reduction in access (26%) or no access at all (24%) compared to other sectors. This could be attributed to disruption in supply chains due to factory closures in China and other main suppliers of intermediate inputs for many manufacturers in Uganda.

3.3.3 Change in demand of agriculture-related products, including sesame

Approximately half the businesses in the country have experienced a decline in demand for their goods by more than 50%, and sesame agricultural products are not an exception. Eight out of every 10 businesses (83%) reported experiencing a decline in demand for their products, including sesame, with 49.4% reporting a severe (more than 50%) decline. Meanwhile, 33.3% of the surveyed businesses reported a moderate (less than 50%) decline. A higher percentage of the businesses in agriculture experienced a severe decline in demand (71%) compared to other sectors. This could be attributed to the loss of income-earning opportunities, leading to a decline in the consumption of agricultural products, since their demand is more income elastic (Food and Agriculture Organization, 2020). In addition, risk aversion, due to fear of contamination, has reduced visits to the food markets that have been allowed operate. The restrictions on vehicle movements have also reduced purchases by the urban middle class. Furthermore, the closure of institutions such as schools and hotels has highly contributed to a decline in the demand of agricultural food stuffs (Mutegeki, 2020). In response, consumers or clients have stocked dry rations, which has reduced the demand for agricultural produce, including sesame.

3.3.4 Unemployment in agribusinesses

The RMA results reveal that the workforce in Ugandan agricultural businesses has undergone the largest restructuring. About 80% of businesses in the agriculture sector have reduced their workforce by more than a quarter. Results indicate that a severe decline in agricultural demand may be to blame: close to 71% of surveyed businesses in agriculture reported a severe decline in demand compared to 47% in manufacturing and 49% in support services. At the same time, a significantly high percentage of manufacturing businesses have laid off employees, with 41% of them reducing employees by more than half.

Unemployment will likely worsen if the risks associated with COVID-19 persist and containment measures are sustained or escalated. Surveyed agribusinesses indicated they would lay off a total of 40 workers temporarily and 15 permanently if the threat of COVID-19 and associated containment measures were to persist for the next six months. Applying sample weights obtained from the Uganda Bureau of Statistics on these numbers, the researcher estimates that 3.8 million workers will lose their jobs temporarily, while 625,957 risk losing their employment permanently if the threat of COVID-19 and associated containment measures persists for the next six months. Such layoffs would constitute a reduction of 42% in temporary employment and 7% in permanent employment. Notably, over 75% of employees projected to lose their jobs permanently are from the services support sector. Given most services in Uganda involve face-to-face interaction that contravenes the social distancing requirement, this finding is not surprising.

In the event of temporary closure, businesses in agriculture and service sectors are more likely to halt compensation compared to manufacturing. Whereas only four out of every 10 businesses (40%) are likely to halt compensation of employees in the event of businesses closure, the percentage is significantly high among businesses in agriculture (55%), followed by service sector businesses (41%). On the other hand, half the businesses in manufacturing (49%) are more likely to continue with compensation of employees, even when the company closes due to preventive measures. Therefore, employees in agriculture and services are more susceptible to the adverse impact of COVID-19 on business operations compared to those in manufacturing.

3.3.5 Credit and liquidity limitations

In addition to the lower demand and higher costs of safety measures, responding businesses shared other worrying concerns, including lessened production and productivity, reduced supply of inputs and credit and liquidity constraints. Indeed, risks associated with COVID-19 have exacerbated pre-existing credit and liquidity constraints among MSMEs. Of the businesses surveyed, 69% reported a decline in access to credit, with 34% experiencing a severe decline (a more than 50% decline in credit).

Notably, a relatively high percentage of small and medium businesses in the support services sector in particular reported a decline in access to credit and financial liquidity compared to large businesses. This trend may be because lending institutions already consider them highly risky, and those businesses are more likely to become insolvent if COVID-19 persists and restrictions are maintained. At a sectoral level, high percentages of businesses in manufacturing and support services reported a decline in the ability to repay outstanding debts due to the outbreak of COVID-19 compared to those in agriculture. This finding might suggest that fewer businesses in agriculture qualify for credit. Even for those with loans, the amounts *are relatively small – a sign of how poorly agriculture is resourced as far as access to credit is concerned.*

The analysis undertaken also shows that the majority of small and medium businesses, particularly in manufacturing, have experienced a severe decline in access to inputs, alluding to the risk of overreliance on international rather than regional or domestic supply chains for raw materials and intermediates. This finding calls for firms, especially MSMEs, to explore the possibility of regional

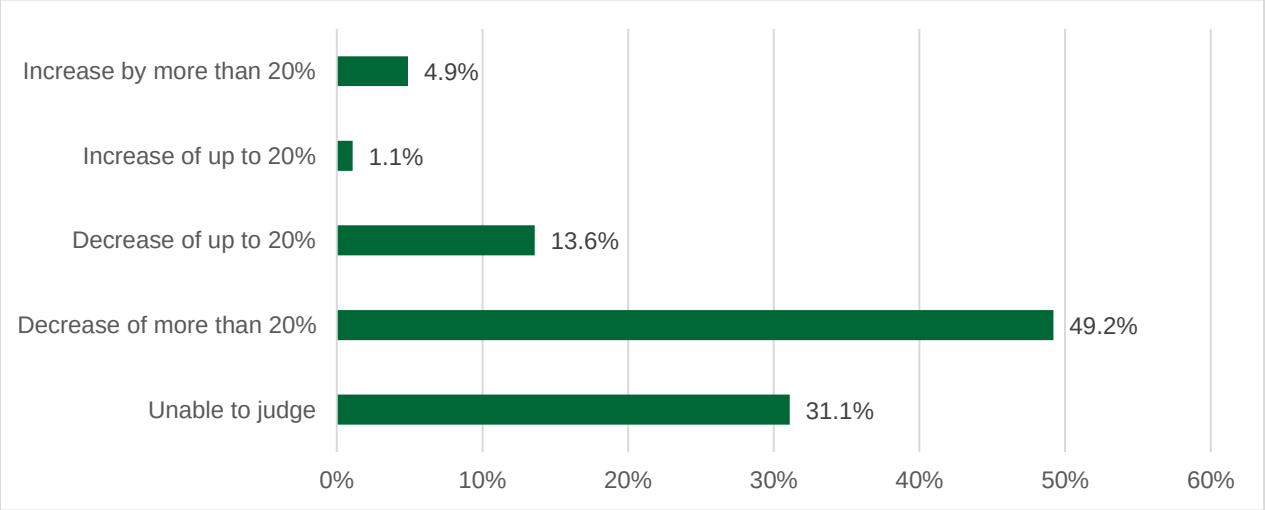
or domestic value and supply chains to stabilize their sources of inputs, while also saving on scarce foreign exchange.

3.3.6 Access to markets (local and export-oriented)

For several years, the Government of Uganda has been promoting an export-oriented strategy to address the balance of payment deficit that characterizes the Ugandan economy. The same commitment is pursued in the National Development Plan III 2020/21 and 2024/25, which emphasizes sustainability and earning enough foreign capital to pay for the importation of required goods and services, particularly intermediate goods, which will be critical to their potential. In this context, the survey explored the expectations of export-oriented businesses about the COVID-19 impact on their export volumes.

Since global economic growth is a key driver of commodity prices, local prices have been driven down by the virus's global impact. The uncertainty of the impact of COVID-19 on local markets is expected to lead to increased risk aversion from investors who are waiting to see its potential impact in Uganda. On the plus side, a temporary fall in share prices always provides opportunities for prudent investors. Analysis of the access to local markets (looking at both supply and demand) of agribusiness needs clearly indicated that items that are locally produced at no extra cost also had increased prices; that current supply was not enough to fulfil the demands fuelled by panic buying; and that strict transport measures limited agricultural delivery to an already pressured local markets.

Figure 5: Expected changes in export volume



According to Figure 5, the prevailing expectation among the export-oriented companies is that their export volumes will go down (62.8% of the responding companies), while 49.2% believe that their exports will decline by more than 20%. Only 6% expect their exports to increase. A business impact survey in 2020 conducted by the United Nations Capital Development Fund in partnership with the Uganda Revenue Authority across a panel of businesses in Uganda indicated that agriculture, forestry, animal husbandry, fisheries (64.5%), health and social work (65.2%), construction (65.0%), wholesale and retail trade (64.3%) and the transport, storage and postal industry (63.6%) highly expected their export volumes to be affected.

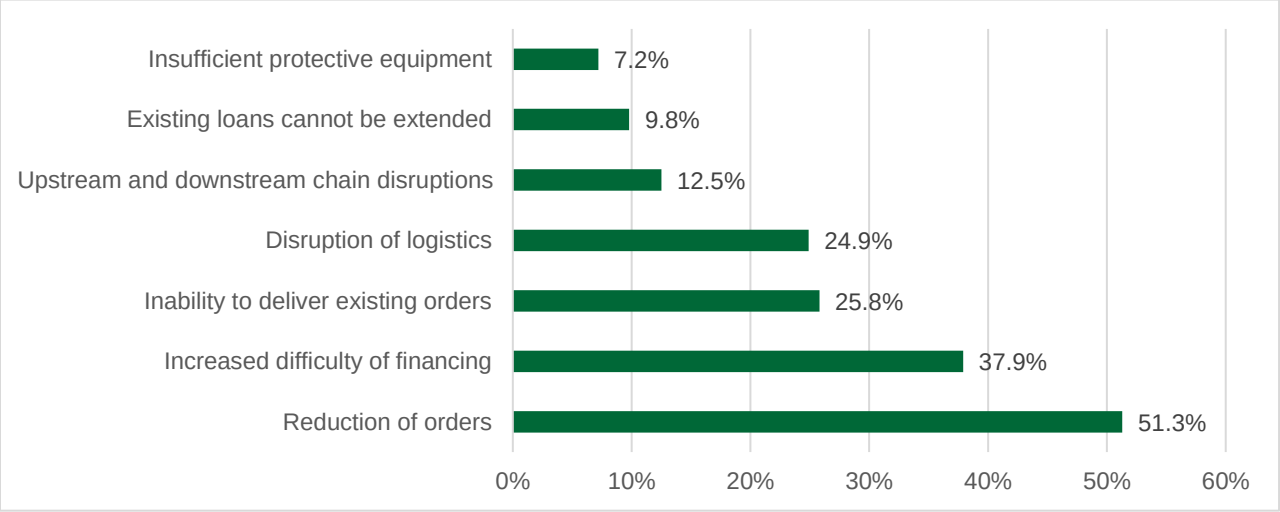
3.3.7 Agribusiness turnover effect

There is also a reduction in turnover due to a sharp reduction in the volumes produced, heightened by low demand for the products or less distribution due to transport difficulties, closure of some potential markets such as schools or hotels, less engagement in production by the target farmers and a sudden turndown of the orders that were already placed.

3.3.8 Other challenges

The surveyed businesses were asked about other challenges they faced due to the impact of COVID-19. Figure 6 shows that most companies (51.3%) have experienced a reduction in orders, which reflects a decrease in aggregated demand due to the lockdown measures. An increased difficulty of financing business operations comes second (37.9%). As discussed above, businesses are facing liquidity problems and an accumulation of outstanding payments, which they cannot pay because of reduced cash inflows. Disruption of logistics and upstream and downstream chains was mentioned as a challenge by 37.4% of respondent companies. They also mentioned the challenge of extending the existing loans (9.8%) and the lack of protective equipment (7.2%) for them to continue their business in a safe manner.

Figure 6: Other challenges faced by agribusinesses in the sesame value chain



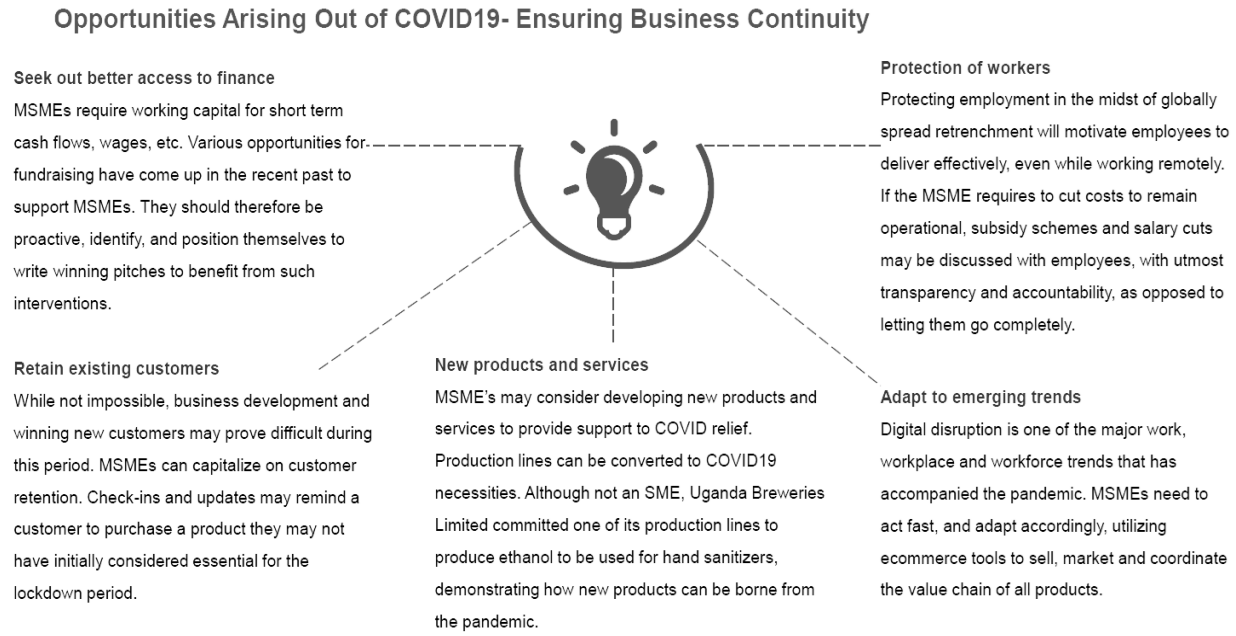
3.4 Enabling environment

The survey also asked the opinion of the participating companies about the effectiveness of the relief measures introduced by the government and financial institutions. The two most appreciated measures were an extension of loans terms and the reduction of financing costs for SMEs (66.8%), as well as the extension of tax payment deadlines to the Uganda Revenue Authority (66.8%). Suspending payments for utilities and loan interest was also viewed as an effective relief measure by 44.3% of the respondents. The other measures, such as stabilizing the foreign exchange rate and reducing charges on mobile money and digital transactions, were considered less relevant.

4.0 Opportunities amid COVID-19

The loss COVID-19 continues to have on families, entrepreneurs and private sector actors including agribusinesses, governments and smallholder farmers is also another opportunity for Uganda and other development programme actors to reaffirm the agricultural agenda as a key priority in ensuring food security, value addition and linkages with the private sector actors for future generations. The COVID-19 pandemic has already caused disruptions in various supply chains, but at the same time it is a grand opportunity for businesses in Uganda to evaluate the efficiencies of the existing supply chains and devise means to seize this crisis as an opportunity. Figure 7 highlights the opportunities this pandemic presents to the agribusinesses.

Figure 7: Opportunities arising out of the pandemic for business continuity



5.0 Recommended actions

Businesses were asked to submit their suggestions about how the problems associated with COVID-19 restrictions and post-pandemic recovery can be addressed. The prevailing sentiment is that businesses should be put back into operation as soon as possible, subject to their compliance with health norms and regulations, including disinfection arrangements and social distancing. The longer businesses stay inoperative, the greater the economic impact and the more difficult it becomes for them to resume their operations. The smaller companies, which are the backbone of any economy, are particularly concerned. Bigger companies are easy to refinance to start operation, but once small companies are out of business they may never recover for various reasons.

In broad terms, the following strategies are recommended as suggestions that can be considered to support smallholder farmers and agribusinesses and to influence government and financial institutions to create a positive enabling environment for smallholder farmers and agribusiness operations.

Facilitate business hub model formation: Farmers and their producer organizations/business hubs should be supported in the coming months, where aggregation and access to premium prices will be accessed, including enabling them to access other business development services. Another good practice would be to identify collection centres closer to producers or farmers, for example to develop storage facilities such as warehouse receipt system platforms or farm produce check-off systems (e-Voucher systems) where farmers can deliver their produce without the need to go to markets while being in a position to access other business services (such as inputs on credit at an aggregation/co-operative society or producer business organization). If possible, farmers should be facilitated to access local markets while putting in place strict physical distancing measures within and outside markets. If feasible, markets should be relocated to larger premises, while ensuring the appropriate infrastructure is in place to maintain quality and food safety.

Support to affordable inputs and operations: This category includes proposals in two areas: (1) facilitating access to inputs through linking smallholder farmers to input agro-suppliers through credit facility or check-off systems; and (2) reducing business operating costs through reducing utility costs, freeing all local agricultural local markets and vehicle movements to enable delivery of farmer produce to these markets.

Support MSMEs to activate the Business Continuity Plan: Currently, it is vital to react as fast as possible to mitigate impact and other risks and to prepare businesses for further development of the COVID-19 pandemic and its possible impact. For example, ***there is a need to invest in infrastructures such as storage facilities, transport equipment for staff and product deliveries, and online platforms for advertising businesses and for making orders and payments have been sought by most of the partners***. This will enable businesses to activate their strategic and operational framework to increase resilience, with the ultimate objective of preventing the suspension of operations or services.

The provision of entrepreneurial skills training should be considered: For any business to thrive in emergencies and to learn from COVID-19, the CASA Project needs to prioritize training of sesame value chain actors along the value chain path with soft skills in business. One way to do this is to partner with Private Sector Foundation Uganda and or Enterprise Uganda, since they understand business operations in the Uganda and are skilled in providing entrepreneurial skilling to agribusinesses, including smallholder farmers.

Promote innovative business solutions that use information technology enabled services to keep logistics going and get real-time data for decision-making. This will position agribusinesses

to “think out of box” rather than doing business as usual. Such efforts may include, but are not limited to, the following.

- Use of technology for access to credit should be escalated during this crisis. For example, mobile money and other e-platforms can simplify loan application processes and reduce turnaround times of MSME loans
- IT applications and social media should be used as innovative ways to coordinate supplies of fresh produce from farm to consumers
- Innovative logistics and transport methods should be promoted for direct deliveries to semi-urban or urban populations, including delivery trucks, pick-ups or bicycles
- Engage youth (and youth business groups) in this endeavour and facilitate the ease of doing business through start up grants, subsidized credits or easy access to means of transport
- Real-time data is critical for any strategic business decision-making, therefore enabled IT platforms should be supported that enable agribusinesses and smallholder farmers to have current information on market prices, production trends, etc.

Insurance: Both businesses and individuals in Uganda in particular might find they are uninsured for any COVID-19 impacts, as losses related to an epidemic or pandemic would usually not be covered by insurance policies, irrespective of whether the insurance covers business interruption, property damage, agricultural product losses or personal life and non-life insurance or even travel insurance. As COVID-19 is a new disease, it would not have been specifically listed in existing insurance contracts. Many business interruption policies will need to be guided to include clauses for extended damage, but it is unlikely that these extensions will provide coverage under the current circumstances. As such, the wording of policies should be carefully checked. **Automation of insurance, including agricultural insurance, needs to be supported to enable smallholder farmers** to insure their farm produce while observing COVID-19 lockdown measures.

Enabling access to finance: The CASA Project can prioritize establishing a grantee fund at a well-selected financial institution to enable smallholder farmers and agribusinesses to access agriculture-related loans with modified loan requirements. This proposed fund can be retained by the bank and act as a buffer to help struggling SMEs and farmers along the loan repayment process. Clear modalities can be developed in consultation with the respective financial institution. This financial facility will stimulate or catalyse agribusinesses and smallholders to improve their struggling enterprises as a result of the COVID-19 pandemic. Such finance catalysts will also facilitate agribusinesses to address challenges such as the limited stocking of agricultural products, equipping aggregation sites at the agent buyers with testing kits for quality assurance, etc.

While at policy level, engagements should focus on the following.

From the survey, the analysis indicates that MSMEs in Uganda are feeling the squeeze in the face of COVID-19 and associated business restrictions. The researcher recommends that the authorities should offer liquidity interventions to support firms in addressing immediate liquidity challenges, reducing layoffs and avoiding closures and bankruptcies. To free up more cash for businesses, the government may consider the following: (i) ***reducing the tax rate; (ii) reducing taxable income; (iii) offering tax credits; and (iv) offering tax refunds***. In addition, the government should pay all the outstanding arrears against supplies made to government.

Commercial banks should consider ***proactively providing emergency loans to MSMEs with flexibility in repayments***. The government could recapitalize commercial banks and microfinancial institutions by extending cash loans or by loosening the liquidity reserve requirements to provide financial institutions with the extra liquidity required to provide flexible emergency loans. The above efforts could be complemented by extension and diversification of

partial credit guarantee schemes for loans provided by private banks, including agricultural loans to agribusinesses. Alternatively, the government could offer concessional loans through the Uganda Development Bank. In this vein, the Government of Uganda has already sought and received a US$ 500m loan from the International Monetary Fund. The government is also seeking debt repayment rescheduling, which would free up to US$ 2bn for such purposes.

Finally, the ***Credit Reporting Bureau*** should be on the lookout for unintended defaults. In this case, all financial institutions should continue to share credit information with regulators. Finally, the government should consider amending the legal framework on bankruptcy with temporary measures to prevent liquidation.

Annex I: Sources

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Annex II: Survey tools

A. Interview guide for smallholder farmers

1. What are the main crops grown in this area? Which one of them are food/cash crops?
2. What is the trend in production of these crops and how can it be explained since 2019?
3. What are the smallest, average and the largest farmers for these crops?
4. How do you obtain inputs you use in production of these crops during this COVID period? (Probe land, labour, seed, machinery/ox-ploughs/hoes, chemicals/drugs, fertilizers, extension services)
5. Which common crop varieties are being grown here since January 2020? Does anyone of them outperform the others?
6. (Probe yields, pest and disease resistance, consumption attributes, etc.)
7. Do you produce these crops individually or collectively and why? (Probe acreage for block farms)
8. Do you follow recommended agronomic practices in the production of these crops? Why? or
9. Why not? (Probe seed selection, row planting, crop rotation, pest and disease control, manuring/ fertilizing, post-harvest technologies, etc.)
10. What are the key constraints to producing these crops?
11. In case there is any natural disaster in your area, what control measures do you always take to minimize damage to your crops?
12. For the crops you have had to deliver to different markets, how have you managed to market your produce during this COVID period while observing lockdown restrictions?
13. During this COVID period, what coping mechanisms have you applied to manage any food insecurity at household level?
14. What are the economics of production of these crops?

Cost of production of selected crops

Item	Unit cost	Total cost
Land rent		
Water		
Land clearing		
Seed bed prep		
Seed		
Fertilizers and application		
Nursery bed		
Planting/transplanting		
Thinning		
Weeding		
Chemicals and spraying		
Harvesting		

Post-harvest handling		
Others (specify)		

15. What should be done to enhance the production of these crops? What roles can you and can you not play to achieve the above goal?

B. Interview guide for input dealers

1. When did you start your organization/business?
2. What is the size of your organization and in which areas do you operate in Northern Uganda?
3. What kind of inputs are you dealing in and how do you procure them? Which of these inputs are related to the sesame/cassava/ground nut/soybean/sorghum/maize/rice value chains? (Probe: machinery, equipment, seeds, chemicals etc.)
4. What are their selling prices and how do you determine these prices? (Probe: buying prices, transport costs, etc.)
5. Who are your customers and who among them are the most important and why? (Probe: individuals, government organizations and NGOs, civil society organizations)
6. Do you provide any augmented services or after-sales services to your customers besides selling those inputs, and what are these services during normal/COVID periods? (Probe*:* credit, production and market information, transport, training, demonstrations, repair, spares)
7. Do you charge your customers for any these services and what do the rates look like?
8. What challenges are you currently facing in this business?
9. What can be done to mitigate these challenges and by whom?
10. Do you know of any input dealer operating in this area? Who are they and what do they deal in?

C. Interview guide for traders/exporters

1. Which crop commodities do you trade in and what volumes are traded annually?
2. Who are your main clients (buyers)?
3. Who are you currently selling to? If different from the past, what are the reasons for the change?
4. Where and how did you find your clients for the first time?
5. How do you learn about your clients' preferences? (Probe: order quantities, types of product preferred, standards, quality requirements, delivery dates)
6. What type of storage do you have currently? What is your storage capacity?
7. If you desired a different form of storage, what would that be and why?
8. How is power wielded among value chain actors? Who holds it and who benefits from it? Do actors in the chain enjoy equal or fair bargaining power? What are their individual and collective capacities to negotiate? Can value chain intervention redress any imbalance?
9. How would you characterize your relationships with your principal clients? (Probe*:* independent, close, collaborative, difficult, lots of information passes between you, client is in charge, they direct you)
10. Would you say that, in your relations with your clients, there is a lot of trust, there is some trust or there is no trust? Why?

11. In thinking about one or two of your principle clients, how has your relationship changed with these clients from the beginning up to now?
12. Does your firm receive any assistance/help or collaboration from your clients? (Probes: advances, credit, information, inputs, technical assistance, recommendations)
13. What steps do you usually take to ensure that you meet your clients' specifications, including delivery date and quality? (Normally, how difficult is it to comply with your clients' requirements? What do you have to do?)
14. What challenges do you face in your business arising out of the operating environment (corruption, bureaucracy, transparency)?
15. Does upgrading the value chain have potential to open new avenues and opportunities for corruption or bureaucracy? How can this be mitigated?
16. Are there policies related to the value chain business economic environment that cause conflict among chain actors or with others? Are there policies benefiting one group of actors at the expense of another?
17. What is the government's role in your industry? Do you view their activities positively or negatively?
18. What are the challenges exporting crop commodities during this COVID period? Are there any special challenges exporting to Uganda, Sudan, Kenya, Egypt, etc.?
19. How do you arrive at the sale price? What are the factors influencing this price?
20. What prices are you currently trading crop commodities?

D. Interview guide for processors

1. What are the main products that you sell?
2. What are all the ways that you sell your products (market outlets)? To whom do you sell your products?
3. What are the differences between your clients? To whom do you prefer to sell? (Probes: frequency, price, bargaining/negotiating costs, volume, quality, consistency)
4. How do you learn about the new products that buyers want? How do you learn about market taste and quality requirements?
5. How did you first meet your clients/buyers?
6. Do you receive any form of assistance/help from your clients/buyers? (Probe: cash advances, advances in materials, training, transport, record keeping)
7. What steps to you take to meet your client/buyers specifications, including delivery dates and quality?
8. What challenges do you face when it comes to your buyers during this COVID period?
9. What technological solutions should be provided during this COVID period?

Suppliers/producers

1. What are all the ways you obtain the products to process? Who are your suppliers?
2. What are the differences between the suppliers you work with? (Probe: quality, price, punctuality, standards, volume, costs of collecting raw materials, risks)
3. Which type of supplier do you prefer to buy from?
4. Do you buy directly from farmers? If so, do you buy from individual farmers or from groups of farmers? What is the typical landholding of the farmers you buy from?

5. What kinds of help or services do you provide to your suppliers? (Probe: inputs, seeds, credit, market information, irrigation techniques, technical assistance in better farming practices, help with certification)
6. How have you communicated your product requirements to your suppliers?
7. What are the difficulties suppliers have in meeting your requirements (prior and during COVID period)?

E. Interview guide for retailers

1. Which crop commodities are you dealing in and in what quantities? What prices do you charge currently?
2. What storage capacity do you have currently? What form does this storage take?
3. Would you prefer a different form of storage? If yes, what form would that take?
4. Do you buy unprocessed produce? If yes, how much do you pay?
5. Do you have your own processing facilities? How much does processing cost?
6. Can you please explain all the ways that you buy your supplies? Who are your suppliers? (Probe: gender, scale, location)
7. What are the differences between the suppliers you work with? In other words, what are the characteristics of each type of supplier? (Probe: quality, price, punctuality, standards, volume, costs of collecting products, risks)
8. Which type of supplier do you prefer to buy from? Why?
9. Do you buy directly from farmers? If so, do you buy from individual farmers or groups of farmers? What is the typical landholding of the farmers you buy from?
10. Who are your most important suppliers? What makes these the most important?
11. How many suppliers (of each type) do you buy from?
12. How do you first find your suppliers? (Probe: people you know, contacts, family, neighbours, language groups)
13. What kinds of help or services do you provide to your suppliers? (Probe: inputs, credit, advice on market demand)
14. How do you communicate your product requirements to your suppliers (prior and or during the COVID period)? (Probe: quality of produce, size and appearance, delivery dates)

F. Interview guide for government officials

1. To start with, can you please provide general information about this area in terms of geographical/political units, population, major economic activities and how it is recovering from the civil war impasse?
2. What is the importance of the agricultural sector to the economy of this area? (Probe: food security, incomes, exports – especially to South Sudan)
3. What role does government currently play in the agricultural sector in this area? Has this role changed overtime and why? (Probe: research, extension, input distribution, credit, production, transportation, processing, marketing)
4. In particular, what is the capacity of your agriculture department? How many staff are available, which roles do they serve and how are they facilitated?
5. How about the private sector – what role does it currently play in the agricultural sector in this area? Has this role changed overtime and why? (Probe: research, extension, input distribution, credit, production and market information, production, transportation, processing, marketing)
6. Do you know of any community-based organizations/NGOs operating in this area with a focus on the agricultural sector?
7. Which are they and what do they do?

8. What do you see as being constraints on the increased performance of the agricultural sector in this area?
9. Which strategic interventions has government so far put in place to boost agricultural production in this area?
10. What has the government done to boast agricultural production during COVID in preparation for the post-COVID season?

G. Interview guide for financial institutions

1. When did you start this business and from where? How big is your organization? Do you have any branches elsewhere?
2. When did you begin your operations in this area?
3. Which financial products do you have in general? Which of these products are targeted at farmers and agribusinesses? What proportion of the total loan portfolio is dedicated to agriculture?
4. How many farmers and agribusinesses have over time obtained credit from your organization? What are the loan sizes offered – smallest, average, largest?
5. What conditions do you set for them to access loans from your organization? Do you require them to save with your organization? What interest rate do you charge at the moment?
6. What proportion of applicants meets these conditions? Do you extend any waiver to those who do not meet credit conditions?
7. How do you monitor those farmers and agribusinesses who obtain loans from your organization?
8. What are the repayment rates for farmers and agribusinesses over time looking like prior to and during the COVID period?
9. Are there any institutional problems that impede your operations in serving farmers and agribusinesses?
10. What should be done to remove these impediments, especially during this pandemic period, and who should do what?
11. Do you know of other financial institutions lending to farmers and agribusinesses in this region?

Annex III: List of respondents

s/n	Agribusiness/institutions/farmers
1	ORUM Marketing and Agro-processing Co-Operative Society Limited
2	Lango Joint Farmers' Co-Operative Society (LAJOFA)
3	Equator seeds/Equator Comm. Impex LTD
4	Mungu Yiko Trading Stores
5	Trutrade Africa
6	Lira Resort Enterprises
7	Global Traders Ltd Oil Millers
8	Oasis Agribusiness
9	Quadrant Exports Uganda Limited
10	AFRIPORT International (U) LTD
11	Rocpaco Grain Millers
12	Princo Group (U) Limited
13	Gulu Agricultural Development Company
14	Uganda Oil Seed Producers & Processor's Association
15	Smallholder farmers
16	Ngetta Zonal Agricultural Research and Development Institute

CASA

Commercial Agriculture for Smallholders and Agribusiness

The CASA programme makes the commercial and development case for investing in agribusinesses that source produce from smallholders. It does this by demonstrating how this can be done effectively, by bridging evidence gaps and by ensuring investors and policymakers have access to the right information and people to make inclusive agribusiness models succeed.

By showcasing successful models for businesses that source produce from smallholders and pulling together the evidence base supporting the commercial and development impact of their business models, CASA will attract more investment into the sector, boosting economic growth and raising demand for smallholder produce.