UNITED NATIONS UGANDA

# LEAVING NO ONE BEHIND

## FROM THE COVID-19 RESPONSE TO RECOVERY AND RESILIENCE-BUILDING

## ANALYSES OF THE SOCIOECONOMIC IMPACT OF COVID-19 IN UGANDA

JUNE 2020

# Leaving No One Behind: From the COVID-19 Response to Recovery and Resilience-Building

Analyses of the socioeconomic impact of COVID-19 in Uganda

# Table of Contents

# Acknowledgements

This report was prepared by the United Nations (UN) Country Team in Uganda in line with the UN Secretary-General's recommendation on the need for socioeconomic support to countries and societies in the face of COVID-19 as espoused in the *Shared Responsibility, Global Solidarity* report and the UN Framework on Immediate Socio-Economic Response to COVID-19. The report fits within the three core areas of the UN's efforts to save lives, protect people, and support countries to better rebuild from COVID-19. It complements the health response, led by the World Health Organization (WHO), and the humanitarian response, outlined in the UN-led COVID-19 Global Humanitarian Response Plan and sets a pathway for recovery and future resilience-building.

The United Nations Development Programme (UNDP) has been designated by the UN Secretary-General as the technical lead on the socioeconomic pillar of the UN support. In Uganda, UNDP provided technical leadership to the drafting and consolidation of the report under overall leadership of the UN Resident Coordinator.

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The specific chapter contributions were as follows:

**CHAPTER 2:** By UNDP, with inputs from the United Nations Capital Development Fund (UNCDF) on remittances, and the United Nations Economic Commission for Africa (UNECA) on trade;

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# List of Acronyms and Abbreviations

| | |
|---|---|
| AfCFTA | Africa Continental Free Trade Area |
| AUTO | Association of Uganda Tour Operators |
| BCC | Behaviour Change Communication |
| BoU | Bank of Uganda |
| CAB | Current Account Balance |
| CG | Central Government |
| CGE | Computable General Equilibrium |
| CSO | Civil Society Organizations |
| FAO | Food and Agriculture Organisation |
| FEWSNET | Famine Early Warning Systems Network |
| FNSSA | Food and Nutrition Security and Sustainable Agriculture |
| GDP | Gross Domestic Product |
| GTAP | Global Trade Analysis Project |
| HDI | Human Development Index |
| IMF | International Monetary Fund |
| IOM | International Organisation for Migration |
| iSDG | Integrated Sustainable Development Goals (Model) |
| KCC | Kampala Cultural Centre |
| LG | Local Government |
| LMICs | Low and Middle Income Countries |
| LST | Local Service Tax |
| MAAIF | Ministry of Agriculture, Animal Industry and Fisheries |
| MOES | Ministry of Education and sports |
| MoFPED | Ministry of Finance, Planning and Economic Development |
| MoH | Ministry of Health |
| MSEs | Micro and Small Enterprises |
| MSME | Micro Small and Medium Enterprises |
| NDP | National Development Plan |
| NHDI | National Human Development Index |
| NLFS | National Labour Force Survey |
| NPA | National Planning Authority |
| NSPP | National Social Protection Policy |
| NSSF | National Social Security Fund |
| NUSAF | The Northern Uganda Social Action Fund |
| RMCAH | Reproductive Maternal, New-Born, Child and Adolescent Health |
| RMS | Rwenzori Mountaineering Services |
| SACCO | Savings and Credit Cooperative Society |
| SAGE | Social Assistance Grant for Empowerment |
| SAM | Social Accounting Matrix |
| SCG | Senior Citizens' Grant |
| SDGs | Sustainable Development Goals |
| SDSN | Sustainable Development Solutions Network |
| SIR | Susceptible-Infected-Recovered |
| TUGATA | The Uganda Travel Agents Association |
| UNCDF | United Nations Capital Development Fund |
| UNCTAD | United Nations Conference on Trade and Development |
| UNDESA | United Nations Department for Economic and Social Affairs |
| UNDP | United Nations Development Programme |
| UNECA | United Nations Economic Commission for Africa |
| UNESCO | United Nations Educational Scientific and Cultural Organization |
| UNHS | Uganda National Household Survey |
| UNICEF | United Nations Children Fund |
| UNMS | Uganda National Manpower Survey |
| URA | Uganda revenue Authority |
| UTB | Uganda Tourism Board |
| UVRI | Uganda Virus Research Institute |
| UWA | Uganda Wildlife Authority |
| VAT | Value Added Tax |
| WASH | Water Sanitation and Hygiene |
| WFP | World Food Programme |
| WHO | World Health Organization |

# Executive Summary

## OVERVIEW

This report has been developed in line with the recommendations of the United Nations Secretary-General on the need to assess the socio-economic impacts of COVID-19 guided by the 2030 Agenda for Sustainable Development and its central thrust to 'Leave No One Behind' (LNOB).

**It focuses on a series of in-depth analyses by the United Nations Country Team (UNCT) in Uganda, generating quantified values for actual and potential losses for Uganda's economy and vulnerable groups as a result of the COVID-19 pandemic (hereafter referred to as "the pandemic").** It analyses the magnitude and nature of impact on selected sectors and segments of the population which are deeply affected by the outbreak and identifies the most effective interventions to address the short, medium and long-term impacts. The sectors and segments of the population assessed have been identified based on the potential transmission channels of impact, viewed through the lens of LNOB.

**It is important to note that analyses and projections in this report are made under conditions of high uncertainty, volatility and data gaps as the COVID-19 crisis continues to progress.** While efforts were undertaken to ensure the quality and robustness of the analyses herein, in light of the rapid nature of these estimates and findings, the conclusions should not be seen as perfect predictions of how the COVID-19 crisis will play out in Uganda, but rather as an evidence-based picture of the range of possibilities that the country may face, and therefore, the strategic recommendations put forward for consideration by Government and development partners during the response, recovery and resilience building periods.

**The report provides a unique attempt to assess the potential implications of the COVID-19 response on the achievement of the Sustainable Development Goals (SDGs) while recommending caution where elements of the response could result in SDG regression.** It also examines the efficacy of social protection measures for mitigation of the impacts of the pandemic and highlights interventions that could achieve maximum impact. The report extensively assesses the structure of Uganda's private sector ecosystem and the potential implications of the pandemic for businesses including tourism and manufacturing. Most importantly, articulation is made on select sectors that have immediate bearing on the entire population, providing entry points to enable the country to keep the most vulnerable and marginalized in view. The policy recommendations are relevant for any revision of Uganda's National Development Plan III (NDP III) in light of COVID-19.

## APPROACH

**The conceptual framework established in this report envisages the pandemic to impact on Uganda through several transmission channels.** These include direct impacts of the pandemic on public health systems, and indirect effects largely caused by responses of state and non-state actors to contain the pandemic. The impact is also envisaged to vary by location, socio-economic status and level of vulnerability and resilience to shocks, and as a result of the level of effectiveness of governance. These additional dimensions are assessed through the lens of LNOB framework.

**In establishing the impact of the pandemic, the report uses a mix of qualitative and quantitative approaches.** These include: application of Global Trade Analysis Project (GTAP) model and Social Accounting Matrix (SAM) Multiplier Model to assess the implications of the pandemic for the macro economy; collection and analysis of survey data to capture behaviours of firms and businesses across sectors, combined with historical data and key informant interviews with industry actors to investigate the impact on and envisaged recovery of the real economy and Micro, Small and

Medium Enterprises (MSMEs); the use of the integrated Sustainable Development Goals (iSDG) model to build scenarios on the potential impact of Government response on achievement of the SDGs; and micro-simulation using national household surveys to assess the envisaged poverty and vulnerability dynamics, and efficacy of social protection measures.

## SELECTED KEY FINDINGS

**While all sectors of the economy will be impacted by COVID-19 pandemic, the crisis will disproportionately affect service and manufacturing sectors.** Some of the effects may include: a direct loss of US$5 billion in the tourism sector during the next 5-year period (2020-2025); further deterioration of fiscal deficit due to the dampening of revenue collection and increased spending needs for response and recovery efforts; a decline in remittances; and deterioration of Foreign Direct Investment (FDI) following the impending global recession.

**National poverty rates could rise between approximately 2 and 8 percent points.** This could disproportionately impact on categories such as older persons, women, households with a high ratio of persons with specific needs in addition to those with refugee or migrant status and marginalized groups such as Indigenous communities. The increase in unemployment could increase the poverty rate among wage earning households by 15.7 percentage points. Targeted social protection programmes have been found to have significant potential to cushion the impact of COVID-19 on poverty and inequality. Thus, social spending is not only aimed to protect the lives of the most vulnerable and marginalized and providing a cushion to avoid households and vulnerable groups from reliance on negative coping strategies but rather is an investment that can provide beneficial returns to the economy.

**While SDGs are impacted across the board, potential impacts are likely to be most severe for the following SDGs: Eliminating Poverty (SDG1), Zero Hunger (SDG2), Good Health and Well-Being (SDG3), Gender Equality (SDG5), and Decent Work and Economic Growth (SDG8).** The effects will be more severe if the Government undertakes significant reallocations within the budget to finance response and recovery, as opposed to borrowing. In other words, the analysis indicates that shifting money previously allocated in the budget for various development objectives could derail progress towards several SDGs, indicating that this is a good time to mobilize external resources.

**There have been disruptions in food supply chains threatening food and nutritional security.** Emerging effects to the agricultural sector include labour shortages, disruption in the supply of farm inputs for both crops and animals, increase in post-harvest losses, especially for perishables due to reduced demand and price collapse, a temporary spike in prices of cereals, and dry products due to panic buying and convenience for bulk storage by households. Severe impact has been felt in the poultry and fishing industries owing to sharp decline in demand and challenges in accessing inputs. Net food-buying households are severely impacted, compounded by loss of household incomes, while subsistence farmers with access to food from own-production could maintain minimal food requirements despite critical hits on income.

**Reduced incomes of informal Micro Small Enterprises (MSEs) have taken a heavy toll;** for example, 46 percent of workers employed in informal businesses in the manufacturing sector have been pushed below the poverty line, with a similar trend in the hospitality industry (43 percent), and trading and services (41 percent), with a disproportionate impact on women. Informally employed women working in markets have been heavily impacted. Only about 15 percent of formal enterprises could sustain more than three months of operation on their current cash flow, affecting employment and business operations.

**The reduction in Central Government releases of non-wage recurrent budget to Local Governments (LGs) is likely to impact service delivery.** This will be compounded the loss of LG revenue from property income, sale of goods and services as well as other statutory fees and fines, leading to a combined fiscal gap of UGX 15.7 trillion (approx. US$4.15 billion).

**Additionally, impacts on health and the knock-on effects of the response in the health sector may significantly impact the welfare of Ugandans, those who have pre-existing health conditions or are otherwise vulnerable or marginalized.** This will also impact overall human development and supporting LGs to ensure continuity of health service delivery is critical.

**The analyses in the report and key findings indicated above will have critical implications for Uganda's national development planning and budgeting (Table 0-1).** Particularly moving into the initial periods of the third National Development Plan (NDP III), these impacts will need to be addressed.

**Table 0-1. Potential impacts on expected results of the third National Development Plan (NDPIII 2020/21-2024/25).**

Note: The Likely Impact of COVID-19 column indicates areas where the report has found: 1) direct negative impact on the expected results of NDPIII or 2) the direction of the expected impact could go either way or 3) areas where the containment measures have already led to new innovations. Rather than providing a comprehensive picture, this analysis is based on selected sectors but it remains pertinent in pointing to areas that the plan could emphasise to prevent derailing the originally envisaged direction of NDPIII.

| NDPIII National Outlook | Selected NDPIII Assumptions and Expected Results | Likely Impact of COVID-19 |
|---|---|---|
| Economic growth and macroeconomic  | Real GDP growth is estimated to range between 6-8% during this period supported by continued productivity enhancement. | Growth expected to decline to 2.5 percent in 2020 and 3.5 percent in 2021 according to UNDESA, and 3.5% in 2020 and 4.3% in 2021 according to IMF (Chapter 2). |
| | The Economic Growth Strategy that underpins the NDP III is built on the need for rapid industrialization of the Ugandan economy linked to high productivity and production in agriculture; while nurturing the potential of the tourism, minerals, oil and gas sectors. | The situation is dire for the tourism sector will lose more than US$5 billion in revenue over the next five years, and the situation is also dire for manufacturing sectors and trade (Chapter 2). |
| | About 520,000 jobs will be created annually during the NDPIII period. | Rather than adding in additional jobs, the beginning of the NDPIII period will need to focus on bringing back jobs, particularly for the most vulnerable and marginalized groups (Chapters 2, 4 and 6). |

| | | |
|---|---|---|
| | The revenue strategy over the NDP III period will focus on improving compliance and efficiency in tax revenue collections through implementation of the Domestic Revenue Mobilization Strategy (DRMS). | Loss of household incomes and decline in private sector activity, in addition to Government tax cuts as a part of the June 11 stimulus, will decrease tax collection (Chapter 2). |
| | Concessional loans from multilateral creditors will continue to be an important source of financing for NDPIII, averaging at 1.7% of GDP over the period. | Mobilizing of external resources will continue to be critical in the post-COVID-19 era but will also require a careful look at debt sustainability (Chapters 2 and 7). |
| | The overall current account balance (including grants) is set to improve from a deficit of 8.2% of GDP in FY 2020/2021 to 5.1% in FY 2024/2025. | The loss of remittances, for example, poses a major threat to Uganda's BoP. (Chapters 2, 4 and 6) |
| **SELECTED NDPIII PROGRAMMES** | | |
| **Agro-industrialization** | The expected results of this programme include increasing export value of selected agricultural commodities, increasing the agricultural sector growth rate, increasing labour productivity in the agro-industrial value chain, creating jobs in agro-industry, and increasing the proportion of households that are food secure. | Although the agricultural sector was not as hard-hit as other sectors, several challenges have been encountered such as price fluctuations and difficulty in accessing inputs. These, in turn, will impact productivity and value addition, meaning that the Agro-industrialization programme may need to focus on catching up at the beginning of the NDPIII period. (Chapter 3) |
| **Tourism Development** | Among other expected results, this programme seeks to increase tourism arrivals and revenues as well as employment in the tourism sector | The tourism sector has been extremely hard-hit by the COVID-19 travel restrictions and containment measures, as Chapter 2 details. The sector will require immediate support and resuscitation and ultimate NDPIII targets may need to be adjusted. (Chapter 2) |
| **Private Sector Development** | Anticipated results of this programme include reduction of the informal sector, strong and competitive MSMEs, increased proportion and value of public contracts and sub-contracts that are awarded to local firm, and increased volume of private sector investment in key growth areas. | Formal and informal enterprises have been heavily affected. Immediate support is needed to resuscitate MSMEs, including support to informally employed women. (Chapter 4) |
| **Manufacturing** | This programme seeks to increase share of manufactured exports to total exports, growth in the industrial sector contribution to GDP, and increase share of labour force employed in the industrial sector. | The manufacturing sector has felt significant impact, with firms cutting down on production and labour. (Chapter 2) |

| | | |
|---|---|---|
| **Human Capital Development**  | The Human Capital Development programme's expected results include increased proportion of labour force transiting to gainful employment; increased years of schooling; improved child and maternal outcomes; increased life expectancy; access to safe and clean water and sanitation; and increased access by population to social protection. |  The gaps in human development between different sub-regions and socio-economic and demographic groups in Uganda will widen, partly impacting poor, vulnerable, and marginalized groups. The impacts to health and the health sector will also widen this gap. The policy recommendations in the report strongly support expanding social protection. (Chapters 5 and 6). |
| **Innovation, Technology Development and Transfer**  | Among other expected results of this programme, Gross Expenditure on R&D and business enterprise sector spending on R&D will be increased, as well as improvement of the country's global innovation index. |  The COVID-19 pandemic and containment measures have resulted in new innovations and applications of technology, such as e-working and e-platforms. (Chapters 5 and 6) |
| **Regional Development**  | This programme seeks to support regional economic growth and development, focusing on sub-regions that have been left behind, such as those in Eastern and Northern regions. |  The pandemic may result in widening economic disparities between sub-regions and worsening of vulnerability for those populations that are already vulnerable and marginalized. The report's policy recommendations offer insights into how this can be addressed. (Chapters 5 and 6) |
| **Plan Implementation**  | This programme is intended to increase GDP growth rate and revenue and result in improvements in alignment of plans and budgets. |  The massive disruptions will affect at least the initial one to two years of the NDPIII period. A robust response and recovery plan is required to cushion NDPIII. (Chapters 2 and 7) |

## POLICY RECOMMENDATIONS

### MACRO ECONOMY AND REAL SECTORS

**Ensure that national development planning and budgeting accommodates new realities. Urgently draw a comprehensive costed recovery plan and COVID-19 "exit strategy."** This should involve a multi-sectoral team led by Ministry of Finance, Planning and Economic Development (MoFPED) to inform the actions of both Government and non-state actors. In addition to the health sector, the plan should make special consideration for the most directly affected sectors such as tourism and logistics to protect employment. National Planning Authority (NPA) and MoFPED should factor in how the pandemic will affect NDPIII assumptions for the next five years and take appropriate action in building the resilience of the economy. In addition, the implementation plans for the 18 programmes outlined in the NDP III should seek to integrate key recommendations from this report.

**Build the capacity of firms to enhance resilience of the manufacturing sector by supporting the retooling of human resource capacities and production processes;** diversify input markets to act as buffer against crises and to insulate the industry against any short-circuiting of input supply chains; adopt digital technologies to build vibrant production-marketing-distribution-consumption value chains; access low cost long-term financing by, in part, incentivizing the financial sector to develop tailored services.

**Develop a comprehensive tourism recovery plan by advancing fundamental changes such as creative interventions to support businesses,** restoration of travellers' confidence, stimulation of demand including in non-traditional countries, and extending support to critical private tourism products (such as cultural centres, forests) for a minimum of two years to avoid collapse and re-allocation to alternative economic uses; and social protection for communities that benefit from tourism services in order to protect wildlife.

### FORMAL AND INFORMAL PRIVATE SECTOR

**Develop a comprehensive recovery package to support businesses' essential needs. Such a package could entail:** 1) support of informal businesses to transition to e-commerce platforms and home delivery applications to retain and increase their customer base; 2) establishment of a fund for facilitating uptake of innovative and/or digital-based business ideas and technology innovations; and, 3) continued and vigorously enforcement of eviction freezes due to non-payment of the rent including waiver or deferment for spaces leased by the Local Government level to prevent business closure, at the same time, guaranteeing landlords.

**Protect current employment through a stimulus package to support informal MSEs.** A stimulus or support to the informally-employed persons, or with their own MSEs, would help offset inevitable economic hardships. This could amount to a direct subsidy to informal MSE, including market vendors. In addition, offering free or subsidized vocational and skill training for employees who may experience structural unemployment as a consequence of the pandemic, with the intention to skill them for activities which enjoy higher demand. Results indicate that this measure would be effective in supporting informal workers and keeping many Ugandans out of poverty.

### DECENTRALIZED SERVICE DELIVERY

**Promote e-Governance, including at the Local Government (LG) level.** Government at all levels should embrace the use of digital technologies in offering their services. Such new modes of operation will: make staff more efficient and effective; fast-track response in times of crises; enhance revenue mobilization efforts; improve monitoring of service delivery; and, enhance coordination with central government operations.

**Create adequate fiscal space for LGs to implement emergency response measures, ensure continued delivery of basic services, support local economies and prepare for recovery.** Introducing a flexible financial mechanism to allow a timely and comprehensive response by Local Governments is needed to boost basic service delivery in Uganda in post-COVID-19 period. This is also particularly critical considering the knock-on effects for the health sector and delivery of health services, in the emergency phase through to the recovery phase. The Government has already moved in this direction by allocating operational funds to the District Task Forces. However, neither the amounts nor the type of eligible expenditures fits the challenge faced by LGs. Additional resources required for the LG response should come from re-prioritization of central and local budgets, and external resources.

## POVERTY AND VULNERABILITY

**Control the spread of coronavirus in the shortest time possible to reduce the negative impact of the pandemic on the lives of Ugandans and the economy.** Effective, swift measures will help to contain the pandemic impact, in terms of both losses of lives and morbidity, and to reduce the time it takes to re-establish normalcy in economic and social development activities. Furthermore, acting now and effectively will help to reduce the medium-term and long-term impacts on SDGs, particularly poverty, hunger, health, and inequality.

**Expand social protection to support vulnerable and marginalized populations, going beyond emergency transfers and ensuring that social protection is shock-responsive, by in part**: 1) working with state and non-state actors, developing a costed rapid Social Protection Plan; 2) re-purposing and scaling up existing programmes, complemented with rapid assessment by Local Government to identify the most vulnerable and marginalized, and assessing the most effective delivery mechanism; and 3) establishing a physical and automated platform for coordination and resource mobilization for support to the vulnerable and marginalized.

## AGRICULTURE AND FOOD SECURITY

**Strengthen the production, storage and conservation capacity to ensure food availability, by:** 1) scaling up the distribution of agricultural inputs and provision of animal health support to ensure continuous food production and income generation in the most vulnerable areas, especially zones prone to drought, desert locusts, and flooding; 2) supporting livelihood diversification and home-based food production; 3) reducing post-harvest losses through improved storage capacities, small-scale processing and conservation of the perishables; and 4) supporting food production in refugee settlements and host communities to improve access to food and healthy diets for the vulnerable.

**Ensure continuity and stability of food systems functions to support food supply.** This can be accomplished by: 1) re-invigorating the National Strategic Food Reserve System, and instituting Community Food/Seed Banks; 2) establishing an appropriate mechanism to shift school feeding programmes to other channels (for instance, churches, parishes, NGOs, food banks and traditional leaders) to ensure continuity of food access to school-aged children during containment; 3) operating digital-facilitated operations to facilitate food deliveries, distribution times and dietary recommendations and hygienic measure to reduce risk of contamination.

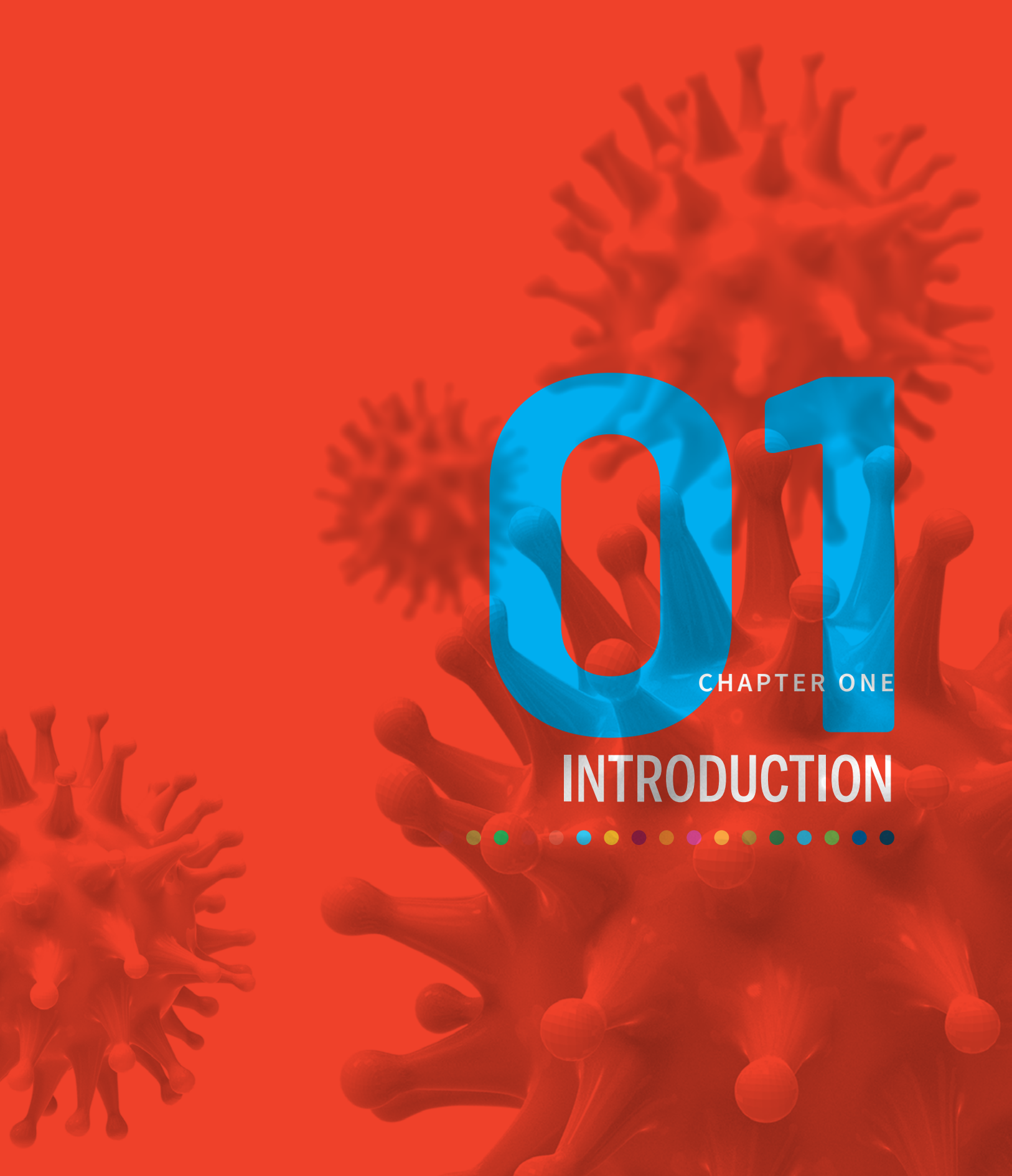
## SDG ACCELERATION

A cautious mobilization of external resources to stimulate all sectors, combined with repurposing of wasteful expenditures, as opposed to reallocation of resources from development programmes could reduce the negative impact of the pandemic on the SDGs. Development partner support in mobilizing new sources of financing is critical in advancing Government efforts.

Expand investment in SDG accelerators that were identified by the integrated Sustainable Development Goals (iSDG) modelling, primarily interventions under the Governance and Industry categories, to propel progress for the entire spectrum of SDGs. Fast-tracking the strengthening of governance systems provides a leverage point for improving performance on the SDGs and thinking beyond the emergency containment phase and transition phase, into the sustainable recovery phase of the response.

## ENVIRONMENTAL SUSTAINABILITY AND GREEN GROWTH

Investments in environment, natural resource management and disaster risk reduction will be an imperative in the recovery and overall resilience building of the country. COVID-19 in Uganda exposed both opportunities and vulnerabilities and in addressing environment and climate change. With economic restrictions and COVID-19 lockdown, the country saw an improvement in air quality by 40 percent in Greater Kampala, but the COVID-19 crisis also exposed vulnerabilities in the country's capacity to address multiple simultaneous disasters, as well as increased degradation of natural resources such as encroachment on wetlands and forests as well as illegal hunting and poaching of wildlife. Disaster occurring simultaneously with COVID-19 include flooding, such as the bursting of major rivers such as Nile and Victoria, causing major power disruptions, and desert locust invasion. Moving towards "building back better," efforts should be made to substantively invest in reducing the country's exposure to risks and vulnerabilities associated with ecosystem degradation, as well as investments in national systems and processes that enhances capacity of the country to respond to disasters.



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CHAPTER ONE

# INTRODUCTION

# 1.1 Background: COVID-19 Trends and Broader Implications

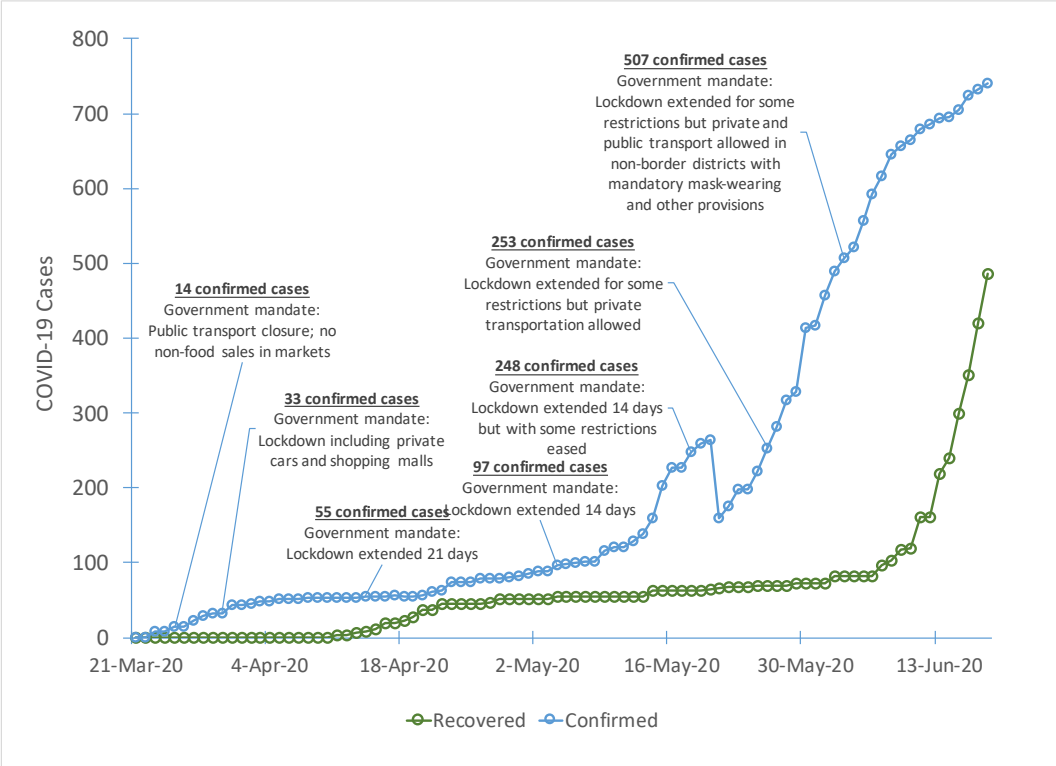
**The outbreak of corona virus, and the disease COVID-19 that it causes began in Wuhan, China, in December 2019.**[1] The virus is spreading globally at an alarming rate, with 8,501,444 confirmed infections and 454,215 deaths as of 19 June 2020. Although COVID-19 was initially slower in taking root in Africa as a whole, and Sub-Saharan Africa specifically, cases have spread rapidly since February and March 2020. Since the first case was recorded on the continent on February 14, 2020 (February 28 for Sub-Saharan Africa), Africa has registered 276,885 cases and 7,425 deaths, with 127,698 recoveries as of 19 June 2020. Within Eastern Africa and the Great Lakes Region, the Democratic Republic of Congo (DRC) and Kenya have the highest numbers of confirmed cases, 5,283 and 4,257 respectively, followed by Ethiopia (3,954), South Sudan (1,830), Uganda (741), Rwanda (646), and Tanzania (509). Rwanda recorded the first regional death from COVID-19 at the end of May 2020.[2]

**It has been observed that prompt reactions from many countries in the East African sub-region, such as implementation of strict measures including travel bans, border closures, curfew and social distancing, helped to contain the spread to some extent.** Although these measures are unlikely to be fully effective, they have been seen to delay the outbreak and allow governments to prepare. Despite such efforts, there is no proven therapy or vaccine against the virus available yet as of June 2020. Public health analysts indicate that COVID-19 is likely to have a profound impact on lives for many months.[3]

**In Uganda, the number of COVID-19 infections has risen sharply (Figure 1).** Only nine days after the first case was recorded on March 21, 2020, by March 30 the cases had risen to 33. As witnessed in other African countries, the number of new infections continued to rise.[4] However, in the weeks following the initial cases, Uganda saw strong rates of recovery for its COVID-19 cases and, as of 19 June 2020, had not recorded any deaths (Figure 1).

1 The outbreak was declared a Public Health Emergency of International Concern by the World Health Organization on 30 January 2020 (WHO, 2020).
2 (WHO, 2020)
3 (Kissler et al., 2020)
4 (WHO, 2020)

**Figure 1. Trend of cases of COVID-19 in Uganda, and government mandates.**




*Data source: WHO COVID-19 Database, accessed 19 June 2020.*

**The outbreak of coronavirus is not only a public health emergency causing large-scale loss of life and human suffering, it also poses a major threat to the economy.** According to the IMF (2020), Uganda's growth is expected to fall to 3.5 percent down from 4.9 percent in 2019, while per capita GDP growth will decline to -0.2 percent. On March 20, 2020, the Minister of Finance, Planning, and Economic Development (MoFPED) anticipated the short-term impact to entail: [5]1) increase in the number of poor people by 2.6 million; 2) significant deterioration of the current account balance owing to expected severe reduction in exports, tourism receipts and workers remittances; 3) UGX 288.3 billion short fall in domestic revenue in FY 2019/2020 and UGX 350 billion in FY 2020/2021; 4) an overall customs revenue loss of UGX 513.26 billion by the end of June 2020, of which UGX 116.26 billion could be as a result of the pandemic[6]; 5) heightened pressure on fiscal space; and 5) a potential decline in economic growth in FY2019/2020 from 6 percent to between 4.6 and 5.1 percent in a worst-case scenario.

5 (MFPED, 2020)
6 (URA, 2020)

**On June 11, 2020, the national budget (2020/2021) was passed under the theme "Stimulating the Economy to safeguard Livelihoods, Jobs, Businesses and Industrial Recovery", demonstrating Government's commitment to address the challenges posed by the pandemic.** The budget elaborated an economic stimulus and growth strategy that addresses several critical interventions including: introduction of tax relief to businesses; expansion of social protection for the vulnerable; improvement of household incomes through work programmes and credit facilities; and, reduction of mobile transaction costs to prevent the spread of the pandemic.

**Building on the existing assessments of the socio-economic impacts of the pandemic and government recovery proposals, this report brings in several novel insights, pertinent to shaping of the recovery direction and development planning in Uganda.** This is accomplished using a combination of quantitative and qualitative analysis of select sectors to better the understanding of the impact of the pandemic. The report also analyses several critical issues such as the effect of the pandemic and response on poverty and SDG progress, then going further by assessing the potential mitigating effects of various programme and policy mixes. It is among the first reports to assess in-depth and cross-sectoral impacts of COVID-19 on (i) macro-economic and real sector including tourism, trade, and industry impact; (ii) agricultural sector; and (iii) private sector (formal and informal). It also analyses critical aspects of socio-economic impact such as poverty, vulnerability and resilience; food and nutrition security; and local and centralized service delivery. The gender dimensions of each component are analysed in-depth throughout the report.

**The report is organized in eight chapters. Chapter 2 analyses the macro-economic aggregates and real sectors;** Chapter 3: Agriculture and Food Security; Chapter 4: Private Sector; Chapter 5: Human Development and Local Government Service Delivery; Chapter 6: Poverty and Vulnerability; and Chapter 7: Potential Long-Term Impacts on Overall SDG Progress. Each chapter includes evidence-based policy recommendations which are drawn directly from analyses in each section.

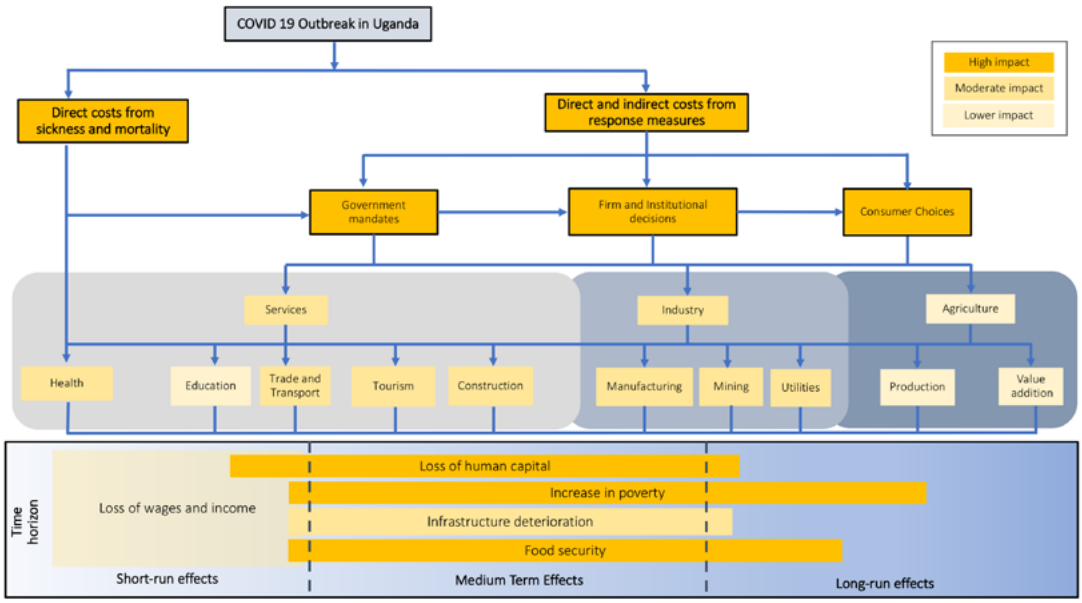
## 1.2 Analytical Framework: Identifying Key Areas of Potential Impact

**The report initially adopted a two-part analytical framework, using transmission channels of anticipated impact.** The outbreak is likely to impact on Uganda through several transmission channels (Figure 2). These include direct (public health implications caused by the virus itself) and indirect effects (caused by the response to the virus, including Government mandates and containment measures), in the short-, medium-, and long-term.

**The indirect effects could arise as unintended consequences of, for instance:** closure of schools, places of worship, entertainment venues, and sporting events; firms and institutions taking proactive measures to avoid infection; and individuals reducing trips to centres of economic activity. In general, there could be: social effects (including morbidity and mortality for those infected, and increased vulnerability to poverty among other shocks) and intangible effects (including decline in social cohesion, stigmatization, governance and security challenges, and risk perceptions); and economic effects (including decline in economic growth and employment, decrease in trade activities, knock-

on effects in the financial sector, increase in public debt due to increased health expenditure in addition to the knock-on effects in the health sector itself, loss of revenues), exacerbated by foreign exchange risks that started to deteriorate immediately after the first case was announced. The socio-economic impact transmission channels for Uganda economy-wide are presented in Figure 2. (Additionally, Chapter 6 presents additional household-specific impact transmission channels focusing on increases in poverty and the direct and indirect effects to be felt at the household and individual levels).

**Figure 2: Transmission channels for potential socio-economic impact of COVID-19 in Uganda.**

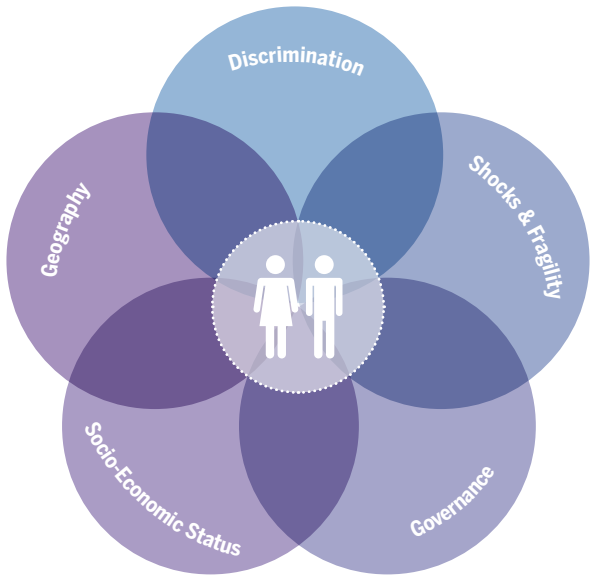



*Source: Adapted by UNDP-Uganda based on Evans and Over (2020).*

**Additionally, all the transmission channels identified in Figure 2 can be viewed through the lens of the Leave No One Behind framework (Figure 3).** The degree and nature of impact will vary by location, socio-economic status, and level of vulnerability and resilience to shocks, and as a result of the level of effectiveness of governance. For example, vulnerable, marginalized, and fragile groups such as women and children, the elderly, persons living with disabilities, and refugees face heightened protection risks. The risks could be pronounced by a surge in new responders (including non-traditional humanitarian responders), combined with high demand for food and health supplies coupled with an unequal supply. Children are at particular risk of potential harm where school closures interrupt school-based services and interventions for at-risk children. Greater difficulties in accessing health services, as well as increased burdens and separation from caregivers, may affect children, the elderly, and persons living with disabilities, for whom access to health services is critical.

**The lens of 'Leave No One Behind' helps in enriching our understanding of measures that can be taken to protect the vulnerable and marginalized persons in Uganda.**

**Figure 3. Five key factors in Leaving No One Behind**




*Source: UNDP, 2018*

CHAPTERS 2-7:

# POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

02

CHAPTER TWO

# MACRO-ECONOMIC AGGREGATES AND REAL SECTORS


## 2.1 Macro-economic Aggregates

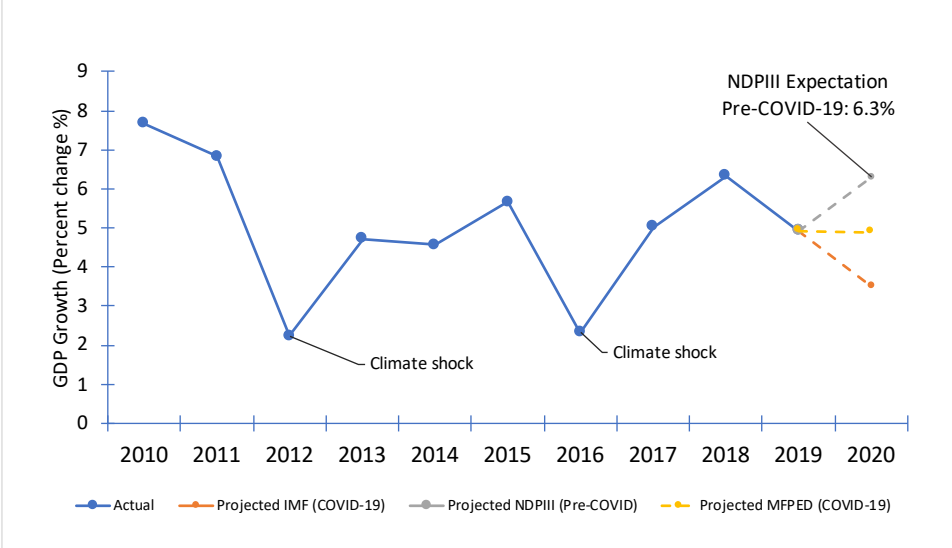
**This section presents a summary of the knock-on effects of the COVID-19 on Uganda's macro-economic aggregates. These include GDP), inflation, fiscal deficit, Current Account Balance (CAB), Foreign Trade Balance, Foreign Exchange Reserves, Remittances, and Public Debt.** Specific results regarding the impact of reduction in exports, imports, and remittances are derived using a Social Accounting Matrix (SAM) Multiplier Model, calibrated to the 2016/2017 Uganda SAM. Global Trade Analysis Project (GTAP) model was also used for the trade related analysis. This was done by triangulating and extracting estimated effects of COVID-19 from various estimates and projections by a range of Government institutions such as Ministry of Finance, Planning and Economic Development (MoFPED), Bank of Uganda (BoU), and Uganda Bureau of Statistics (UBOS), and International Financial Institutions (IFIs) among others.

### 2.1.1 Recent Trends of Economic Growth

**Uganda had a relatively moderate economic growth rate[7] over the last decade while it has faced high level of volatility.** Within the last ten years, Uganda's economic growth dipped twice, as low as 2.24 percent in 2012 and 2.23 percent in 2016. The volatility of the economic growth was largely due to its vulnerability to shocks mainly related to climate change related weather changes.[8] Having recovered from the 2016 drought, Uganda's economy grew at a rate of 6.5 percent in real terms during FY 2018/2019 and after rebasing of GDP, the size of the economy increased to UGX 128.5 trillion up from the initial estimate of UGX 108.5 trillion.[9]

Before the outbreak of the COVID-19 pandemic, real GDP growth rate was projected at 6.3 percent and 6.2 percent in FY 2019/2020 and FY 2020/2021 respectively and is expected to reach 7.0 percent by FY 2024/2025 (Figure 4). These estimates were revised down to between 4.6 percent and 5.1 percent[10] after the country registered its first confirmed COVID-19 case. IMF estimates that the economy will grow at 3.5 percent in 2020 down from 5 percent in 2019 compared to 1 percent in Kenya and 2 percent in Tanzania.[11] The IMF's projection for Uganda is in line with the BoU forecast of 3-4 percent (Figure 4), implying that growth will remain below a decade historic average of 4.8 percent. The forecasted slowdown for the two years is largely due to COVID-19 outbreak.

**Figure 4. Real GDP Growth Rate**




*Sources: IMF, NDPIII, MoFPED.*

7 Real GDP averaged 4.89 percent during 2010-2020 period. (IMF, 2020)
8 Additionally, since the global financial crisis, both exports and average labour productivity growth slowed down sharply, which lowered GDP growth rate during the past decade (2010-2019).
9 (UBOS, 2019)
10 (MFPED, 2020)
11 (IMF, 2020). Relative to UNDESA's World Economic Forecasting Model (WEFM), these figures could be considered optimistic. UNDESA forecasts use market exchange rates, as opposed to PPP exchange rates used in IMF forecasts. In PPP terms, Uganda is expected to grow by around 2.5% in 2020 and 3.5% in 2021, which is lower than IMF projections of 3.5% in 2020 and 4.3% in 2021.

**The widespread impact of COVID-19 across key economic sectors will most likely slow down the speed of economic transformation, expansion of the industrial base, job growth and delivery of essential social services, envisaged under NDPIII, which comes into effect in July 2020.** In fact, according to BoU's recent monetary statement, although the economy is projected to gradually recover starting from the second half of FY2020/21, the emerging output gap is projected to persist until 2022[12]. Analysis run using the Global Trade Analysis Project (GTAP) model indicates that most affected sectors are services, processed foods, transport, and heavy manufacturing (see details on this model and the assumptions in Box 1). Significant reductions in economic activities are evident in the most promising sectors such as tourism, transport, manufacturing, logistics, and services affected a significant share of youthful population who rely on them for their livelihood. Given the global nature of the pandemic and the ensuing global recession slow recovery is the most likely outlook for these sectors. It is to be recalled that Uganda is structurally transforming to a service economy but faces low productivity and low job creation.

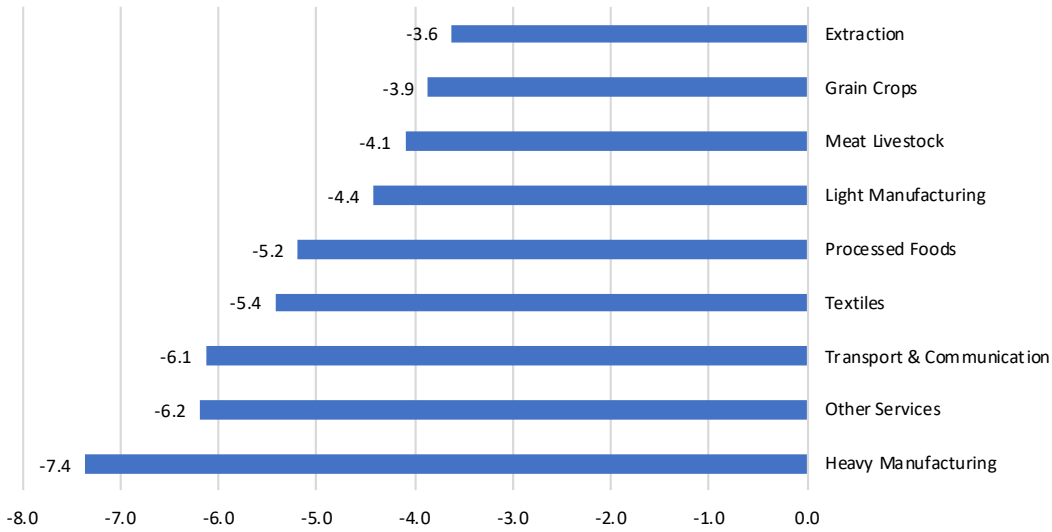
### BOX 1. Methodological note on GTAP

A Computable General Equilibrium (CGE) model based on GTAP data was used to study the impact of the COVID-19 on the Ugandan Economy. The GTAP CGE model is a system of equations that describes economic linkages between several global regions and sectors. The model closure determines which variables are exogenous and which are endogenous. Endogenous variables have values that are determined within the model. For example, prices and quantities are endogenously determined within the model. The exogenous variables have values that are fixed at their initial levels and do not change when the model is solved. For this study, a use fixed wage closure for unskilled labour was used allowing for high levels of unemployment in Uganda and Eastern Africa. This represents a more accurate reflection of the labour market in the region. For the simulations, the GTAP 10 database was used, which describes global bilateral trade patterns, production, consumption and intermediate use of commodities and services. The underlying data in the GTAP 10 database refers to a 2014 baseline. The modelling in this report is based on a number of assumptions about the spread of COVID-19 and how it will affect the population and industry. Shocks in the model were calibrated to produce real GDP shocks predicted by the World Bank (2020) and the IMF (2020) (an average decline of -2.1 percent to -5.1 percent of GDP for Africa). Specifically, the impacts are assumed through the following short-term shocks: a negative total factor productivity shock (income shock) of -3 percent for Uganda, and transport productivity shocks of -20 percent for exports and imports.

Regarding labour market participation and productivity, a general reduction in labour input and productivity associated with the total economic lockdown was assumed as people are unable to work during lockdown. Likewise, capital productivity is reduced. Trade costs are expected to increase with airport shutdowns and COVID-19 screening at the borders resulting in long delays. The standard GTAP (Hertel, 1997) closure is used in the simulations, but allowing for fixed wages of unskilled labour in Africa, to reflect the high levels of un-employment and under-employment that characterize regional labour markets. This closure (fixed wages) is maintained because it is assumed to be a more accurate reflection of the unemployment situation in Uganda. Changing the closure assumption would imply full employment in a period of an economic downturn. It is also important to note that the shocks used in this the GTAP model are based on predictions from IMF on the expected GDP changes in Uganda. However, all the predictions in this period remain uncertain due to the changing nature of the COVID-19 crisis. Therefore, the results of GTAP model are likely to accurately reflect the direction of the economic changes (negative shocks) but should be cautiously interpreted in terms of the accuracy of the actual magnitude of the changes.

12 (BoU, 2020)

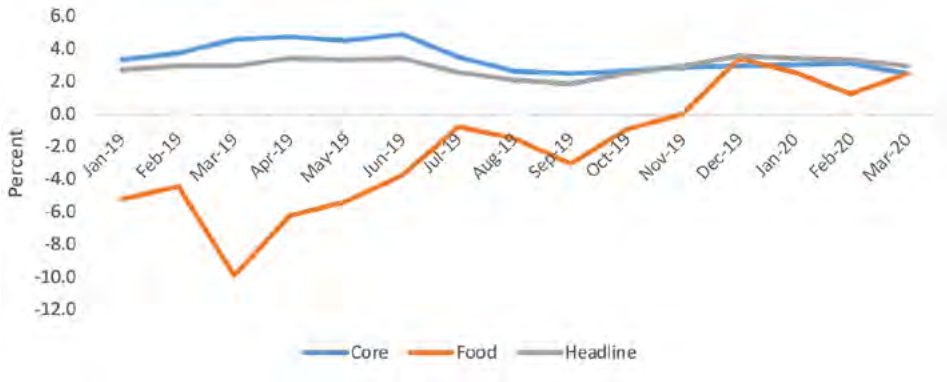
**Figure 5. Change in volume of output by sector (%)**




*Source: GTAP calculations.*

**The country's macroeconomic environment is expected to remain relatively stable in the medium and longer terms, despite the COVID-19 crisis.** Uganda has maintained an inflation rate below 5 percent over the last decade (Figure 6). Combined with downward revision of growth projections by governments and international financial institutions, there were fears that potential rise in prices could negatively affect food security and welfare of the population further as the COVID-19 situation unfolds (Chapter 3). Notwithstanding the movement in prices, it is expected that food prices will stabilize in the medium term as agricultural production has been relatively less effected by the outbreak. Furthermore, BoU has timely deployed its monitory policy instruments to ensure stable macro-economic situation which is providing a significant level of confidence.

Figure 6. Inflation (year-to-year percent change)

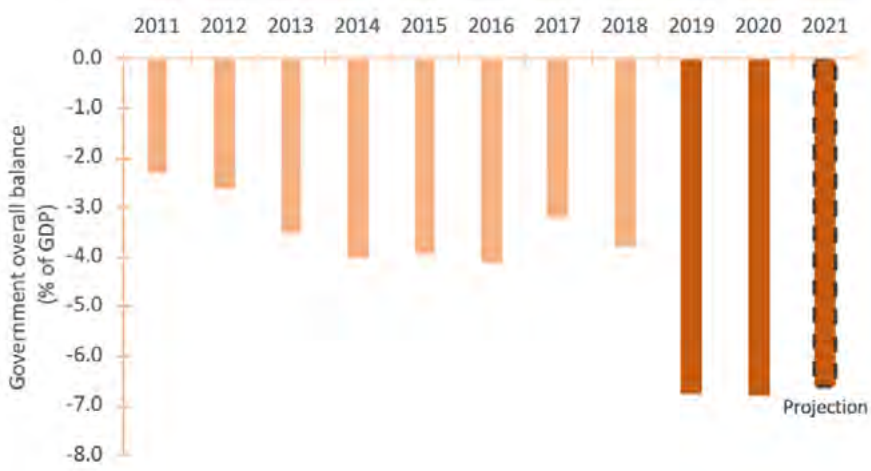



*Source: UBOS Monthly Consumer Price Index database.*

### 2.1.2 Fiscal sector

The country's fiscal deficit is expected to deteriorate further. According to the IMF Fiscal Monitor, overall Government balance will reach -6.8 percent of GDP in 2020 but is expected to improve slightly to -6.6 percent in 2021 (Figure 7).

Figure 7. Government overall balance (2011-2021)[13]

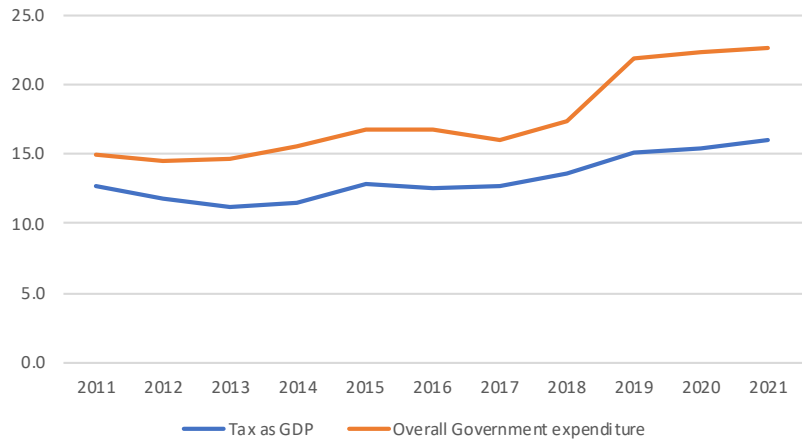



*Source: IMF Fiscal monitor.*

13 (IMF, 2020)

**While it is difficult to precisely estimate the impact on both expenditure and revenue due to the unfolding situation, the recently published IMF fiscal monitor forecasts that the pandemic will significantly reduce total revenue.** Overall Government expenditure is expected to rise not only in 2020 as a result of the health response, but also due to the need to provide additional support to the economy to rebound in 2021. Domestic revenue collection is expected to fall due to disrupted supply chains, limited purchasing power, as well as Government support measures such as granting extension on tax-paying deadlines. However, as a ratio of GDP, revenue might not decline significantly (Figure 8). This could be attributed to the rate of GDP decline being expected to be higher than that of revenue. In terms of expenditure, the ratio could reach close to 22.6 percent of GDP.

**Figure 8. Tax revenue as a percentage of GDP and overall government expenditure as a percentage of GDP**




*Source: IMF Fiscal Monitor (April, 2020)*

**Worsening revenue collection will severely impact the already constrained fiscal space, including areas of immediate spending to avert the crisis.** According to MoFPED, the total resource envelope for FY 2020/2021 was projected at UGX 39.6 trillion comprised of both domestic and external sources down from 40.4 trillion in the FY2019/2020. This is largely because of reduction in external financing as well as a reduction in dutiable imports, particularly from China (Table 1).[14] The slowdown in international trade, which accounts for about 42 percent of all the tax revenue, is likely to have a significant negative impact on tax collections in 2020. The situation will be worsened by the reduced economic activity in the retail and trade, services, hotels, tourism and manufacturing sectors, which will translate to reduced VAT, remittances, and corporation tax payments to Uganda Revenue Authority (URA). URA estimates domestic revenue shortfall of UGX 404.5 billion in FY 2019/2020 and UGX 350 billion in FY 2020/2021 due a reduction in economic activity.[15]

14 Analysis is restricted to China.
15 (URA, 2020.)

**Table 1. Imports from China in February 2020 compared to 2019.**

| | February 2019 (UGX Bn) | February 2020 (UGX Bn) | Decline (UGX Bn) | Decline (%) |
|---|---|---|---|---|
| Dutiable imports | 166.00 | 146.46 | -19.54 | -11.8 |
| VAT taxable imports | 252.08 | 244.73 | -7.35 | -2.9 |
| Total imports | 732.46 | 449.46 | -283.00 | -38.6 |

*Source: Author calculations from URA databases.*

**If the economy does not recover soon and the impact on Government revenue is extended for a longer period, the ensuing reduction in resources will also affect the implementation of NDPIII.** The Tax-to-GDP ratio is projected to grow by 0.5 percent per annum, resulting into a tax-to-GDP ratio of 16.5 percent in 2024/2025, which will be insufficient to finance the plan's total cost of UGX 342.61 trillion, which is nearly double NDPII cost of UGX 196.7 trillion.

**Government had budgeted to spend UGX 304.5 billion in combating the COVID-19 pandemic.** However, on April 8, 2020, Parliament approved only UGX 284 billion as a supplementary budget[16] to be used by frontline sectors and agencies involved in combating the pandemic (Figure 9). Shortage of funds has forced Government to use part of its Contingency Fund in the FY2019/2020 budget to finance approximately one-fifth of the Ministry of Health Preparedness and Response Plan from January to June 2020.

**Figure 9. Budgeted expenditure for combating COVID-19**


*Source: Parliament of the Republic of Uganda*

16 (Parliamentary Approval, 2020). Budget Committee recommend the approval to the House under Addendum 2, of the Supplementary Expenditure Schedule No. 2 for Financial Year 2019/2020.

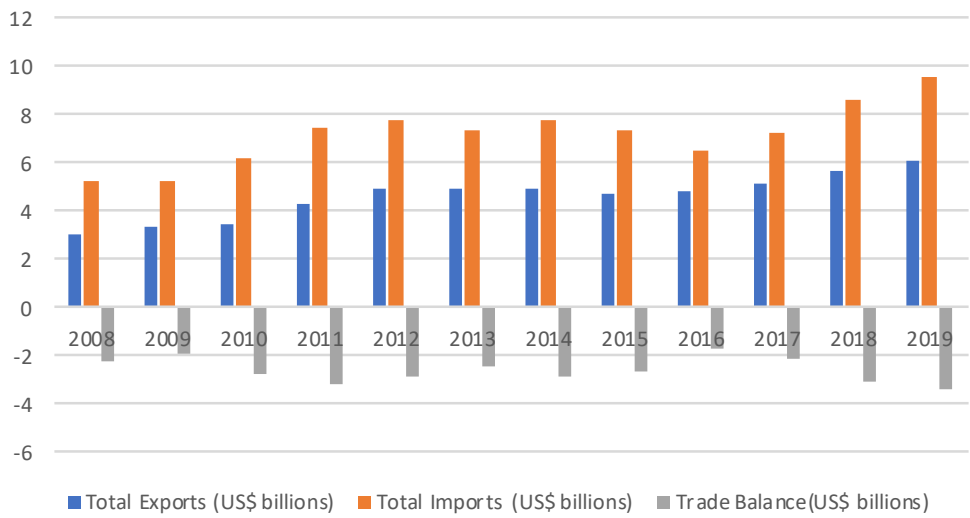
**While the Government is increasingly receiving donations, totalling over UGX 5 billion in cash (as of April 22, 2020) plus assorted food items, more resources are needed to effectively deal with the pandemic.** These additional expenditure requirements are likely to reduce the fiscal space for implementing the budget for FY2020/2021, where the Government focus is on increasing production and productivity in the productive sectors of the economy, enhancing private sector competitiveness as well as consolidating and increasing the infrastructure stock, improving social service provision and regional equity, improving the effectiveness of governance and maintaining peace and security.

**If Uganda is to recover fully, there is a growing need for spending in the post-emergency phase, as elaborated in the next chapters.** This means there will be increased reliance on external financing in the foreseeable future. It is to be noted that Uganda has a high level of dependence on external financing of its budget. For instance, in 2018/2019 close to 24.3 percent of the total budget was financed from external resources. This again will have implication on debt sustainability.

### 2.1.3 External sector

**Uganda has a systemic trade deficit as a result of the increase in the import bill due to large imports of fuel, intermediate and capital goods (Figure 10).** While the value of exports increased over time, the rate at which imports were growing had outperformed exports. Trade deficit deteriorated to 6.2 percent of GDP in 2018/2019. Current account balance is expected to worsen due to the pandemic. According to the World Economic Outlook (April 2020), current account deficit (as a percentage of GDP) was 4.4 percent in 2017 and is expected to increase to 9.5 percent in 2019 and 9.6 percent in 2020 and it will rise to 8.0 percent in 2021. The situation may, however, be helped by the global decline in oil prices, reducing Uganda's import bill.

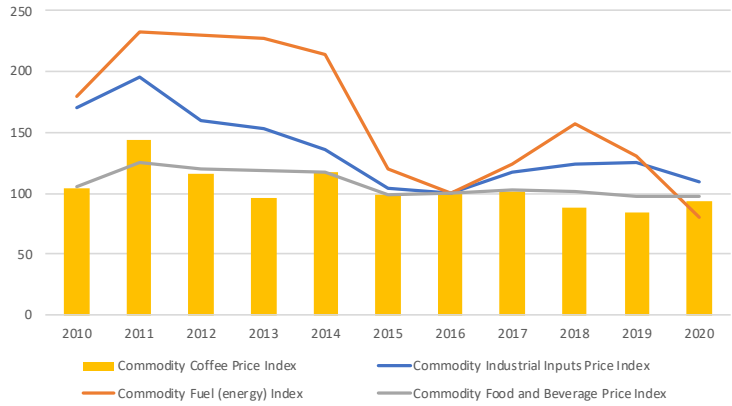
**Figure 10. International trade balance.**




*Source: BoU, 2020.*

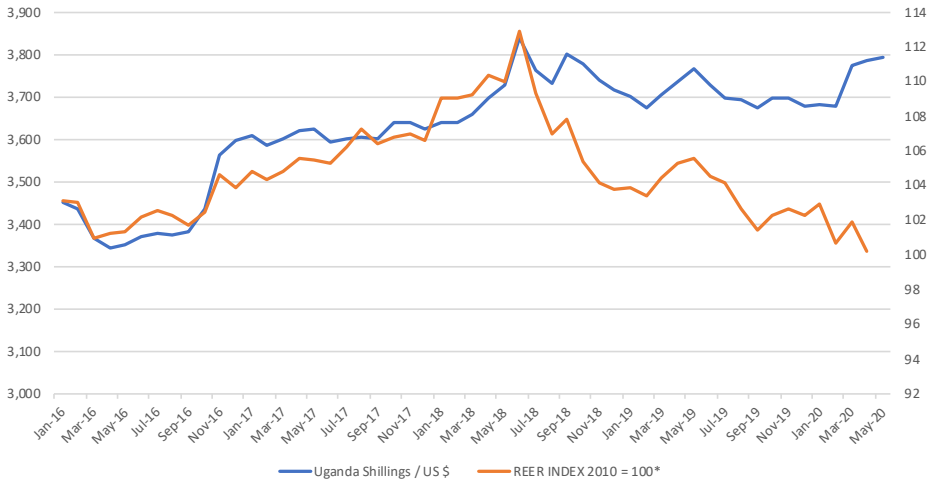
**The effect on the trade balance and exchange rate remains uncertain (Figures 11 and 12).** The price of Uganda's most crucial commodity export, gold (Figure 14), has increased by 33 percent, while initial data shows that the price of coffee has fallen as a result of decreased global demand. Additionally, Uganda mainly exports within Africa and the Middle East (Figure 13), and therefore the decline in exports will be determined by the extent of the recession in these regions. The IMF (2020) predicts that the recession will be less severe in Africa and the Middle East relative to the USA and Europe.

**Figure 11. Key Commodity Prices**



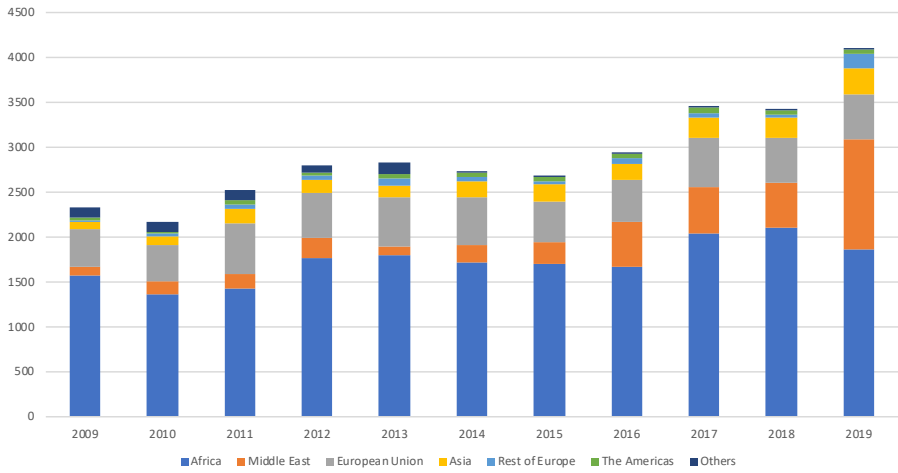

*Source: IMF, 2020*

**Figure 12. Exchange Rate (UGX/US$, monthly average)**



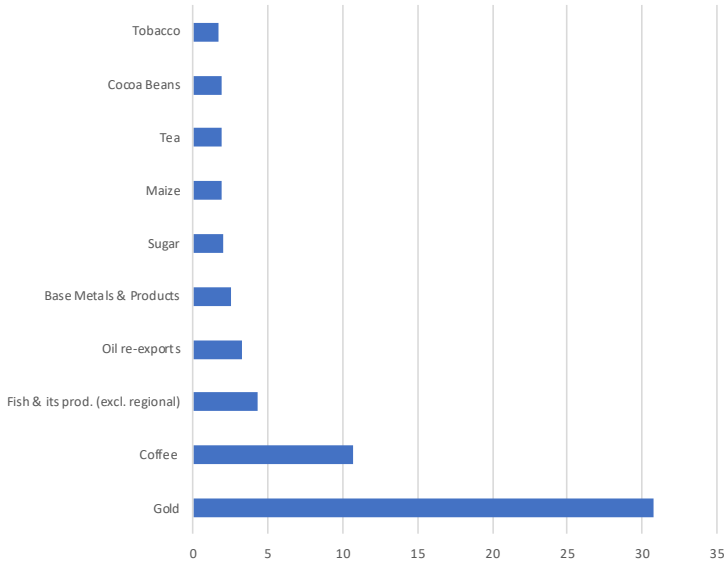

*Source: Bank of Uganda, 2020*

## Figure 13. Uganda's exports by destination (million$).




*Source: Bank of Uganda, 2020*

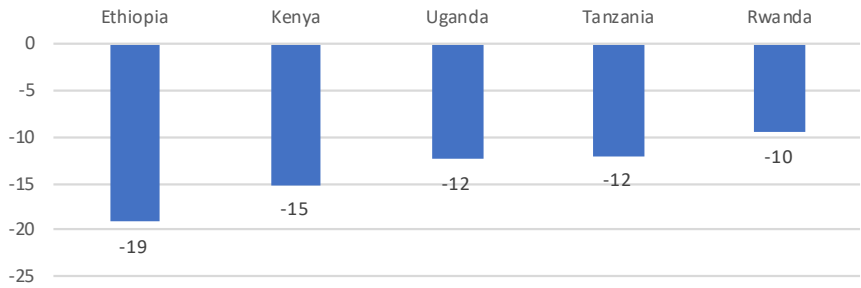
## Figure 14. Top commodity export shares




*Source: Bank of Uganda, 2020*

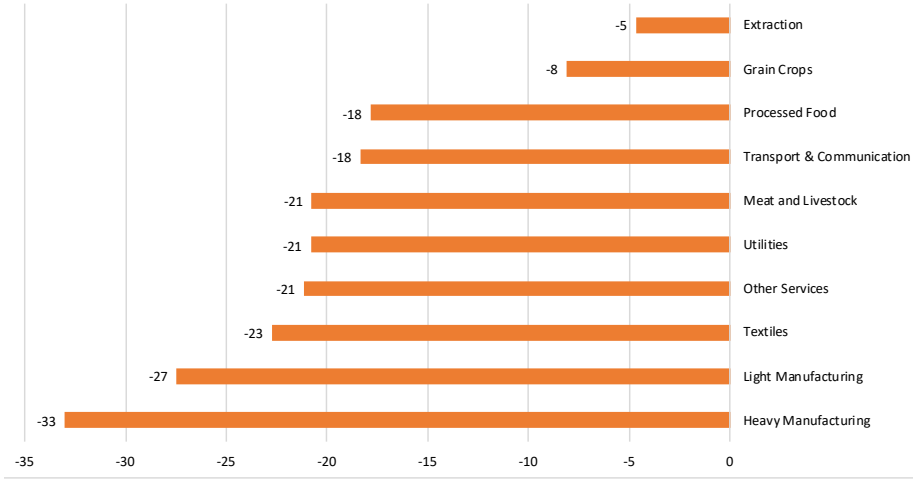
**Notwithstanding the uncertainties explained above, the GTAP simulations show that the economic lockdown will have a negative effect on volume of exports (real change) across the region, with Ethiopia and Kenya most adversely affected.** Uganda's volume of exports will reduce by 12 percent (Figure 15). These results are similar to results of the WTO (2020b) which estimates a decline in volume of exports for African countries by between -5.2 percent and -13.4 percent. Additionally, for Uganda, the decline in exports is heavily skewed towards heavy manufacturing, light manufacturing and the textile sectors. Recent data further confirms this predicated decline in Uganda's exports. Uganda's exports dropped by $31 million in February 2020 from $383.62 million registered in January, representing an 8 percent reduction on month-to-month basis. The projections above assume that the Ugandan export will pick up on the later quarters while it remains short of what the country exported in the previous year.

**Figure 15. Change in volume of exports.**




*Source: GTAP calculations*

**Figure 16. Change in volume of exports by sector.**




*Source: GTAP calculations*

**The impact of COVID-19 on imports will be felt largely in the reduction in prices of major imports, oil and industrial inputs, which are all predicted to decline in 2020.** However, the effect on import demand remains uncertain because of the expected weak domestic consumer demand and reduced Government investment on infrastructure. A recent report by BoU shows that imports dropped from $701.34 million in February 2020 to $107.6 million in March 2020.[17] It is important to note that as the crisis impact deepens, countries will attempt to maintain essential imports while to a large extent attempt to substitute imports of consumer goods. It is, however, worrying if countries are obliged to reduce import of both capital and intermediate goods sharply as this will have significant negative repercussions for productive efficiency in the short and medium term.

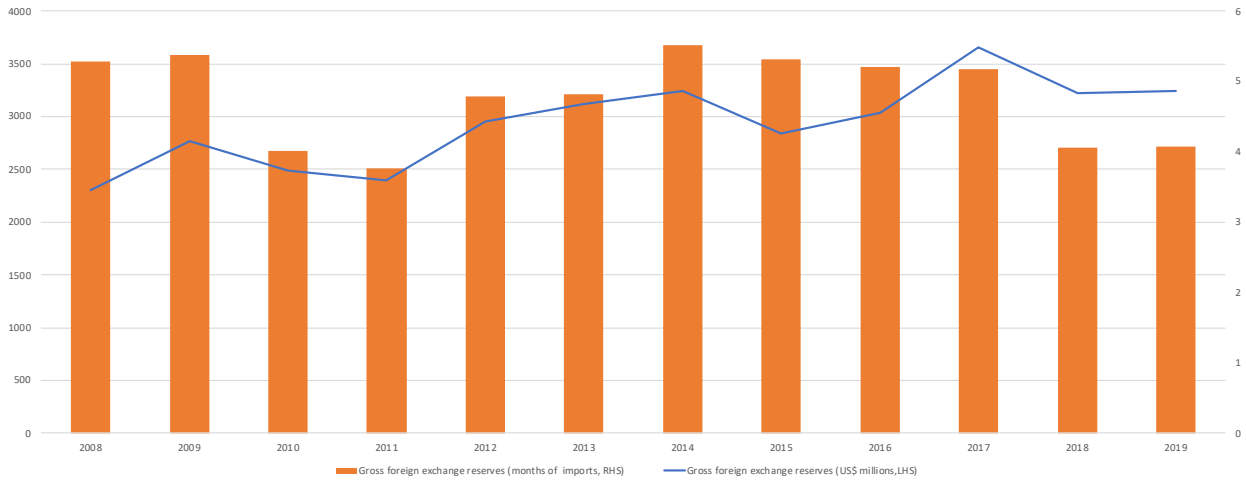
### 2.1.4 Balance of Payments

**Uganda's overall balance of payments (BOP) position weakened in the 12 months to October 2019 on account of increasing current account deficit, largely driven by higher private sector imports.** Meanwhile, the financial account inflows increased by $1,119 million in the 12 months to October 2019 supported mainly by an increase in FDI inflows and significant drawdown of deposit abroad by banks and the private sector[18]. Owing to high current and capital account deficit recorded in 2019, Uganda stock of reserves as at the end of October 2019 declined slightly to reach $3,155.5 million – equivalent to 4.1 months of future imports of goods and services.

**While the above picture depicts the pre-COVID-19 situation, the overall balance of payments could further be weakened in 2020.** High inelasticity of import demand and high volatility of exports pose significant BOP risks, which will exacerbate during the current crisis.[19] Depending on the duration of the pandemic, global business confidence could be severely affected, leading to weaker FDI. UNCTAD (2020) predicts that COVID-19 could decrease global FDI by up to 30 to 40 percent. According to data from the Uganda Investment Authority (UIA) 45 percent of all the planned FDI into Uganda was to come from China. The investments were mainly in capital infrastructure projects and manufacturing. This means that a slowdown in FDI should be expected.[20] Additionally, the tightening of global financial conditions could cause deeper and longer-lasting downturns in aid flows and remittances.

17 (BoU, 2020)
18 (BoU, 2020)
19 Imports grew by 9.2 percent per year during the 1990-2018 period, while its exports grew by only 5 percent annually during the same period. Ugandan exports have been twice as volatile (coefficient of variation) as imports.
20 (PWC, 2020)

**Figure 17. Foreign Reserves (millions, USD)**



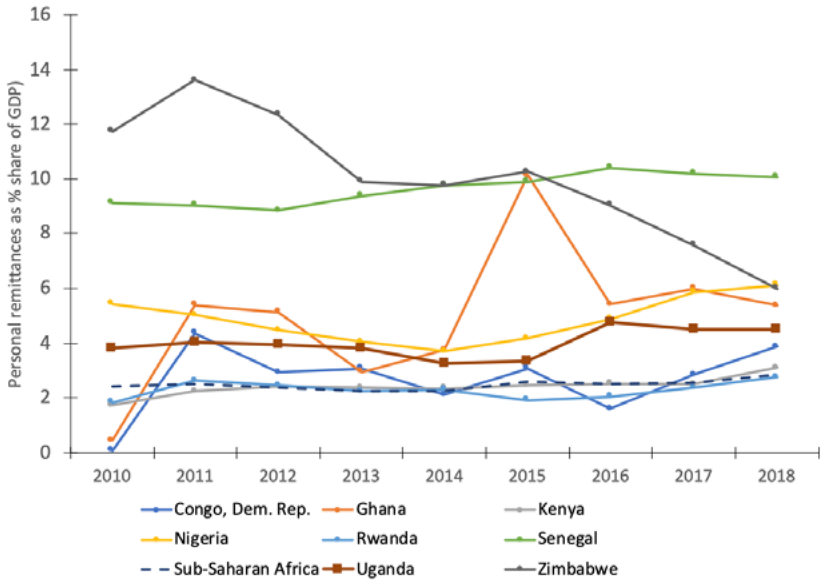

*Source: Data from Bank of Uganda, 2020*

**Remittance flows are a key component of Uganda's balance of payments, particularly in covering trade deficits, and are expected to be hard-hit.** According to the World Bank (April 2020)[21], global remittances are projected to decline sharply by about 20 percent in 2020 due to the economic crisis. Remittances to low and middle-income countries (LMICs) are projected to fall by 19.7 percent to $445 billion. As of 2018/2019, remittances accounted for approximately 4.5 percent of Uganda's GDP placing it above the average for Sub-Saharan Africa (2.8 percent) and above regional counterparts including Kenya and Rwanda (Figure 18).[22]

21 (WBG, 2020)

22 However, the President of Uganda has stated that as of May 2020, of the $1.4 billion received by Uganda in remittances, $1.3 billion have already been lost.

**Figure 18. Personal remittances as percentage share of GDP for Uganda compared to region and Sub-Saharan Africa**




*Source: WBG, 2019.*

**Like the global trend, Uganda's remittances from the diaspora are widely expected to decline and disproportionately affect the economy as well as household income of many Ugandans, especially the poorest in both rural and urban areas.** Three key factors would drive this trend: (i) most migrants in some of Uganda's largest remittance sending countries/regions (Europe, 31 percent; Middle East, 22.7 percent; and North/South America, 22.6 percent) are unable to work, (ii) around 80 percent of remittances are sent physically via a Remittance Service Provider (RSP), but these money transfer networks have partially or totally shut down; and (iii) cost of sending money is still relatively high. According to the World Bank (April 2020)[23], sending $200 worth of remittances to Africa cost 8.9 percent on average in the first quarter of 2020, a modest decrease compared with the average cost of 9.25 percent a year before.

## 2.1.5 Public debt

**Uganda's gross Government debt has been increasing over time. Gross debt as a ratio of GDP has increased from 35.6 percent in 2018 to 40.0 percent in 2019.** This trend is expected to continue compounded by the outbreak of the pandemic. Uganda's gross Government debt as a ratio of GDP is estimated to reach 46.3 percent and 50.7 percent in 2020 and 2021, respectively, but this estimate may not fully capture the effect of COVID-19 related debt that Uganda might acquire to be able to respond effectively. The IMF debt sustainability assessment (2019), indicates that Uganda is at low risk even though it has a debt stock to GDP ratio of 50.7 percent in nominal terms and high interest payments; projected to take as much as 20 percent of revenue in 2019/2020, a level typically only associated with countries at high risk, or in debt distress.[24] On 6 May, 2020, Uganda was approved for $491.5 million

23

24 (IMF 2019 Art IV consultation).

emergency assistance under the IMF Rapid Credit Facility[25]. The financing will help several sectors to meet the urgent balance-of-payments and fiscal needs arising from the outbreak and catalyse additional support from the international community.

**Notwithstanding the recent measures taken by Global International Institutions, the UN is stipulating that these measures are not enough given the scale of the crisis.** According to UNDP[26], while the offer to provide an immediate debt moratorium for selected countries is a welcome step, it should be extended to all developing countries to provide "breathing space" for them to focus on crisis response. It further calls for targeted debt relief for countries with unsustainable debt levels to provide the policy space needed to achieve SDGs; while efforts should be made to revisit the long-standing challenges of the international debt architecture, to prevent debt defaults that could lead to prolonged financial and economic crises.

**Box 2. Methodological note for manufacturing analysis.**

This analysis is based on literature review in addition to 45 key informant interviews (KIIs) with manufacturing firms conducted in April 2020. Purposive sampling was utilized with emphasis on information-rich cases coupled with the feasibility of generating the necessary responses in light of the COVID-19 situation across the country. KIIs were conducted among key players in Uganda's manufacturing sector.

# 2.2 Manufacturing

## 2.2.1 Immediate impact

**The onset of COVID-19 has negatively affected the manufacturing sector through closure of plants, factories and industries.**[27] The impacts across industries are summarized in Table 2.

The ban on public transport and the movement restrictions rendered many workers unable to reach the manufacturing plants, except for workers in specific subsectors like large-scale sugar firms and cement factories which have staff quarters near the plant.

25 (IMF, 2020)

26 (UNDP, 2020)

27 Following a statement by the President of Uganda on 30 March 2020, lockdown resulted in closure of factories and industries. Those industrialists who would wish to continue in production of goods were advised to provide accommodation for their workers near the factories or tents so that they can sleep at the factory/ industrial premises which became an uphill task. However, on 4 May 2020, manufacturing and warehouse jobs were allowed to continue with transport to the site to be arranged by employers (Presidential Statements, 2020).

## Table 2. Anticipated impact of COVID-19 crisis on manufacturing sub-sectors.

| ANTICIPATED IMPACT | | | | | |
|---|---|---|---|---|---|
| **Subsector** | **Revenue** | **Production capacity** | **Employment** | **Sourcing raw materials** | **Innovation** |
| **Breweries**  | Bars and nightclubs constitute 60% of sales. Closure of cultural, religious and sporting events has significantly reduced consumption of products. The lockdowns and travel restrictions have severely affected consumer demand. | The production capacity has been reduced by over 50% under lockdown measures. Bars and nightclubs were closed under COVID-19 control measures with significant reduction of consumption of beer products. There was no reason to continue with high production under real depressed consumer demand. | Brewery companies directly employ over 5,000 people, and approximately 60,000 are employed indirectly by the sales depots and bars and restaurants. Layoffs have particularly affected those in distribution chains. Unfortunately, most of the laid-off comprise the low-income earners-those in loading beer crates, and other casual workers. | Disruption in procurement of raw materials mainly wheat, chemicals and packaging materials. | Some breweries have invested in local production of raw materials particularly wheat and sorghum. Uganda Breweries has for example, local farmers in pre-payment to produce sorghum locally. Alternative product lines such as hand sanitizers produced from ethanol are also being explored. |
| **Beverages**  | Same as above | The reduction in consumer demand has forced beverage companies to reduce production. For example, Ice Love Water Mineral Production Company has reduced production capacity from 60% to 30%. | Most staff first laid off were casual workers, handling loading of products in storage facilities and on vehicles. Staff in the distribution chain comprising depot workers and drivers have also been laid off for the time under COVID-19 lockdown measures. | Disruption in supply and procurement of supply of inputs, namely, packaging materials and plastics. There are factories in Uganda which produce materials for bottling and packaging. However, because of disruption of COVID-19, these materials have been in short supply and very expensive. | Many beverage companies have embarked on home deliveries which has enhanced revenue generation. Companies have also adopted working from home which has ensured business continuity. |
| **Sugar Production**  | Sugar manufacturing companies have suffered significant reduction in revenue due to drastic fall in sales. The closure of borders under COVID-19 measures meant the loss of export markets in South Sudan, DRC, Kenya and Tanzania. Ability to pay out-growers has fallen. | Sugar production has reduced by roughly 60%, for example at Kakira Sugar Works (March 2020). The major reason is the closure of large consumers such as schools, hotels, restaurants, religious and cultural ceremonies. Many households have also lost disposable income and cannot purchase sugar for household consumption. | Sugar factories employ many people. For example, Kakira Sugar Works employs 10,370 people. Like other subsectors, layoffs and salary reductions are a common response to COVID-19 measures. | Disruption of supply and procurement of raw materials namely chemicals and fertilizers which are mainly procured from India, Dubai and Egypt. There is no local replacement of those raw materials. | Coping strategies by the sugar manufacturing companies have included "shift configuration" to fit workers in lockdown and curfew measures. Companies like Kakira Sugar Works have adopted virtual marketing where deliveries are concentrated at depots. |

| Subsector | Revenue | Production capacity | Employment | Sourcing raw materials | Innovation |
|---|---|---|---|---|---|
| **Printing**  | Limited people on streets in major urban areas means drastic reduction in consumer demand for newspapers, leading to at least 50% reduction in revenue for most printing companies. The production, circulation, and advertising is the main revenue stream for newspaper companies. Advertising generates over 80% of total newspaper revenue. Advertising has dropped drastically. There are few business enterprises that advertise during this period of COVID-19 pandemic. | Distribution capacity for newspapers has been limited, as those engaged in distribution channels have to work only within curfew hours and due to closure of public transport. Similarly, closure of business enterprises, cultural and religious ceremonies has lowered demand for printing materials. Production of newspaper materials has reduced by 60%. | New Vision Printing Corporation has cut salaries of staff by 60%, resulting from drastic reduction in sales. | COVID-19 pandemic has significantly affected the inflow of materials such as chemicals and paper. Those with supply have inflated prices due to short supply of these materials resulting from lockdown in China, India, and Dubai. | New Vision for example has found a silver lining in production of raw materials for home-schooling. The company in partnership with Ministry of Education and Sports has produced learning materials for all ladders of education. Overall, this is a lesson to such printing companies that there is need for domestic sourcing inputs. |
| **Dairy**  | Many consumers have reduced consumption of milk and out of need to purchase necessities like maize, and because of lockdown and closure of schools, restaurants and hotels, there has been flooding of the market with fresh milk. With low demand and high supply, reduced demand amidst milk prices dropped drastically. Low prices and low demand have drastically reduced revenue. | Production capacity has stayed roughly the same, while prices have fallen. For example, the price of milk per liter plummeted. | Second to the local market, Kenya has the biggest market for Uganda's milk, but the lockdown and export restrictions has meant decreased milk trade hence further reduction of workers on the production line. The dairy industry has been severely hit by the drastic fall in prices amidst low export opportunities. | While fresh milk is produced locally, preservatives and flavours are imported from abroad. This supply chain has been disrupted. | Some processing factories have adopted innovations like shifting production of processed to with longer shelf life, cheese and frozen yoghurt. It should be noted that Uganda government has no subsidy regime on agriculture production. |
| **Small & medium size cottage industries**  | With fewer potential clients from accessing MSME workplaces, reduction in sales has resulted in decline of revenue. | Lockdown restrictions have curtailed transport of materials to production centres, hence making it difficult for MSMEs to sustain production. | Travel restrictions have locked out most employees who mostly use public transport. Given low operating capacity, many MSMEs are at the verge of collapse.<br><br>(See Chapter 3 for more details) | COVID-19 pandemic has caused short supply and increase in price of materials and intermediate goods. | Contacting clients via telephone and using boda-boda deliveries has helped to sustain some enterprises. |

*Source: Key Informant Interviews April 2020.*

The lockdown also disrupted the supply chain of intermediate goods, particularly those that are imported from foreign countries. Many firms depend on imported raw materials (steel, palm oil, and plastics), and inputs sourced across regions of the country. The lockdown and subsequent closure of schools, religious institutions, shops, bars, lodges and hotels, meant drastic reduction of consumer demand which has negatively affected industrial production of goods such as beer and soft drinks. According to Uganda Breweries Ltd, "This has meant significant reduction in consumer demand of the products, yet these activities consume 60 percent of total sales of beer manufacturing plants. Sales have plummeted by 80 percent countrywide."[28]

**CASE 1: IMPACT OF COVID-19 ON UGANDA BREWERIES LTD**

Uganda Breweries Ltd is a public liability company. The company produces beer and alcohol products including Bell Lager and Waragi. It is also the distributor for Smirnoff and Tusker-Lite Lager from Kenya. Raw materials necessary for Uganda Breweries include sorghum (produced in Kapchorwa, Eastern Uganda, and in Kisoro, Kasese and Kabale in Western Uganda) and wheat (mostly imported). COVID-19 has negatively affected the company with both supply and demand shocks. According to interviewees, the first impact was the "short-circuiting" of the supply chain of raw materials. Due to the COVID-19 response measures such as lockdown, procurement of both sorghum and wheat has reduced from 40 tons to 10 tons per month. Furthermore, on the distribution side, the transportation restrictions only allow movement of trucks and government-approved vehicles, but distribution is also fed by other forms of transport such as motorcycles (for instance boda bodas) which are banned for public transportation but not for delivery purposes.

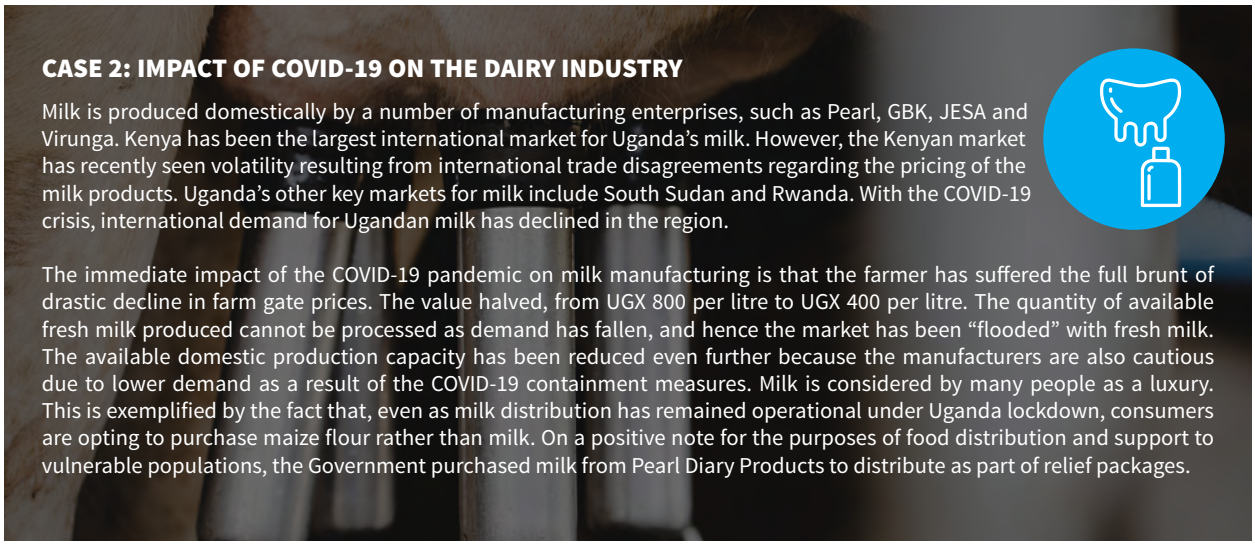
Most workers engaged in loading and distribution of the products are limited in movement and ability to work due to the lockdown measures that have been imposed, which has greatly affected the volume of products handled daily. These lockdown measures and closure of public spaces, such as bars, has also meant significant reduction in consumer demand. According to the company, the onset of COVID-19 has greatly affected sales, which have plummeted by roughly 80 percent countrywide. Additionally, surplus stock is being stored in warehouses which have seen fluctuating storage costs.

### 2.2.2 Common themes for immediate impact on manufacturing

- **Disruption in supply chain for raw materials:** Both international and domestic supply chains have been disrupted by lockdown measures and closure of transportation routes and distribution lines; this has impacted both prices and the time delay in receiving the inputs necessary for manufacturing.
- **Decline in demand for "non-essential" items:** During these times, a number of items are deemed to be "non-essential" by consumers (such as clothing, furniture, steel, plastics, shoes and cement). Naturally, their demand, which even at normal times is much lower than the household consumer goods, has become even lower.
- **Loss of perishables and short shelf-life items:** The impact is both on the products (such as sausages, fruit juices) and the perishable raw materials (for example milk, fruits, vegetables and meat). The restrictions on demand and supply have resulted in huge losses on the part of producers/dealers of perishables products.

28 KII, Sales Department, Uganda Breweries March 2020.

- **Disruption of distribution channels:** The COVID-19 measures have disrupted the national distribution channels for many of the manufacturing firms. They include distributors, wholesalers, retailers and transporters. These are especially for the fast-moving domestic goods like beer, soda, mineral water, milk, fruit juice, soap and cooking oil. This will result in cash flow challenges.
- **Constrained exports:** Many of the large and medium scale manufacturing firms serve domestic and export markets (see Case 2: Dairy). The exports are especially to the neighbouring countries like DRC, South Sudan, Rwanda (especially before the recent border closure issues), Kenya and Tanzania. Examples of the manufactured/value added exports include: sugar, soap, mineral water, fruit juice, milk, cement, steel products, maize meal, plastics, beauty products and cooking oil among others. All these have now been slowed down or completely halted by the COVID-19 restrictions.
- **Piling product stocks:** For products that cannot be sold during the crisis, many are kept in warehouses. Storage costs have therefore fluctuated. Uganda Breweries Ltd has experienced challenges in this regard, as they are increasingly running short of storage space for beer products (Uganda Breweries, March 2020).
- **Increased costs:** According to information from Uganda Breweries, due to the ban on public transport, the company incurred significant costs to transport workers to and from work. Workers directly engaged in production and distribution have been put on paid leave. This is additional cost to the company because many had already taken their annual leave. But the reality is that in the light of COVID-19 crisis their needs remain constant under the lockdown provisions. There are other fixed costs such as utilities and security which remain constant costs while production has been reduced.



### CASE 2: IMPACT OF COVID-19 ON THE DAIRY INDUSTRY

Milk is produced domestically by a number of manufacturing enterprises, such as Pearl, GBK, JESA and Virunga. Kenya has been the largest international market for Uganda's milk. However, the Kenyan market has recently seen volatility resulting from international trade disagreements regarding the pricing of the milk products. Uganda's other key markets for milk include South Sudan and Rwanda. With the COVID-19 crisis, international demand for Ugandan milk has declined in the region.

The immediate impact of the COVID-19 pandemic on milk manufacturing is that the farmer has suffered the full brunt of drastic decline in farm gate prices. The value halved, from UGX 800 per litre to UGX 400 per litre. The quantity of available fresh milk produced cannot be processed as demand has fallen, and hence the market has been "flooded" with fresh milk. The available domestic production capacity has been reduced even further because the manufacturers are also cautious due to lower demand as a result of the COVID-19 containment measures. Milk is considered by many people as a luxury. This is exemplified by the fact that, even as milk distribution has remained operational under Uganda lockdown, consumers are opting to purchase maize flour rather than milk. On a positive note for the purposes of food distribution and support to vulnerable populations, the Government purchased milk from Pearl Diary Products to distribute as part of relief packages.

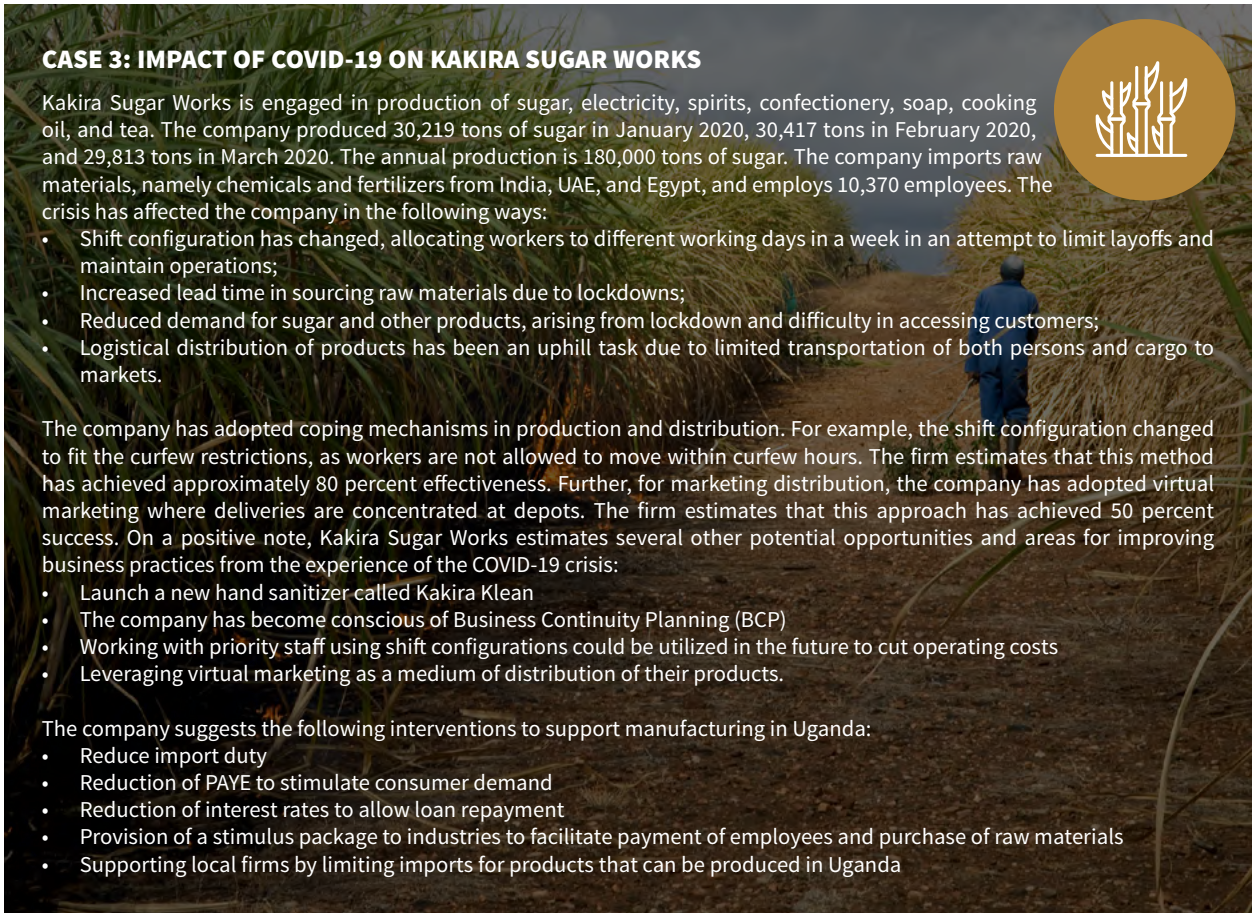
### 2.2.3 Medium-term impact on manufacturing

**The medium-term impact is envisaged to manifest in several ways. For example, dampening of aggregate demand across the country will translate into reduced ability for people to purchase goods and services.** The decline in business is likely to impact the manufacturing firms in terms of ability to service their existing loan/ overdraft facilities with the financial institutions or even to access fresh ones. The anticipated stimulus package financed through borrowing could hike interest rates, further increasing the cost of doing of business. The contraction of private sector credit will mean that industrialists will find it hard to secure affordable financing sources which will culminate into reduced production, unemployment and further contraction of the economy.

### 2.2.4 Long-term impact

**Over the long term, the manufacturing sector in Uganda is likely to be impacted in various ways, especially through the global recession that is expected to hit the world economy, as well as influences emanating from the pandemic. Some of these include the following:**

- **Technology transfer:** Closed borders, subdued global industrial activity and limited demand mean limited opportunities for technology transfers from the more developed economies, which was beginning to take root especially in the nascent Industrial parks at locations like Namanve, Mbale and Kapeeka.
- **Less export demand:** One of the biggest lessons for all countries from the COVID-19 pandemic is the need to develop local production capacity, especially of essential goods, rather than relying on imports from other countries. Consequently, many of Uganda`s export markets (DRC, South Sudan, Rwanda, Kenya and Tanzania) are likely to consider import substitution where possible. This will impact Uganda`s firms in the area of manufactured/value added exports including sugar, soap, mineral water, fruit juice, milk, cement, steel products, maize meal, plastics, beauty products and cooking oil, among others. Uganda had started to make some major inroads into the export markets in the region such as South Sudan and the DRC. This would help the country in the diversification of the market, boosting of production capacity and increase in incomes. Unfortunately, the restriction on international borders and lockdown of business enterprises has interrupted this process.



### CASE 3: IMPACT OF COVID-19 ON KAKIRA SUGAR WORKS

Kakira Sugar Works is engaged in production of sugar, electricity, spirits, confectionery, soap, cooking oil, and tea. The company produced 30,219 tons of sugar in January 2020, 30,417 tons in February 2020, and 29,813 tons in March 2020. The annual production is 180,000 tons of sugar. The company imports raw materials, namely chemicals and fertilizers from India, UAE, and Egypt, and employs 10,370 employees. The crisis has affected the company in the following ways:

- Shift configuration has changed, allocating workers to different working days in a week in an attempt to limit layoffs and maintain operations;
- Increased lead time in sourcing raw materials due to lockdowns;
- Reduced demand for sugar and other products, arising from lockdown and difficulty in accessing customers;
- Logistical distribution of products has been an uphill task due to limited transportation of both persons and cargo to markets.

The company has adopted coping mechanisms in production and distribution. For example, the shift configuration changed to fit the curfew restrictions, as workers are not allowed to move within curfew hours. The firm estimates that this method has achieved approximately 80 percent effectiveness. Further, for marketing distribution, the company has adopted virtual marketing where deliveries are concentrated at depots. The firm estimates that this approach has achieved 50 percent success. On a positive note, Kakira Sugar Works estimates several other potential opportunities and areas for improving business practices from the experience of the COVID-19 crisis:

- Launch a new hand sanitizer called Kakira Klean
- The company has become conscious of Business Continuity Planning (BCP)
- Working with priority staff using shift configurations could be utilized in the future to cut operating costs
- Leveraging virtual marketing as a medium of distribution of their products.

The company suggests the following interventions to support manufacturing in Uganda:

- Reduce import duty
- Reduction of PAYE to stimulate consumer demand
- Reduction of interest rates to allow loan repayment
- Provision of a stimulus package to industries to facilitate payment of employees and purchase of raw materials
- Supporting local firms by limiting imports for products that can be produced in Uganda

- **Backward and forward linkages in manufacturing sector:** Suppressed production at the manufacturing plants over time will impact several suppliers of raw materials. Examples include the out growers of sugarcane for sugar factories (especially near the Lugazi-Kakira axis near Jinja); maize farmers (for maize millers); simsim and palm oil growers (for cooking oil firms); cotton growers (for textiles); beef and dairy cattle farmers (for milk, beef, etc.) among others. Another affected category are the producers of other inputs /items which are not produced by the manufacturing firms but are used to add some value to their products like packaging products (for instance, carton boxes, sacks, jerry cans, bottles). The product marketing and distribution actors linked to products will also be impacted as and when the main firms are affected by the pandemic. Finally, the value chain actors for complementary goods (which are consumed and/or used in tandem with another item) will also suffer in the long term in Uganda.

- **Slowing the pace of structural transformation through contraction of the manufacturing sector:** Unless strong interventions are implemented by Government to counteract the COVID-19 impact over the immediate and medium term, the overall impact of the pandemic challenges will ultimately be reflected in different levels of downsizing, limited production and outright closures of some manufacturing plants. This will lead to a contraction of the sector.

## 2.3 Tourism

**Uganda's tourism sector is built around a rich natural, cultural and historical resource base.** For instance, Uganda is home to over 53.9 percent of the world's mountain gorilla population, 58 percent of Africa's bird species (1082 species); 19 percent of Africa's amphibian species richness, and high concentrations of chimpanzees and golden monkeys. The country has beautiful mountain ranges including the snow-capped Rwenzori Mountain ranges, the second largest freshwater lake (Lake Victoria) and third deepest lake (Lake Bunyonyi) in the world, as well as the source of the world's longest river (River Nile), gifted with beautiful waterfalls and unique water scenery. Uganda is also blessed with a lot of water bodies and hot springs that could spur water-based tourism as well as a wide range of cultural heritage attractions like Namugongo Martyrs Shrine, Kasubi Tombs, museums and a number of Kingdoms.[29] Uganda also hosts four UNESCO world heritage sites, 650 designated cultural sites of national importance and has more than 50 vibrant cultural tribes, living in a space that is one quarter of the size of Texas.

**Box 3. Methodological note on tourism analysis.**

This analysis is based on a survey of 135 respondents in the tourism sector including tour operators, tour guides, community-based enterprises, hotel owners, leadership of Ministries, Departments, and Agencies (MDAs).

**Tourism is one of the core sectors of the Ugandan economy, contributing significantly to job creation and export revenue generation.** The industry has enjoyed exponential growth since the turn of the century, with visitor arrivals increasing from 200,000 in 2000 to over a 1.5 million in 2018.[30] The tourism sector accounts for about 7.7 percent of Uganda's GDP and generates $1.6 billion annually. This represents more than twice the earnings of coffee, the country's second biggest export. The sector employs over 667,600 people, which is 6.7 percent of the total non-farm labour force.[31] From the balance of payments perspective, tourism has maintained a sustained growth in the balance of travel for the last 15 years.

**To protect the tourism sector, Uganda Wildlife Authority took several steps in addition to the prohibitive measures announced by the Government and aimed at controlling the spread of the pandemic.** These include: suspension of primate tourism and research in all the protected areas; suspension of filming of primates; provision of personal protective equipment to trackers to avoid passing on infection to the primates;

29 (UTB, 2018).
30 (MTWA, 2018)
31 *Ibid*.

prohibition of motorcycles and bicycles in protected areas; establishment of an internal COVID-19 taskforce to update and guide management on the day-to-day developments in implications on wildlife conservation and tourism in protected areas; and relaxation of the rescheduling of gorilla and chimpanzee tracking for a maximum of two times up to 31 March, 2022.

Additional efforts to cushion the tourism sector include:

(i) BoU's provisions for loan restructuring that could address challenges related to the seasonality in the tourism earnings. By the time of a survey undertaken in April as part of this study, about 25 enterprises had responded to the call by Uganda Tourism Association (UTA) to submit information about their loans with financial institutions, to benefit from this provision;

(ii) a two-year waiver of the Value Added Tax (VAT) to upcountry hotels by MoFPED. Whereas this measure was welcome, it was evident that the entire tourism sector was affected, not only the upcountry hotels. It would have been expected that all hotels in the country would benefit from this initiative. Moreover, evidence suggests that some of the largest hotels were in Kampala and Wakiso and these have had to lay off thousands of workers as they battle to keep some cash flow.

(iii) rescheduling NSSF contributions by enterprises for three months without accumulating penalty, starting 31 March 2020. While this offered some relief, the industry will take a minimum of two years to recover and the period in between will be for survival. Thus, cash flow accumulation will be a key factor in deciding who stays in business and who collapses or lays off more workers.

(iv) the COVID-19 Recovery and Resilience Program by MasterCard Foundation offers feasible interventions such as access to finance, and business shock support clinics, among others, that can promote the resilience of SMEs including those in the tourism sector.

The following sections present the results of the survey of the tourism subsector.[32]

### 2.3.1 Accommodation

**The accommodation subsector plays a significant role in the development of Uganda's tourism industry. The sector has approximately 3,876 establishments countrywide, of which 95.2 percent are owned by Ugandans.**[33] In the 2001-2011 decade, the sub-sector grew exponentially by 189 percent, from 1340 establishments. Facilities in the 30 key districts for tourism have a combined total of 25,909 bedrooms and an annual total of 10,731,730 beds available for sale.[34]

**By 16 March 2020, lodges had received up to 2500 cancellations and were making refunds.[35] By April 2020, 894,310 beds available per month could not be sold, following closure.** At the same time, the Kampala Serena and Serena Kigo had cancellations worth $1.4 million. Sheraton hotel also reported a loss of approximately $700,000 in cancellations for the months of March and April 2020. Occupancy levels fell from 75 percent in the past quarter to less than 20 percent by end of March and 0 percent by end of April. The smaller facilities laid off their workers and majority had unpaid wages and high costs of maintenance. By the time of the survey, retained employees of Sheraton Hotel were paid only 80 percent of their April salaries. Like other accommodation facilities, Sheraton was on the verge of sending home over 400 of its workers[36].

32 For further methodological detail, see Katongole, 2020.
33 (MTWA, 2014)
34 (MTWA, 2014)
35 (PMI, 2020)
36 (Observer, 2020)

**While the effect on urban accommodation facilities was large, the facilities operating in and around national parks suffered the greatest losses.** These facilities relied primarily on inbound visitors. With the closure of airports, restrictions of in-country movements and closure of the national parks, these facilities saw decline in occupancy. The excerpt below from one of the operators of a budget accommodation facility on Lake Mutanda near Bwindi Impenetrable Forest National Park offers useful insights:

> "Over the last 20 years I have been in the tourism industry and based on the trend until 2019, 2020 was envisaged to be the climax of tourism business in Uganda…. We previously received 300 to 500 guests per year and had hoped to host about 1,200 this year (2020) but all this is lost for the rest of the year. We charge $25 for camping with breakfast per person per night so we have missed out on about UGX216,000,000. Most of our staff have been asked to leave until the industry recovers. Only a few are left to take care of the facility. However, not all hope is lost. One Tour operator who solely brings about 200 guests to our facility annually communicated to us that they had rescheduled their travel plans tentatively to around April 2021. Some tentative bookings have also started coming in but for 2021, which is a good sign of life after the pandemic." ***Tour Operator***

### 2.3.2 Tour and travel sector

**There are approximately 350 registered tour companies in Uganda (315 members of the Association of Uganda Tour Operators (AUTO) and 172 on UTB website).** There are also about 100 travel agents, organized under The Uganda Travel Agents Association (TUGATA). All the tour and travel companies own websites and engage in several activities that promote destination Uganda. Tour operators promote Uganda's tourist attractions vigorously through online marketing, participating in travel fairs, and investing in the sector. Travel agents offer advice on destinations and make arrangements for transportation, hotel accommodations, car rentals, and tours for their clients. In many instances tour operators also do the work of travel agents and vice versa. About 73.5 percent of tour operators participate in trade fairs, and those that attend alongside UTB, often contribute about 20 percent of the fair cost. Tour operators sell tour packages to tourists and they generate about 98 percent of the revenue from sale of gorilla permits as well as substantial proportions of all the products sold by UWA. Each company sold an average of 74 safaris in 2019. Tour operators provide transport services to tourists and supply accommodation facilities with guests. More than 90 percent of safari lodges in the different parts of Uganda receive their guests from tour operators. Also, many airline bookings to Entebbe International Airport are attributed to the efforts of tour operators. The tour operators provide employment, pay taxes, make investments and contribute towards supporting the tourism industry as key actors in the tourism value chain.[37]

**Approximately 91 percent of AUTO members have suffered cancellations averaging 25 per company, worth UGX 208 million per AUTO Member Survey conducted recently.** For 350 companies, this represents about UGX 72.8 billion. Each company has lost an average of 25 cancellations which they were expecting to conclude before June 2020. The median income for 2019 was UGX 131 million with some companies earning as much as UGX 1.4 billion in gross revenue but the current losses are estimated at UGX 131 million. These companies employ an average of 11 people, and the

37 (ITC, 2011)

majority have already sent these workers home. Like the safari lodges, tour companies are likely to take longer to recover primarily because they depend on international visitors. The case of Uganda Safari Company depicts this point quite well.

> "We suffered way before the pandemic reached Uganda. Started in Feb. We had trips, had incentives, invested in vehicles but all of this is now gone. Lifting of the lockdown in Uganda does not mean it shall be lifted elsewhere. We need to make long term plans at the minimum. We should plan for years. At our company we work from home. We have a lot of contracts with suppliers, tried to freeze rates, postpone the trips for one year at the same rate. And we are maintaining low season rates irrespective of whether visitors will come during the peak season. We gave tour operators freedom to avoid cancellations. Refund is the very last measure. We tried to adjust cancellation policy to allow at least 2 months. Maybe we can have business around October or November. We keep the adjustments within 2 months. Everyone thinks Africa is going to be the worst hit. So, it's important to manage it."
>
> ***Safari Company***

**Most of the reservations have been postponed to the next summer.** One of the key factors for postponement, and thus avoidance of refunds, is the UWA policy of refusing to refund but instead encouraging postponement of trips up to 2022. If proper survival strategies are not devised, many companies are likely to run insolvent, leaving booked permits and clients unattended. It is thus essential to have these companies stay in business until their clients make the trips to Uganda.

**CASE 1: RWENZORI MOUNTAINEERING SERVICES (RMS)**

**RMS is a community-based organization (CBO) operating in the Rwenzori Mountains National Park. The CBO had a concession to operate mountaineering services in the Rwenzori Mountains. They had built a community lodge, a community health centre and operated three offices – in Kampala, Kasese and the head office at Nyakarenjijo, at the base of the mountain. The CBO directly employed 19 people (26% women) on full time and provided employment to about 1,000 local people who acted as porters, guides and cooks on a rotating basis. For the most part of the year, the CBO would guide about 200-300 guests through the mountain. Each visitor would need about five people (3 porters, 1 guide, and 1 porter for the guide). Thus, in a month when 200 guests climbed the mountain, a minimum of 1,000 local people were employed and earned an income. These people had families and others used the income to support their parents. However, since February the CBO has not received even a single guest. All the bookings they had for 2020 have been cancelled. The lodge was closed. The offices were closed. The permanent workers were all sent home and have not received salary since February. The community cannot even gather to plan and decide what to do because gatherings have been banned. They had committed to pay school fees for the needy children in the local community. They are considering withdrawing the offer because there is no income. The health centre offered free services and thus can no longer operate. The CBO management is worried that they are going to lose their good employees. People have gone back to peasantry farming. Their infrastructure (lodge) and good effort in past years is going to waste.**

### 2.3.3 Local community tourism

**Local communities are communities that live adjacent to the attraction sites.** Most of these communities are poor[38] and predominantly in subsistence farming, with tourism providing the best route to income generation. Some of these communities are also socially and economically marginalized, such as the Batwa, an Indigenous community in the Rwenzori and Greater Virunga region where Mgahinga, Bwindi, and Rwenzori National Parks are located. The national umbrella association for local community tourism initiatives estimates about 1000 such enterprises. These communities provide several services to tourists including community trails, experiential activities, handicrafts, dances at lodges and others supply produce to safari lodges. They receive their guests mostly from lodges and tour operators, and sometimes from tour guides. These enterprises are destined to suffer significantly in the medium-long term as well. Stagnation of tourism implies that many are going to lose income and thus the opportunity to accumulate livelihood assets and address their welfare needs. They could also lose the tourism skills and the social capital that has been developed over time.

### 2.3.4 Tourist guiding

**Tourist guides are often called "jacks of all trades" because they must have a wide base of knowledge regarding Uganda's history, culture, sites, and activities.** In Uganda many of the guides also act as drivers, so most of the visitors' time is spent in their hands. Estimates by both Uganda Safari Guides Association (USAGA) and the Tour Guides Forum of Uganda (TGFU) indicate that there are approximately 1,000 professional guides in the country with training in various fields such as birding, primatology, cultural tourism, mountaineering, and tourist driving. The loss of business will result in the loss of vital manpower in the industry to other economic activities that will provide quicker sources of livelihoods, affecting the marketing of several tourism products.

### 2.3.5 Cultural sites

**Many cultural sites in Uganda are associated with traditional kingdoms.** The kingdoms, being custodians of the culture for their people, often look after these sites, with or without tourism, because conservation of culture is their responsibility. Tourism, however, can provide additional resources to support cultural conservation. Some cultural centres also support Indigenous communities such as the Batwa, where ecotourists to Bwindi, Mgahinga, and Rwenzori National Parks can also go to learn about the Indigenous Batwa culture and the livelihoods practices of the communities. There are also some cultural sites that are purely private but are for the greater good of community and humanity. These sites earned their incomes exclusively from tourism and the pandemic is threatening their survival, even in the long term. One of these sites is a well-developed centre that operates in Kampala City (Kampala Cultural Centre [KCC][39]). KCC runs three shows per week and has been in existence since the early 1980s. The centre operates a restaurant, an accommodation facility and cultural performances. The centre had three distinct categories of people: artists, the children in school and the administrative staff. They used to perform before audiences of about 300-400 people but by the end of January their audiences had reduced to 2-3 people. By March there was no single client booking to watch the shows. By the time of the survey, the centre has sent home: all the 81 artists; 51 young talented children under its tutelage, and 90 percent of administrative staff. KCC had begun a program of rolling out cultural tourism to other parts of Uganda. Part of this was in the form of building a unique cultural lodge and a Batwa cultural centre in Kisoro. The lodge was being built with borrowed money and was slated to open on 30 June,

38 (Katongole, 2020)
39 Pseudonym used to protect the identity of the site.

2020, at the peak of the visitor high season. The building was not completed, the commercial bank continues to calculate interest and demand for its money. Even if the pandemic ends, the centre cannot open the lodge because the bank stopped halfway the funding process.

> "…it takes 4-5 years to train an artist. Now that they have gone home, their bodies will retract, some will become pregnant, some will marry, others will find other jobs, and others will forget the art. We had built the Centre on 9 acres and keeping it is costly…if this pandemic kills KCC, that will be the end of the link between our past and the present, and if this goes on and I cannot continue, I will just sell off the place and retire. At least I will have done my part." ***Founder, KCC***

**The words of the KCC also reflect a lack of contingency planning and an approach to business that did not take into account shocks.** This was observed across the entire sector, whether for large or small operators. Thus, the COVID-19 pandemic has exposed the vulnerability of many tourism enterprises and their lack of resilience to shocks. While many of these are private enterprises, they have benefited many Ugandans and members of the global community and the losses for cultural centres will be great. For cultural or community centres that also support vulnerable and marginalized groups such as the Indigenous communities like the Batwa, the losses may also increase poverty, vulnerability, and entrench economic and social marginalization.

### 2.3.6 Industry-level effects

**The outbreak of the virus affected virtually all parts of the hospitality value chain.** The impact of cancelled events, closed accommodations, and shut down attractions and national parks became immediately felt in other parts of the supply chain, such as catering and laundry services, and community products and services. Restaurants had to close as well, though in some locations, a switch to take-away/delivery sales allowed some to continue operations.

**Unlike other business sectors, tourism revenue is permanently lost because unsold capacity – for instance in accommodation – cannot be marketed in subsequent years, with corresponding implications for employment in the sector.** Below is a breakdown of monthly foreign exchange gain from tourism in Uganda for the year 2018 during which foreign exchange gains from tourism reached $1.6 billion.

**Table 3. Potential monthly losses from tourism in Uganda**

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Share of arrivals | 8.2% | 7.4% | 7.9% | 8.1% | 8.8% | 7.4% | 8.7% | 9.5% | 8.4% | 7.8% | 8.2% | 9.6% |
| Share of Foreign exchange gain (2018) | $130.9k | $117.8k | $126.7k | $130.3k | $140.9k | $119.1k | $139.4k | $151.3k | $134.1k | $124.9k | $130.8k | $153.7k |

*Source: MTWA, 2018*

**Thus, the tourism sector suffers a direct average loss of approximately $130 million for each month during which the industry professionals are not operating (Table 3).** However, the induced impacts on tourism-related sectors are likely to be bigger as it includes all backward linkages with local producers.

### 2.3.7 Five year forecasted impact of the pandemic on the tourism sector

**Today, the forecasts for the recovery of international tourism are rather pessimistic in light of the most recent information that most international travel will be limited until end of 2020.** The expected impact depends strongly on the willingness of individuals to travel and on the extent of travel restrictions globally. Thus, during the next few months, most visitors to Uganda will be merchants from neighbouring countries, not forgetting domestic tourists for whom there is no precise data. For some such as the World Economic Forum, once the outbreak is over, it could take up to 10 months for the industry to recover.

**Assessing the distribution of international arrivals by category of visitors for the last 15 years can help to forecast the impact of the pandemic.** Leisure visitors represented about 20 percent of all international visitors to Uganda in 2018 (Table 4). These visitors are not likely to return before mid-year 2021. Another important factor to be considered is that visitors from western countries only represent 20 percent of all arrivals to Uganda. Most visitors to Uganda (70 percent) are business travellers from within the East African Community. This means that the business tourism market should recover faster than the leisure market. Unfortunately, this also means that a few categories of tourism suppliers such as tour operators, safari lodges and communities projects will be dramatically impacted as most of their customers are working with the leisure market only. Another important aspect is that cities, where business visitors are mostly staying, should benefit more than secondary destinations from the recovery. The recovery will also be slower for the leisure markets given the economic impact of the pandemic on households.

**The tourism sector is expected to lose enormous revenue, $5 billion, over the next five years.** Comparing the scenario with an average growth in international tourist arrivals of 5 percent per year without COVID-19, there is an observed difference in the number of arrivals over a 5-year period (2020-2025) of more than 5 million. Based on the level of average spending per traveller, this represents a shortfall of almost $5 billion over the same period. Uganda should not expect to recover before June 2021 for the leisure and Western markets. For other market segments, such as business tourists, the recovery will depend on business sectors with significant differences between merchants and business tourists (MICE) for whom the organization of online meetings and webinars, which has become an innovative and ultimately effective solution during the crisis, should continue in the first instance. For those visiting friends and relatives (VFRs), there is no precise data on their origin. While the return of Ugandans in the European and American diaspora should take longer, the regional VFRs should recover more quickly, including for religious events. The “other” category is generally represented by students and researchers. Mainly composed of young people not vulnerable to COVID-19, it should also resume with the reopening of the borders.

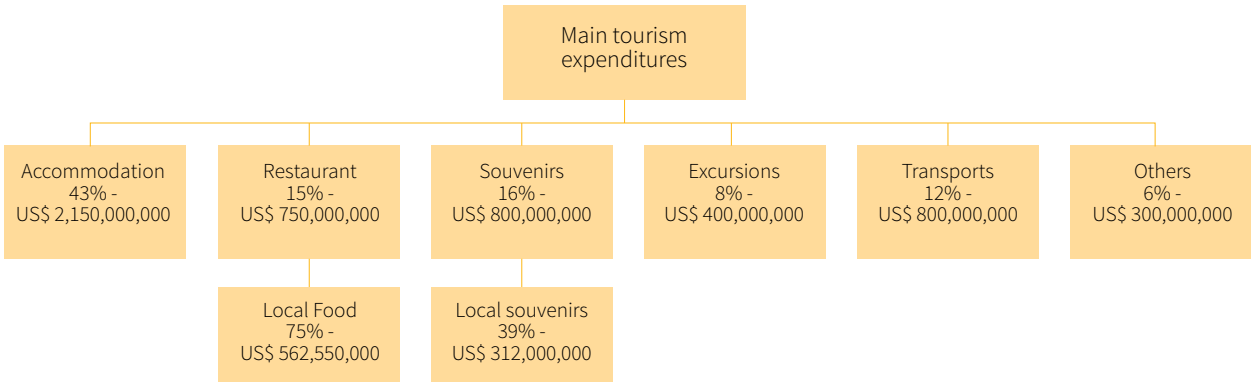
**Table 4. Projected shortfalls in tourism receipts 2020 – 2025 by tourist numbers (Low scenario).**

| | 2018 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|---|
| **Leisure visitors** | 330,000 (20.7%) | 40-50,000 (Jan-Feb) | 80-100,000 (June-Dec) | 200,000 | 250,000 | 275,000 | 300,000 |
| **Business visitors** | 490,000 (28.7%) | 160,000 (Jan-Feb + Sept-Dec) | 200,000 | 300,000 | 350,000 | 400,000 | 450,000 |
| **VFR** | 570,000 (34.8%) | 270,000 (Jan-Feb + July-Dec) | 300,000 | 400,000 | 450,000 | 500,000 | 550,000 |
| **Others** | 255,000 (16%) | 100,000 (Jan-Feb + July-Dec) | 150,000 | 200,000 | 220,000 | 230,000 | 250,000 |
| **Total** | 1,600,000 | 580,000 | 750,000 | 1,100,000 | 1,270,000 | 1,405,000 | 1,550,000 |
| **Variation** | | -63% | +29% | +46% | +15% | 11% | 10% |
| **Trend without COVID-19** | 1.6m | 1.76m | 1.85m | 1.94m | 2.04m | 2.14m | 2.25m |
| **Difference** | | 1.18m | 1.10m | 840,000 | 770,000 | 740,000 | 700,000 |

*Source: MTWA, 2020; calculations from tourism shortfall projections.*

Using the breakdown of visitor spending based on ITC's 2011 value chain analysis, if the pandemic were to affect all market segments similarly, the losses indicated in Figure 19 would be observed for each of Uganda's tourism-related sectors over the next five years.

**Figure 19. Estimated loss over 6 years (2020-2025) per node of the value chain (based on breakdown of visitor expenditures).**




*Source: Authors' adaptation from ITC, 2011.*

**These estimates do not however fully reflect the impact of the pandemic, as the leisure market segment was also affected.** For this category, the value should be considered as a minimum.

### 2.3.8 Effect on human resources, livelihoods and community development

**As of April 2020, at least 65 percent of interviewed businesses had temporarily laid off staff, with 30 percent of staff having seen their contract being terminated.** On average, salaries represent about 20 percent of operating costs of all tourism sub-sectors representing an average monthly loss of income of $25 million for the tourism workers.

**The closure of tourism enterprises has far reaching implications on livelihoods.** For instance, 80 percent of the guides have families, ranging between 3-4 members. Further estimates by the leadership of the associations indicate that about 70 percent of the guides work about 10-15 days a month, earning about UGX 1,500,000. They also earn well from tips at the end of the trips. Tips are estimated at about UGX 1,000,000 per month. It is evident from this information that tourist guides have been some of the key beneficiaries from the tourism industry. The monetary incentives, opportunities for networking, flexibility in working hours, exposure and knowledge generation attracted several high-quality guides into the industry. These have all lost income.

> "All of us are not working; many of us are financially hard-up; and some of us are surviving on our savings…we are scared and anxious because we don't know when the industry will restart as there is no cure or vaccine for the coronavirus."
>
> ***Head of the Tour Guides Forum***

**The need to survive is going to drive many guides out of tourism.** It has been strongly suggested that tour guides have sound driving skills and will easily find jobs as drivers in other sectors, including transport and Government agencies. Moreover, they have sound interpersonal skills because they serve people directly. Others may end up in farming, and in sectors that are less prone to volatilities. The others who will return may have to learn afresh as some subjects require routine reading. Some of these subjects include birding and nature activities – and usually the presence of visitors is an incentive for reading and updating content. It is therefore likely that by the time tourism resumes, tour guides may have moved on in other areas, and those who will have stayed may be rusty. The implication is that tourism will be short of a key group of people that deliver on the promises made by tour operators, the Uganda Tourism Board and all of those that market and promote destination Uganda.

**Table 5. Projected Community Revenue losses from UWA Revenue Sharing 2020 –2025.**

| Protected Area | 2005 - 2011 | 2012 - 2018 | 2019 - 2025 (without COVID-19) | 2019 - 2025 (with COVID-19) |
|---|---|---|---|---|
| **Bwindi** | 811,061 850 | 2,056,913,826 | 3,769,327,635 | 2,291,295,996 |
| **Kibale** | 260,280,756 | 589,114,515 | 1,079,561,814 | 656,243,209 |
| **Kidepo Valley** | 6,868,000 | 206,713,000 | 378,804,894 | 230,267,629 |
| **Lake Mburo** | 619,940,116 | 2,013,773,505 | 3,690,272,303 | 2,243,239,901 |
| **Mount Elgon** | 66,480,500 | 120,382,565 | 220,602,985 | 134,099,974 |
| **Murchison Falls** | 1,868,791,500 | 8,421,310,000 | 15,432,185,881 | 9,380,905,335 |
| **Queen Elizabeth** | 903,890,026 | 2,768,961,054 | 5,074,165,620 | 3,084,479,911 |
| **Toro-Semiliki** | 13,989,000 | - | - | |
| **RMNP** | 52,834,800 | 310,521,350 | 569,035,363 | 345,904,781 |
| **Mgahinga Gorilla** | 47,404,775 | 268,331,195 | 491,721,226 | 298,907,122 |
| **Total** | 4,651,541,323 | 16,756,021,010 | 30,705,677,721 | 18,665,343,858 |
| | | | | **-12,040,333,863** |

*Source: UWA, 2020.*

**Based on the latest estimate, local communities may lose a minimum of UGX 12 billion by 2025, due to corona virus outbreak and containment measures.** From a community development perspective, for those involved in tourism there are currently no economic alternatives. This was further emphasised by the Uganda Community Tourism Association. Community development will be significantly hampered by lost income from the Uganda Wildlife Authority (UWA). UWA shares 20 percent of its revenue from entrance fees with the local communities. Table 5 depicts the magnitude of lost community income from revenue sharing should the pandemic persist.

## 2.4 Policy Recommendations

**URGENTLY DRAW A COMPREHENSIVE COSTED RECOVERY PLAN.** This should involve a multi sectoral team led by MoFPED to inform the actions of both Government and non-state actors. In addition to the health sector, the plan should make special consideration for the most directly affected sectors such as tourism and logistics to protect employment.

**NDPIII MUST ACCOMMODATE NEW REALITIES.** National Planning Authority (NPA) and MoFPED should factor in how COVID-19 will affect NDPIII assumptions for the next five years and take appropriate action in building the resilience of the economy (Table 0-1).

**BUILD THE CAPACITY OF FIRMS TO ENHANCE RESILIENCE OF THE MANUFACTURING SECTOR.** The manufacturing sector should be supported to retool existing human resource capacities and production processes to speed up industrialization programs; diversify input markets to act as buffer against crises and insulate the industry against any short-circuiting of input supply chains; and adopt digital technologies to build vibrant production-marketing-distribution-consumption value chains. The recently issued UNIDO Guidelines could provide direction in this regard (UNIDO, 2020). Digitalization of value chains will facilitate stronger positioning within the AfCFTA.

**PROVIDE TAILOR-MADE FINANCIAL SUPPORT TO ENABLE FAST RECOVERY OF THE MANUFACTURING SECTOR.** Provision for affordable financing for manufacturing is key for the sector to recover quickly. The sector involves long term investment which needs preferential low-cost finance. Ensuring access by large, medium and small scale/cottage manufacturing firms will demand new ways of working including involving microfinance institutions to reach to the small enterprises. Government should use the opportunity by working with the financial sector new services to be emerging that will allow firms to ensure the required liquidity and to ease the financial burden of firms, especially SMEs, which are already facing significant challenges.

**DEVELOP A COMPREHENSIVE TOURISM RECOVERY PLAN.** Given that recovery will no longer entail the old ways of doing things, as travel patterns and nature of demand will change, the plan must advance fundamental changes providing for creative interventions to support businesses, restoration of travellers' confidence and stimulation of demand including in non-traditional sources, once containment measures are lifted. This plan should be accompanied by a marketing strategy to guide sector promotional actions. This is also the time to revise the terms of reference for the public relations firms with a view to promoting a newly branded Uganda. The plan should also consider: establishing tourism Standard Operating Procedures (SOPs) for the "new normal" to protect wildlife, local communities, and visitors; accommodating immediate support to cater for critical operational expenses, retaining human resources in the public and private sector, protected areas monitoring, human-wildlife conflict management; and social protection for communities that benefit from tourism services to prevent endangering tourism products. Support should also be extended to critical private tourism products (for instance cultural centres, forests) and all wildlife or animal-rearing destinations for a minimum of two years to avoid collapse and re-allocation to alternative economic uses.

**LEVERAGE REGIONAL INTEGRATION**, to build integrated digital markets to reduce transaction barriers for goods and services to sustain businesses during crises, guarantee food security, and enable the country to harness its potential as a regional food basket, including in times of crisis.

CHAPTERS 2-7:

# POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

CHAPTER THREE

# AGRICULTURE AND FOOD SECURITY

# KEY MESSAGES

Overall, subsistence farmers' food production was not severely impacted by the lockdown. Rural households largely rely on own-produced food.

Lockdown measures have impacted food supply chains and market functioning. Agricultural related activities continue to operate due to lockdown exceptions instituted to minimize country-wide food shocks. However, adverse effects on agriculture are beginning to emerge in:

- Interruption of farm input supply due to travel restrictions, especially on public transport;
- Disruption of food distribution in urban areas as a result of social distancing rules that have slowed the loading of produce onto trucks;
- Demand for cereals and items with long shelf-life has increased, especially for common staples such as maize flour, beans, peas, millet, salt, sugar, and cooking oils, resulting in a temporary spike in prices;
- Prices for perishables have generally declined due in part to disruptions in transport and inadequate storage capacities;
- Lockdown of cattle markets and restrictions on fishing have reduced the supply of meat and fish;
- Food safety and quality have deteriorated due to delays and reduced controls and checks.

The poor and net food-buyers are most affected by disruptions in food supply chains and reduced access to affordable food.

Access to dietary diversity and nutritious foods has decreased, mostly for highly vulnerable groups and marginalized communities such as refugees, women and children, unemployed or informally employed youth, elderly, and people living with disabilities or pre-existing medical conditions like HIV/AIDS, and Indigenous communities.

Absence of a strategic food reserve worsens food access for the poor and vulnerable. This poses challenges for rapid Government response to various types of shocks which impact on food and nutrition security of vulnerable and marginalized households.

# 3.1 Agriculture Sector

**The containment measures have caused disruptions of food supply chains with serious implications for the poor, vulnerable, and marginalized.** The measures did not specify how the food security and livelihoods of the poor and vulnerable will be safeguarded. The onset of the pandemic coincided with the beginning of the main crop production season and the restrictions of movement, transport and market operations happened at a time when most households, especially those in rural areas, had insufficient food stocks on which to subsist.

**The restrictions affected the supply of agricultural labour, technical services, and the supply of inputs, such as improved seed, fertilizer, veterinary medicines, animal and fish feed, insecticides, and pesticides.** This is likely to pose critical challenges to food production and processing and potentially increase food insecurity. The restrictions are also likely to disrupt food supply chains, including food production and processing of vegetables, high value crops such as coffee and tea, and nutrient-dense food such as meat and fish. Also, these heightened efforts are of significance in areas such as Karamoja and Northern Districts that have experienced the recent desert locust outbreak as well as flood prone areas in western Uganda.

**In addition, small-scale farmers may face restrictions in accessing markets to sell their produce or buy inputs (such as seeds, pesticides).** Net food purchasing households (both rural and urban) could also struggle to access food due to higher food prices and limited purchasing power. Furthermore, pregnant women and those with disabilities or pre-existing or chronic medical conditions may experience reduced access to proper nutrition and basic health services.

**The Government did put in place several measures to stabilize the food supply chain.** These have included supporting technology to enhance productivity, maintaining veterinary services in operation and continuity of food sales at markets, and facilitating food distribution and flow. MAAIF proposed to institute safe labour practices by increasing access to personal protective equipment (such as gloves, masks, etc.). Labour saving practices are also being promoted to compensate labour shortage, limitations of collective labour and restrictions on the movement of people to production sites. The ministry is also proposing to support innovative digital-facilitated logistics to support control measures on transport, input distribution and retailing systems in the provision of agricultural inputs in the rural areas. Government also started distributing food (maize flour, beans and sugar) to urban vulnerable and casual workers and unemployed in Kampala and Wakiso district. However, wider distribution is yet to be organized and rolled out. MAAIF is also working on strengthening policy dialogue between food surplus areas and food deficit areas by circulating information on food prices and consumption patterns, allowing stocks to flow widely in real time.

**In case COVID-19 continues to spread, it is expected that agricultural export will be reduced if transit routes are congested to Kenya and Tanzania, resulting in input shortage that could impact on agricultural productivity.** These inputs could include fertilizers for sugar canes estates, and feed for dairy, poultry and pigs. Mombasa and Dar-es-Salaam remain very critical to Uganda's agricultural export and imports. In case there are substantial disruptions in input supply chains, shortage in imported livestock, drugs, and vaccines will impact on livestock productivity and the industry at large, including production of meat, milk and eggs.

**These critical potential impacts of COVID-19 on the agricultural sector and food security need to be better understood and documented.** It is important

to understand the transmission channels of the impact of COVID-19 for agriculture, food security and nutrition, and how they impact vulnerable and marginalized people such as the urban and rural poor, children under five years, women of reproductive age, elderly, refugees, and those living with HIV/AIDS. Further documenting measures taken by the Government of Uganda (GoU) and its development partners to improve agricultural production and productivity as well as social protection measures such as food distribution and cash transfers will be necessary in ensuring that the poor, vulnerable, and marginalized have access to food. Investment in agricultural production and productivity as well as ensuring the continuity in operations of food supply chains will also be critical in longer-term recovery efforts in response to COVID-19. This chapter assesses the impacts of COVID-19 on global food trade and markets, the disruption to food supply chains, and all possible impacts of COVID-19 on the population's food security, especially for the poor and vulnerable. The chapter generates evidence to support pragmatic policy recommendations for the immediate, medium and long terms, to also increase the resilience of Uganda's food systems to future unforeseen outbreaks or shocks.

**BOX 4. Methodological note for agriculture sector and food security analysis.**

Primary and secondary data were collected for this analysis. Secondary data were obtained from FAO and UBOS Annual Agricultural Survey (2018/2019) data, World Bank, MAAIF, WFP, USAID, and UNICEF, which enabled analysis of trends in food supply and demand, food prices and markets, food access, consumption and nutrition at national, regional and household levels to understand the likely impacts of COVID-19 on food and nutrition security and sustainable agriculture (FNSSA) in Uganda. Primary data were collected through Key Informant Interviews (KIIs), and households' and traders' questionnaires. The respondents from the selected districts in this study included rural and urban dwellers. Given travel restrictions, data collection was done using phone interviews and/or online survey Delphi method (structured communication method as a systematic, interactive forecasting method). Key informants included Districts Agriculture Officers, District Veterinary Officers, District Fisheries Officers, local administration officials and staff from the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), and other relevant ministries staff, Development Partners, NGOs, Farmers Organizations, Livestock Associations, Dairy Industry Association, Agribusiness Associations, Fisheries Organizations and Civil Society Organizations (CSOs); crop and livestock farmers; capture fish farmers; agricultural labourers (landless farmers); the urban poor; health professionals; food traders and transporters; input dealers; agro-processors; workers in the food catering services; consumer households. The selection of representative districts was based on several indicators which include: the population of vulnerable groups, the prevalence child nutritional and health outcomes, population of refugees, presence of disasters such as floods and landslides as well as desert locusts, and whether the district is food surplus or food deficit. This selection was made in collaboration with FAO of Uganda and MAAIF officials.

### 3.1.1 Food production and productivity of crops, fisheries, and livestock

Lockdown measures have not directly impacted agricultural production for most subsistence farmers.[40] Neither the operation of agro-veterinary outlets nor the movement of agricultural equipment and vehicles have been restricted. Currently, rural households are relying on own-produced food and earning incomes through typical strategies such as selling chicken, fruits and horticultural products, borrowing food/money from villages saving groups and selling crafts and cash crops. In most of bimodal rainfall patterns areas (for example in Central Region), most of the farmers are planting and weeding first seasons crops, while those that planted earlier in February 2020, (district of Kyenjojo, Kyegewa, and Mityana) are witnessing early harvest for beans, providing income to households.

40 (FEWS NET, 2020)

**The 2020 cropping season is going relatively well: planting has taken place and is still underway in specific locations especially in Northern and Eastern Region and Karamoja.** However, the pandemic is coming on top of desert locusts and flooding, especially in North-Eastern Uganda. The fall armyworm also remains a threat to maize production while the rainfall pattern is projected to be above-normal conditions, providing a good opportunity for crop and pasture growing conditions, also creating conducive hatching conditions for desert locust that could further outbreak, affecting production.

**The lockdown may have had some slight negative effect on food production due to restrictions of the movement of casual labourers.**[41] While labour shortage has been observed, it is unlikely to take unbearable proportion for households' farm production since family members provide the bulk of labour. However, off-farm employment opportunities can be expected to diminish. The farm input supply system has also been affected due to travel restrictions imposed on farmers and input dealers who predominantly use public transport. The depreciation of the Ugandan shilling has led to an increase in the cost and scarcity of imported farm inputs. However, there was a limited effect on smallholders' farmers, given their limited use of external inputs such as fertilizers and agro-chemicals. For commercial farms, the increase in the cost of equipment and spare parts (production and processing) has heavily affected business.[42]

**Decline in fish production and the broader impacts on the fish supply chain, have resulted in negative impacts on livelihood and food security for populations that rely on fish for animal protein and essential micronutrients.** According to interviewed respondents, capture fishing in lakes and rivers has been severely restricted to prevent the spread of the pandemic from the DRC, Kenya and Tanzania. In terms of the broader fish production supply chain, there are three major ways that fisheries and aquaculture food systems are being affected, namely production, logistical, and market-access: 1) fishing activity reduced or was brought to a halt in some landing sites because of reduction in demand, as some of the traders using public means of transport cannot continue with the business; 2) shortage of inputs such as ice, fuel, and labour has led to deterioration of quality of fish; 3) the disruption of regional market (DRC, Kenya, Rwanda) has also increased the risk of prolonged storage, compromising quality.

**For fish farmers in aquaculture, there is also increased cost of production as farmers require more feed to keep the fish through the lockdown.** Fish farmers especially those at small scale are experiencing further difficulty in sourcing for inputs such as feeds and fingerlings, mainly due to movement restrictions.

**The livelihoods of fishing communities are in a dire state.** Fish supply is becoming difficult resulting in a price increase, negatively impacting fish consumption. Furthermore, fishermen often live and work together, depend largely on public transport, and work in crowded surroundings. Fishing communities also have disproportionately high levels of vulnerability, for instance, with HIV prevalence averaging between 20 and 30 percent, above the national average of 6 percent. They therefore present a potentially most-at-risk category regarding the effects of the pandemic. Furthermore, there is a likelihood of the pandemic having a long-term effect on women who depend on the value chain as the only source of livelihood. Some of them have financial loan obligations while others will have spent all their capital on feeding their families during the lockdown.

**Livestock value chains have also been severely hit.** Suppliers of livestock inputs such as feeds and veterinary pharmaceutical products also made losses. Physical distancing and requirements for additional

41 (Fowler, 2020)
42 *Ibid.*

personal protective equipment reduced the efficiency of industrial feed enterprises. This affected the quantities of livestock inputs produced for instance (animal feeds processed per day). Movement restrictions also resulted in labour shortages and reduced supply of raw materials or other ingredients. It also disrupted transhumance, crippling pastoralists' ability to feed their animals. Overall, the cost of production has gone up because of the challenges of accessing the inputs while the demand for livestock products dropped suddenly. Although Uganda has experienced good rainfall patterns in January-March 2020, resulting in excellent pastures for livestock and dairy production, the wholesale and farm gate milk prices have collapsed due to recent import restrictions of Ugandan milk on its domestic market. Interviewed respondents also noted that there appeared to have been increased criminal cases related to the theft of animals despite the existence of curfew.

**The situation has greatly affected the poultry sub-sector.** In addition, movement restrictions and disruption in supply chains on national and international trade routes is curbing farmer access to breeding materials and replacement stocks (e.g. day-old chicks). Interviewees in the poultry sub-sector indicate that this has been due to restricted customer access to markets and stalls to buy chicken, for example. The veterinary service providers became inaccessible and unavailable due to reduced mobility. This has caused the death of birds since farmers could not easily access services. Veterinary inputs such as feeds and drugs have become unavailable and inaccessible. There is also reduced consumer purchasing power as quarantine and lockdowns constrained purchasing power, particularly that of informal workers, with little or no social safety nets. Staff reductions due to lockdown measures are constraining poultry processing industries, given their labour-intensive nature. In urban and peri-urban areas, the crisis has disproportionately affected women working in the poultry sub-sector. The effect on informally employed women in markets in urban and peri-urban areas is further explored in Chapter 4.

### 3.1.2 Food demand and supply

**All agricultural related activities continued operating during the lockdown to minimize any country-wide food related shocks in the economy.** Despite this measure, perishable animal products such as eggs and milk saw a sharp decline in demand due to the restrictions on urban dwellers and restaurants. In addition, demand for some foods such as fruits, vegetables, livestock products such as meat has declined due to the loss of daily income of the urban poor who live from hand to mouth. In addition, the lockdown has affected households with reasonable income flows in terms of the frequency of privately driving to the markets to buy food. Social distancing rules meant that loading of farm produce from rural markets or farms onto trucks was restricted. Therefore, more time was required to move produce from farms to urban markets. In addition, less than usual quantities of food supplies were entering the markets. Coupled with lower food demand, it implies that business has been severely slowed down in the food supply chains.

**In the medium to long term, effective demand for food products could fall rapidly leading to a reduction in farm gate prices.** Major drops in demand for staple food crops are unlikely but a significant reduction in imported and processed food and beverages is expected as household incomes are lost. This is particularly true for urban informal workers and casual labourers, whose livelihoods have already been impacted by the lockdown. Moreover, agricultural export industry registered significant price falls of more than 20 percent for the last 3 months, particularly for sugar, cocoa and cotton, as a result of shrinking global demand for those commodities.[43,44]

43 *Ibid.*

44 Uganda also experienced catastrophic fall in demand for flowers in major European markets, leading to the collapse of the floriculture industry with around 30 percent of the labour (total labour force estimated at 10,000 workers) force being laid off.

**In the short term, Uganda will rely largely on domestic food production, but remain heavily dependent upon vegetable oil imports.** Approximately 68 percent of farm households are classified as "subsistence," which may be a strength in the current circumstances as farmers produce mainly for home consumption, with sales being limited, rather than being the focus of the farm households' production planning. The most vulnerable of these subsistence farmers are very dependent on off-farm labour.[45] The closure of borders and international airport has limited imports and exports of foods thereby affecting the performance of the regional and domestic food value chains. The lockdown has meant that farmers of oil palm (vegetable oil production) have experienced limited access to inputs such as seed, fertilizers and plant protection chemicals from input dealers who are far away. Therefore, a prolonged lockdown will affect the vegetable oil value chain.

### 3.1.3 Food prices

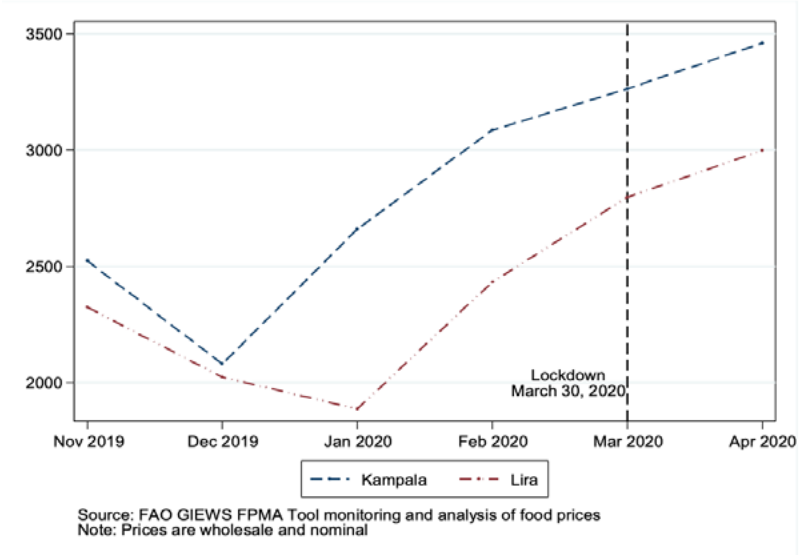
**Food markets in urban and peri-urban areas have been allowed to operate throughout the country during the lockdown (except cattle markets and weekly markets in the rural areas) to enable farmers send their food to urban areas.** The closure of livestock spot markets disrupted the supply chains of beef, poultry and dairy. Most livestock products are destined for the urban markets such as restaurants and urban households, that are now under lockdown.

**Price collapse has been observed for perishable food products.** The price of eggs per tray of 30 eggs declined from UGX 12,000-15,000 to UGX 6,000-8,000 in most parts of Kampala, only to start rising with gradual easing. The price of green bananas *(matooke)* mostly supplied to urban dwellers and restaurants declined from approximately UGX 15,000-25,000 to UGX 6,000-10,000 per bunch in most parts of the city. The same applies to other highly perishable products.

**There has been a spike in prices of cereals, wheat, and basic staple food commodities such as maize, beans and rice, given their long shelf-life and convenience in bulk storage.** At the onset of the outbreak in March 2020, urban areas witnessed substantial increase in food demand due to panic buying, hoarding and speculative trading and short-term price increases especially for rice, sugar and salt. Uganda is net food exporter to neighbouring countries such as DRC, South Sudan, Kenya, and Rwanda. Each year the country experiences seasonal food prices increase as households and market supplies decline. However, food prices increased atypically between February and March 2020 due to the disruptions of food supply chains and the high demand locally from South Sudan. This occurred in the context of below average production of maize and beans during the last season which also influenced the supply countrywide. It is important to note that most of rural open-air markets that sell the livestock have been closed during this lockdown period, denying farming households their regular sources of incomes and access to buyers/traders[46].

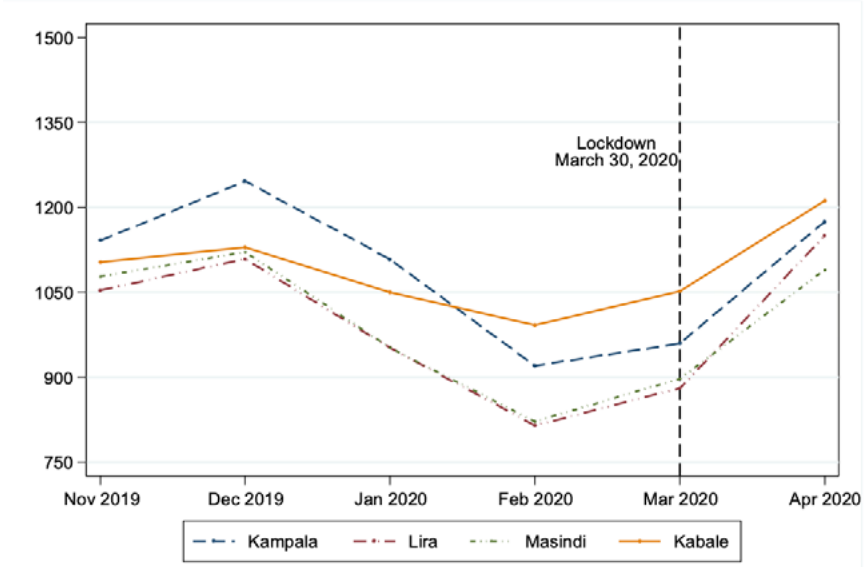
45 (Fowler, 2020)
46 (FEWS NET, 2020)

Figure 20. Maize price per kilogram in selected markets.




Source: FAO GIEWS FPMA Tool monitoring and analysis of food prices
Note: Prices are wholesale and nominal

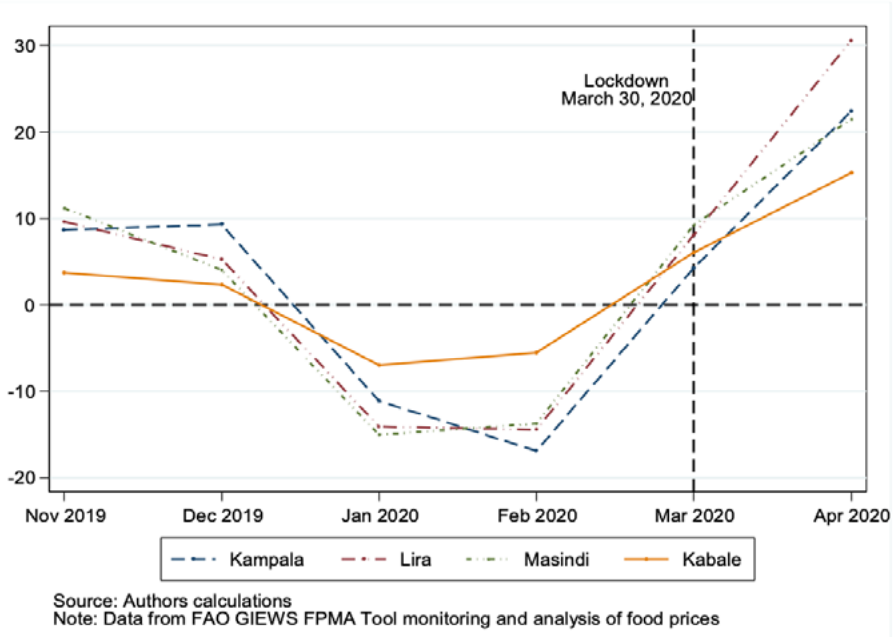
Figure 21. Beans price per kilogram in selected markets.




Source: FAO GIEWS FPMA Tool monitoring and analysis of food prices
Note: Prices are wholesale nominal

**This upward pressure was also compounded by the rise in demand from the Government for its food distribution programmes.** Prices in April were above their year-earlier levels, sustained by a below-average 2019 cereal production and large exports in the past months[47]. Figure 20 shows maize prices increases in percentage from November 2019 to April 2020 while Figure 22 shows that maize prices have increased sharply between 5-22 percent, 7-15 percent, 8-32 percent, and 10-22 percent in Kampala, Kabale, Lira and Masindi, respectively, since March 2020 to April 2020, as a result of lockdown and disruptions in supply chains.

**Figure 22. Percentage change in maize price per kilogram in selected markets.**

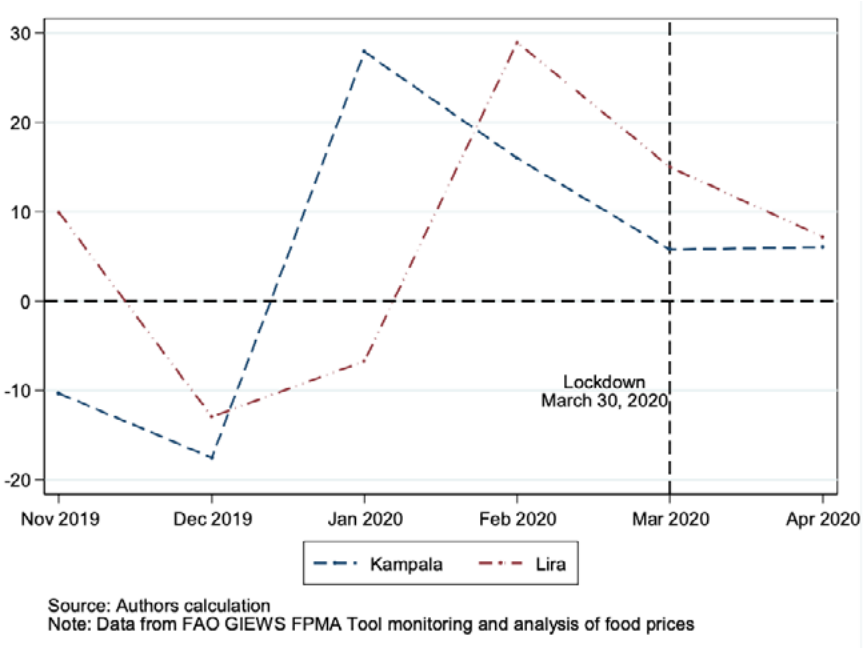



Source: Authors calculations
Note: Data from FAO GIEWS FPMA Tool monitoring and analysis of food prices

**Between March and April 2020 beans prices increased by about 10 percent (Figures 21 and 23).** The prices of beans also increased by more than 25 percent in Kampala between December 2019 and January 2020 while they rose by the same magnitude in Lira between January and February 2020. This suggests that additional factors may be at play in driving beans prices. According to FEWS NET,[48] between February and March 2020, the retail prices of beans experienced slight to moderate increases of 2-15 percent in the monitored bimodal markets of Lira, Gulu, Kampala, Masindi and Soroti, Mubende, and Tororo (Figures 24 and 25). In Arua, prices were stable. In all markets, bean retail prices in March 2020 were significantly higher by 33-47 percent than prices recorded in March 2019, and 33-41 percent higher than the five-year average (Figure 25).

47 (FAO, 2020)
48 (FEWS NET, 2020)

Figure 23. Percentage change in beans price per kilogram in selected markets in Uganda.




Source: Authors calculation
Note: Data from FAO GIEWS FPMA Tool monitoring and analysis of food prices

Figure 24. Retail staples food prices in March 2020 as percent of February 2020 prices, various markets in bimodal areas

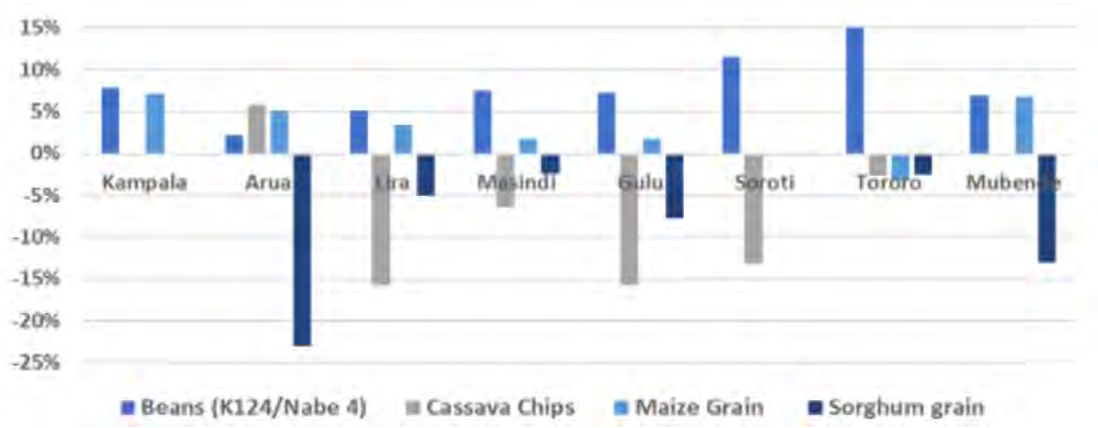
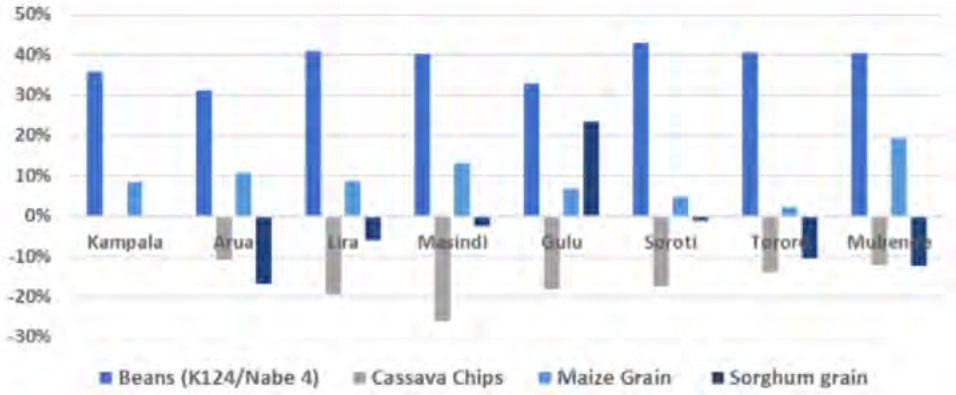


**Figure 25. Retail staple food process in March 2020 as a percent of the 2015-2019 average, various markets in bimodal areas.**




*Source: FarmGain in FEWS NET (April 2020).*

**In order to better understand the price-spike drivers, market traders were interviewed from main markets in and around Kampala, Hoima in Western Uganda, and Mbale and Sironko in Eastern Uganda.** Tables 6, 7, and 8 present prices per kilogram before and after the lockdown for selected food commodities, which the traders usually buy and sell while Tables 9, 10, and 11 present corresponding quantities purchased.

**These market prices and quantities were obtained in the first week of May 2020.** Prices and quantities Before Lockdown are for the month of February 2020 and the After Lockdown prices and quantities are for the month of April 2020. The analysis of Tables 6, 7, and 8 shows that the selling prices for most commodities have increased post lockdown in Kampala, Hoima, Mbale and Sironko with beans and rice showing the highest increase in prices between February and April 2020. The prices at which traders buy commodities have also increased, which signals a disruption in the supply chain. This rise in the prices of staple food commodities raises concern about the food and nutrition security of households in the months to come if the lockdown measure continues.

**Table 6. Trader Survey-Kampala: Prices of Selected Foods Before and After the Lockdown.**

| | Before Lockdown (UGX/kg) | | After Lockdown (UGX/kg) | | Percentage change in Price | |
|---|---|---|---|---|---|---|
| **Food** | Buying | Selling | Buying | Selling | Buying | Selling |
| **Maize flour** | 1,600 | 1,800 | 1,800 | 2,000 | 12.50 | 11.11 |
| **Beans** | 2,500 | 2,700 | 4,000 | 4,500 | 60.00 | 66.67 |
| **Groundnuts** | 6,000 | 6,650 | 7,000 | 7,400 | 16.67 | 11.28 |
| **Rice** | 2,500 | 2,900 | 3,200 | 3,800 | 28.00 | 31.03 |
| **Cassava (fresh)** | 600 | 1,500 | 750 | 2,000 | 25.00 | 33.33 |
| **Millet** | 2,200 | 3,600 | 2,775 | 4,250 | 26.14 | 18.06 |
| **Sweet potatoes** | 700 | 1,000 | 450 | 650 | -35.71 | -35.00 |
| **Cabbages** | 500 | 600 | 400 | 500 | -20.00 | -16.67 |
| **Sugar** | 2,125 | 3300 | 2,825 | 4,200 | 32.94 | 27.27 |

*Source: Authors' calculations.*

**Table 7. Trader Survey-Western: Prices of Selected Foods Before and After the Lockdown.**

| | Before Lockdown (UGX/kg) | | After Lockdown (UGX/kg) | | Percentage change in Price | |
|---|---|---|---|---|---|---|
| **Food** | Buying | Selling | Buying | Selling | Buying | Selling |
| **Maize flour** | 1,700 | 2,050 | 2,000 | 2,200 | 17.65 | 7.32 |
| **Beans** | 3,000 | 3,500 | 3,500 | 4,000 | 16.67 | 14.29 |
| **Groundnuts** | 4,000 | 4,500 | 6,000 | 6,500 | 50.00 | 44.44 |
| **Rice** | 2,600 | 2,800 | 3,500 | 3,700 | 34.62 | 32.14 |
| **Cassava (fresh)** | 850 | 1,250 | 1,000 | 1,400 | 17.65 | 12.00 |
| **Millet flour** | 3,200 | 3,550 | 3,100 | 3,500 | -3.13 | -1.41 |
| **Sweet potatoes** | | | | | | |
| **Cabbages** | | | | | | |
| **Sugar** | 3,200 | 3,500 | 3,700 | 4,000 | 15.63 | 14.29 |

*Source: Authors' calculations.*

**Table 8. Trader Survey- Eastern: Prices of Selected Foods before and after the Lockdown.**

| | Before Lockdown (UGX/kg) | | After Lockdown (UGX/kg) | | Percentage change in Price | |
|---|---|---|---|---|---|---|
| **Food** | Buying | Selling | Buying | Selling | Buying | Selling |
| **Maize flour** | 1,600 | 1,800 | 1,800 | 2,000 | 12.50 | 11.11 |
| **Beans** | 2,500 | 2,700 | 3,250 | 3,750 | 30.00 | 38.89 |
| **Groundnuts** | 6,000 | 7,000 | 7,000 | 7,500 | 16.67 | 7.14 |
| **Rice** | 2,600 | 2,800 | 3,200 | 3,400 | 23.08 | 21.43 |
| **Cassava flour** | 1,125 | 1,350 | 1,100 | 1,350 | -2.22 | 0.00 |
| **Millet flour** | 3,000 | 4,000 | 4,000 | 5,000 | 33.33 | 25.00 |
| **Sweet potatoes** | 600 | 800 | 400 | 500 | -33.33 | -37.50 |
| **Cabbages** | | | | | | |
| **Sugar** | 2,700 | 3,000 | 3,500 | 3,800 | 29.63 | 26.67 |

*Source: Authors' calculations.*

Quantities of food commodities traded generally declined between February and April 2020, signalling a disruption in food supply chains. These numbers are presented in Tables 9, 10, and 11. The decline in sales of food commodities further suggests restricted access to markets and illustrates the low purchasing power of consumers. For products that have experienced disruptions to food supply chains and subsequent declines in supply, this can trigger hoarding by food buyers that could raise prices higher at the final consumer level. However, if there is a bumper harvest, these prices could fall at harvest time in June/July 2020.

**Table 9. Trader Survey - Kampala: Quantities of Foods Buying and Selling before and after Lockdown.**

| | Before Lockdown (Kg/Month) | | After Lockdown (Kg/Month) | | Percentage change in Quantity | |
|---|---|---|---|---|---|---|
| **Food** | **Buying** | **Selling** | **Buying** | **Selling** | **Buying** | **Selling** |
| **Maize flour** | 2,267 | 2,267 | 2,400 | 1,933 | 5.87 | -14.73 |
| **Beans** | 1,250 | 700 | 250 | 350 | -80.00 | -50.00 |
| **Groundnuts** | 867 | 567 | 625 | 483 | -27.91 | -14.81 |
| **Rice** | 1,100 | 833 | 650 | 433 | -40.91 | -48.02 |
| **Cassava (fresh)** | 1,000 | 300 | 300 | 100 | -70.00 | -66.67 |
| **Millet** | 300 | 200 | 100 | 50 | -66.67 | -75.00 |
| **Sweet potatoes** | 800 | 800 | 1,600 | 1,600 | 100.00 | 100.00 |
| **Cabbages** | 2,000 | 2,000 | 3,200 | 3,200 | 60.00 | 60.00 |
| **Sugar** | 400 | 400 | - | 600 | | 50.00 |

*Source: Authors' calculations.*

**Table 10. Trader Survey - Western: Quantities of Foods Buying and Selling before and after the lockdown.**

| | Before Lockdown (Kg/Month) | | After Lockdown (Kg/Month) | | Percentage change in Quantity | |
|---|---|---|---|---|---|---|
| **Food** | **Buying** | **Selling** | **Buying** | **Selling** | **Buying** | **Selling** |
| Maize flour | 1,022 | 1,025 | 448 | 584 | -56.16 | -43.02 |
| Beans (grains) | 1,225 | 1,094 | 295 | 267 | -75.92 | -75.59 |
| Groundnuts (Shelled) | 481 | 527 | 258 | 266 | -46.36 | -49.53 |
| Rice (grains) | 850 | 940 | 379 | 436 | -55.41 | -53.62 |
| Cassava (fresh) | 400 | 300 | 300 | 240 | -25.00 | -20.00 |
| Millet flour | 150 | 150 | 123 | 63 | -18.00 | -58.00 |
| Sweet potatoes | - | - | - | - | - | - |
| Cabbages | - | - | - | - | - | - |
| Sugar | 200 | 200 | 200 | 80 | 0.00 | -60.00 |

*Source: Authors' calculations.*

**Table 11. Trader Survey - Eastern: Quantities of Foods Buying and Selling Before & After the lockdown.**

| Food | Before Lockdown (Kg/Month) | | After Lockdown (Kg/Month) | | Percentage change in Quantity | |
|---|---|---|---|---|---|---|
| | **Buying** | **Selling** | **Buying** | **Selling** | **Buying** | **Selling** |
| Maize flour | | 253 | | 101 | | -60.08 |
| Beans | | 125 | | 175 | | 40.00 |
| Groundnuts | | 70 | | 35 | | -50.00 |
| Rice | | 137 | | 42 | | -69.34 |
| Cassava flour | | 200 | | 20 | | -90.00 |
| Millet flour | | - | | - | | |
| Sweet potatoes | | | | | | |
| Cabbage | | | | | | |
| Sugar | | 130 | | 52 | | -60.00 |

*Source: Authors calculations.*

# 3.2 Food Security

### 3.2.1 Pre-COVID-19 food security situation in Uganda

**Despite a policy environment supporting food and nutrition security, and poverty reduction, food insecurity and malnutrition have persisted in Uganda. Food insecurity is still a problem affecting 46 percent of the population,[49] while stunting affects 29 percent of children under-five years.** The highest food and nutrition related burden currently is with anaemia; 32 percent of women of reproductive age and 53 percent of children under-five years are anaemic, primary due to poor access to iron rich food and diets. In effect, the rural poor are the most affected by poverty and malnutrition.[50] The country is still ranked among the countries that are highly burdened by disasters, hunger, food insecurity, under-nutrition and right to food deprivation. The 2014 National Housing and Population Census released in 2016 revealed that the majority of Ugandans were consuming a sub-optimal number of meals per day: about 36 percent of Ugandans had eaten three meals a day; 51.4 percent had consumed two meals, while 12 percent had consumed only one meal, with the problem being more pronounced in the rural areas.[51] In 2017, a review of Uganda's progress on SDG 2 indicated that dietary energy supply was 1860 kcals per capita, below the recommended 2200 kcals. The number of undernourished people also increased from 6.7 million (24.1 percent) in 2004-2006 to 17.2 million (41.4 percent) in 2015-2017. The 2018 Global Hunger Index ranked Uganda number 105 out of 119 countries.

**Several drivers are implicated for the current state of poverty, food insecurity and malnutrition.** Primarily, about 70 percent of Uganda's population are still engaged in subsistence agriculture. The rural-urban divide is still high and population growth rates are un-sustainably high at over 3 percent. The over-reliance on rainfed agriculture has also been grossly affected by vagaries of weather and climate change, while agriculture productivity has not improved significantly over the last decade. Moreover, post-harvest losses of food in Uganda are more than half of total food produced and technology uptake for value addition remains low. The low uptake of intensive commercial agriculture is exacerbated by low use of inputs and extension services in the agriculture sector mostly due to low involvement of the private and public sector investments in food production. At the institutional level, capacity gaps exist in terms of human and budget resources, while coordination within, between and across sectors are still inadequate.

**According to the Integrated Food Security Phase Classification[52] for Uganda, 86 percent of the total population in the country was minimally food insecure (IPC Phase 1)[53] between 2017 and 2018.** Ugandan households in Phase 1 have had access to

49 (GOU, 2017)
50 (GOU, 2017)
51 (UBOS, 2016)
52 (IPC, 2019)
53 IPC phase 1: Households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income. IPC phase 2: Households have minimally adequate food consumption but are unable to afford some essential non-food expenditures without engaging in stress-coping strategies. IPC phase 3: Households either: - Have food consumption gaps that are reflected by high or above-usual acute malnutrition; OR - Are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies (IPC, 2019). Households either: - Have food consumption gaps that are reflected by high or above-usual acute malnutrition; OR - Are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies (IPC, 2019).

adequate and nutritious food since 2017 to 2019 due to good harvests. Households in this category have been able to eat two or more meals a day with a good dietary diversity. In the period 2017-2018, 13 percent of Uganda's population were stressed (IPC Phase 2) with minimum adequate food consumption. The locations with the highest stressed households were Karamoja (35 percent), East Central (17 percent), Acholi (16 percent) and Central 2 (16 percent). They experienced prolonged drought. Additionally, 1 percent of the total population in Uganda were in Crisis (IPC Phase 3) with very low but deteriorating dietary diversity and high rates of malnutrition, especially in Karamoja (10 percent), Teso (3 percent), Acholi (8 percent) and West Nile (5 percent) regions. They were characterized by very low food consumption scores, low meal frequencies such as one meal a day and low dietary diversity of less than three food groups. They have always survived through food assistance, remittances from relatives, begging, stealing food, wild food gathering and irreversible sale of productive assets to buy food.

**Uganda lacks a strategic food reserve system that can assist in withstanding various types of shocks**[54]. There is no food reserve system at both the household and national levels. There are only small reserves owned by the private sector. This makes the country vulnerable to mild and severe food insecurity. The Government of Uganda has no public national strategic food reserves, despite the existence of a constitutional (legal) and policy framework. Lack of a national strategic food reserve system is very likely to be a driving factor for unpleasant consequences if the country were to be faced with either concurrent or sequenced multiple large-scale covariate shocks. *Ceteris paribus*, the potential consequences of a pandemic like COVID-19 coupled with prolonged geographically extended droughts, floods, or outbreak of desert locusts is unfortunately not an unlikely scenario for Uganda.

### 3.2.2 Household food access and consumption and nutrition

**In bimodal rainfall pattern areas, access to food from own-production is expected to be supporting minimal food requirement (IPC phase 1) despite critical hits on income during the COVID-19 crisis.**[55] However, some poor households in areas that were heavily impacted by flooding and landslides (from October to December 2019, including Teso, Bugisu, Bukedi, and Elgon sub-regions in the East and parts of Bundibugyo, Ntoroko, and Kasese districts in the West), lost crops, livestock, and assets, are largely dependent on markets for food. Combined with reduced access to income during the previous season and containment measures, high staple prices constrained access to food as well as limiting ability to purchase planting material from the market to rebuild farmers' livelihoods.

**The majority affected by the COVID-19 restrictions are the urban poor, who are unable to produce their own food.** There are three primary channels through which this impact has manifested itself. The first channel has been the reduction in household incomes for those in the informal sector, especially the self-employed with low income sources and with no safety net infrastructure in their types of jobs. The second channel has been the attendant changes in prices of different types of foods. Prices of long shelf-life foods also increased due to higher-income households scrambling to purchase and accumulate household buffer stocks as a means of self-insurance against hunger and lockdown uncertainty. The third channel has been the fact that all school children and the young unemployed youth are at home at the same time on a 24-hour basis. That means an increased demand for food in the household. The result in lowest income households, where the breadwinners are mostly employed in the informal sector, has been a reduction in the number of meals from three per day to one meal or maximum two meals per day.

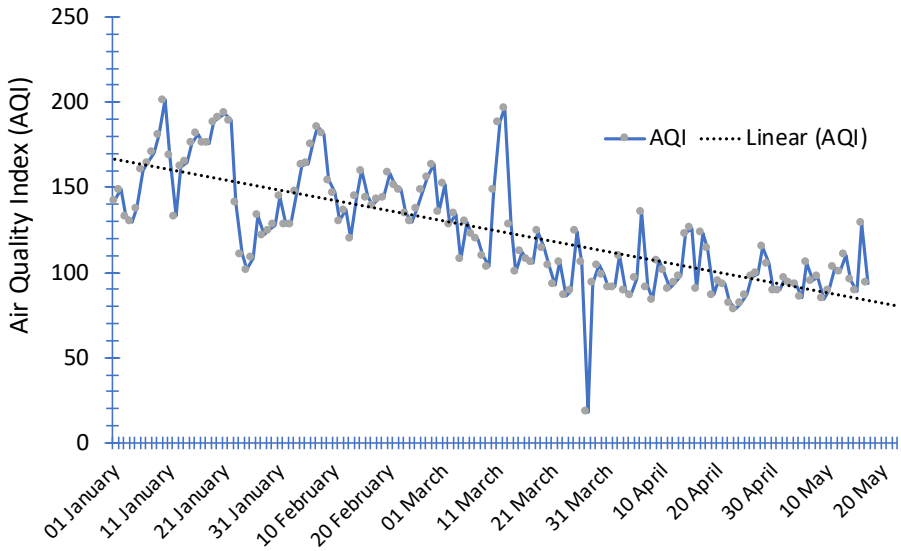
54 (NPA, 2020)
55 (FEWS NET, 2020)

**However, in rural areas, the poorest are losing income sources and those who are not able to rely 100 percent on subsistence agriculture already had limited reserves of food.** This includes vulnerable and marginalized people (such as refugees, elderly, migrants, children under five, women of reproductive age, casual labourers, and school-aged children). Approximately 80 percent of refugees are already below the international per capita poverty line of $1.9 per day and have been significantly impacted as a result of the simultaneous cut off 30 percent of food aid rations (see Chapter 6). The pandemic is also disproportionately impacting informally employed and refugee women. As a consequence, a range of harmful coping mechanisms may be adopted including reduced food consumption, sale of livelihood assets, and transactional sex and sexual exploitation and abuse, in addition to gender-based violence.

**Overall, the COVID-19 crisis greatly affects net food buyer households, in both rural and urban areas.** Across the board, access to dietary diversity and nutritious foods has decreased for vulnerable and marginalized groups due to loss or reduced income and movement restrictions. As income is lost, a negative coping strategy is a shift in diet patterns which becomes increasingly problematic for the poor and vulnerable in both urban and rural areas. Both quality and quantity of diet is compromised. In urban areas, consumers have started opting for cheaper and less-nutritious food (roots, tubers) due to relative low access and availability of nutrient dense foods (meat, vegetables, fruits). Increased morbidity and vulnerability to disease may therefore increase as a result of poor dieting patterns, malnutrition and the increase in food insecurity. As part of the coping strategies some urban poor have resorted to asking for food hand-outs from relatives, friends and the government; some have resorted to selling off some non-essential property like household durables.

## Box 5. COVID-19 Impact and the environment

Much of the discussion regarding the COVID-19 containment measures and environmental impacts has revolved around the air quality and immediate climate implications of the economic shutdown. For example, air pollution has declined in Kampala (see graph) lowering its average monthly Air Quality Index from the "Very Unhealthy" range into an "Unhealthy for Sensitive Groups" or "Moderate" category of Air Quality Index (AirNow, 2020). This has, in the short term, reduced emissions from vehicles and air travel, as transportation has been restricted in an effort to contain the virus.




*Data Source: AirNow, 2020.*

However, there are other critical environmental implications of the economic shutdown for Uganda, which are closely linked to increases in poverty and food insecurity. Uganda possesses natural resources of global significance, and, as discussed in-depth in Chapter 2, Uganda is home to a wide range of national parks and critically endangered flagship species such as mountain gorillas which rely on protected forest habitat. Historically, Uganda's ecosystems have been degraded in times of political or economic crisis, notably during the 1970s and again in the mid-1980s. Critically, rural populations during these times, when faced with extreme poverty and food insecurity that results in malnutrition, have often been driven into forests for bushmeat, fuelwood and timber. The expected uptick in poverty (see Chapter 6) and food insecurity resulting from the COVID-19 pandemic and shutdown of economic activity could have a similar impact, resulting in accelerated biodiversity loss as well as increased carbon emissions and reduced resilience to the effects of climate change, especially among poorer rural populations. This would also increase the vulnerability of marginalized communities, including Indigenous communities such as the Batwa, and further exacerbate poverty and inequality.

## 3.3 Policy Recommendations

**IMPROVE FOOD SECURITY AND NUTRITION GOVERNANCE.** This can be done by: 1) advancing Executive Round Tables to systematically identify constraints, easy wins, and longer-term policy change that could positively impact the agriculture sector; 2) advancing food safety and hygiene standards to leverage the opportunities presented by the AfCFTA; 3) strengthening the Biosafety Control and Food Quality Assurance System; 4) repositioning the role of Strategic Food Reserve System into Food Security planning and thinking, in addition to revisiting the pending Food and Nutrition Bill to mainstream the issues of Right to Food; and 5) integrating the fragmented Food and Nutrition Early Warning Systems.

**STRENGTHEN THE PRODUCTION, STORAGE AND CONSERVATION CAPACITY** to ensure food availability, by 1) scaling up the distribution of agricultural inputs and provision of animal health support to ensure continuous food production and income generation in the most vulnerable areas, especially zones prone to drought, desert locusts, and flooding; 2) supporting livelihoods diversification and home-based food production; 3) reducing post-harvest losses through improved storage capacities, small scale processing and conservation of fruits, vegetables, milk, meat products and fish, etc.; and 4) supporting food production in refugee settlements and host communities to improve access to food and healthy diets for vulnerable refugees and their host communities.

**ENSURE CONTINUITY AND STABILITY OF FOOD SYSTEMS FUNCTIONS TO SUPPORT FOOD SUPPLY.** This can be accomplished by: 1) re-invigorating the National Strategic Food Reserve System, and instituting Community Food/Seed Banks; 2) establishing an appropriate mechanism to shift school feeding programmes to other channels (churches, parishes, NGOs, food banks, traditional leaders, etc.) to ensure continuity of food access for school-aged children during containment; 3) operating digitally-enhanced facilitation of food deliveries, distribution times and dietary recommendations and hygienic measure to reduce risk of contamination.

**STRENGTHEN FOOD SUPPLY CHAINS AND ACCESS TO FOOD FOR THE POOR, VULNERABLE, AND MARGINALIZED GROUPS.** This could entail: 1) establishing data collection and evidence generation to assess the constraints faced by affected populations, especially farmers, supply chain operators, and vulnerable populations to inform policy decisions; 2) identifying vulnerable populations at risk of food and nutrition insecurity; 3) identifying blockages to internal trade in agricultural produce; 4) enhancing purchasing power of vulnerable and affected people through direct injection of cash where context allows; and 5) strengthening of local producers groups to maintain access to markets.

**INVESTMENTS IN ENVIRONMENT, NATURAL RESOURCE MANAGEMENT AND DISASTER RISK REDUCTION WILL BE AN IMPERATIVE IN THE RECOVERY AND OVERALL RESILIENCE BUILDING OF THE COUNTRY.** COVID-19 in Uganda exposed both opportunities and vulnerabilities in relation to environment and the menace of climate change. With economic restrictions and the lockdown, the country saw an improvement in air quality by 40 percent in Greater Kampala (See Box 5). However, the COVID-19 crisis occurred simultaneously with other disasters, such as the desert locust invasion and flooding caused by heavy rainfalls, which has also led to major power disruptions. Additionally, the pandemic has seen to the increased degradation of natural resources such as the encroachment on wetlands and forests as well as illegal hunting and poaching of wildlife. These concurrent shocks have exposed vulnerabilities in the country's capacity to address multiple and simultaneous disasters. Moving towards "building back greener," efforts should be made to substantively invest in reducing the country's exposure to risks and vulnerabilities associated with ecosystem degradation, as well as investments in national systems and processes that enhance national capacity to respond to multiple disasters.

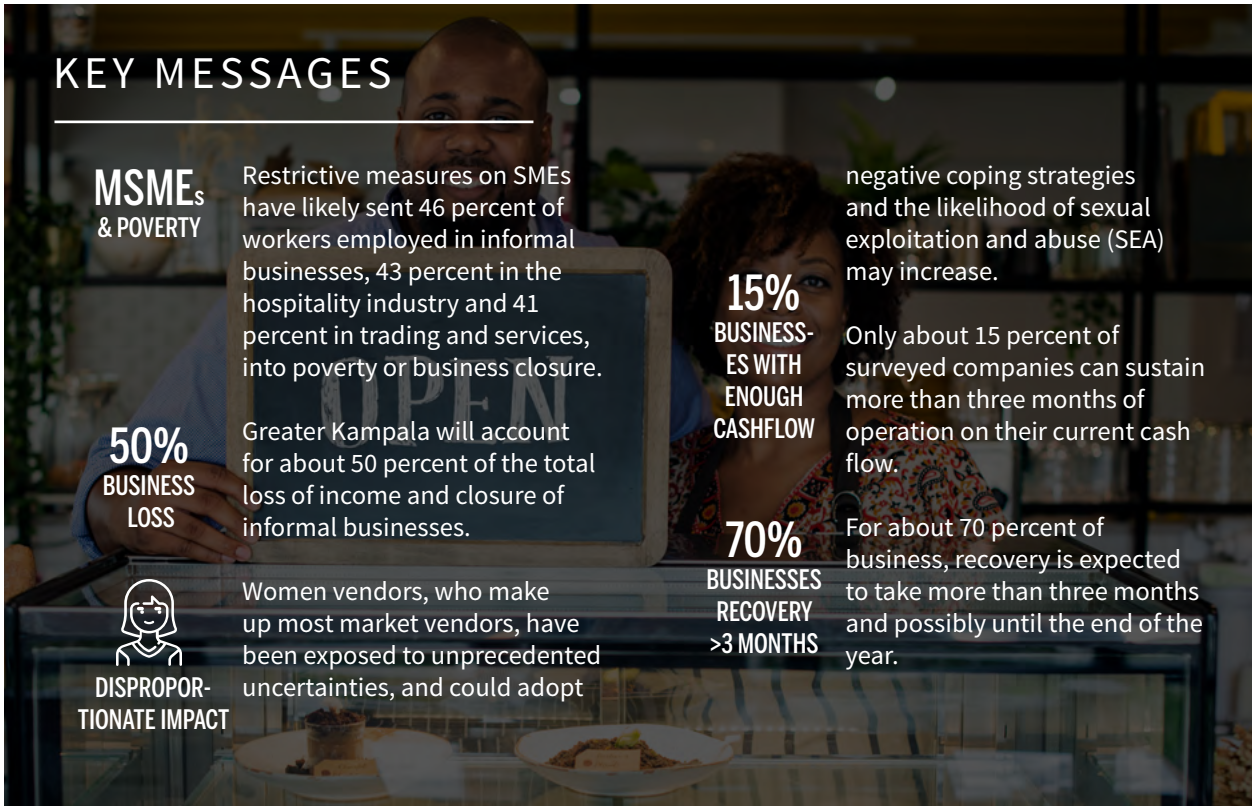
CHAPTERS 2-7:

# POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

04

CHAPTER FOUR

## PRIVATE SECTOR




**Micro, small and medium enterprises (MSMEs) are the bedrock of the Ugandan economy, accounting for approximately 90 percent of the entire private sector, over 80 percent of manufactured output and contribute about 75 percent to the gross domestic product (GDP).** However, MSMEs, particularly MSEs, represent a particularly vulnerable segment of the economy. The total rate of failure in businesses is estimated at more than 50 percent in three years; it is even higher for smaller businesses, one third of which do not see their first birthday. MSEs contribute 85 percent to total employment and over 50 percent to GDP; these enterprises are even more fragile and vulnerable to shocks.

**According to the Uganda Investment Authority (UIA), micro enterprises are firms that employ at most four people, with an annual sales/revenue turnover or total assets not exceeding Uganda shillings 10 million while small enterprises employ between 5 and 49 persons and have total assets between UGX 10 million and 100 million.** Enterprises that employ between 50 and 100 persons and with total assets that lie between UGX 100 million and 360 million are classified as medium enterprises. This implies that a greater proportion of enterprises in Uganda fall in the MSMEs category. They are spread across all sectors with 49 percent in the service sector, 33 percent in the commerce and trade, 10 percent in manufacturing and

8 percent in other fields.[56] These enterprises account for over 80 percent of manufactured output and contribute about 75 percent to GDP. The sector employs more than 2.5 million people equivalent to 90 percent of total non-farm sector workers and comprises about 1,100,000 enterprises which makes it one of the largest employers in the country.[57]

**The private sector is dominated by micro enterprises (93.5 percent), the rest being small (4.1 percent) and medium (2.4 percent).**[58] This is true for both the formal and informal sector, the latter employing 84.9 percent of Uganda's labour force outside agriculture. Informal workers often lack contracts, benefits, and financial or social safety nets; as such, they often experience low levels of resilience to shock and are forced to rely on negative coping mechanisms and are highly vulnerable to poverty. MSMEs also often lack insurance or formal arrangements to maintain business location or property. Consequently, any shock, which negatively affects the operation of MSMEs, can have far reaching knock-on effects in the economy. In the case of COVID-19, consequences of control measures disrupt business operations from both supply and demand side.

**Box 6. Methodological note for informal MSME analysis.**

Historical data analysis based on the previous cases of health events and epidemics, such as SARS, Ebola and HIV/AIDS, was used to estimate the impact of COVID-19 on Ugandan MSMEs, higher weighting assigned to health events that employed partial or total lockdowns to contain an epidemic. The research focusing on informal MSMEs uses three sets of data, National Manpower Survey (UNMS) 2016, Uganda Labour Force Survey (NLFS) 2016/17 and Uganda National Household Survey (UNHS) 2016/17. The research methodology is based on the supply and demand model that allows decomposition of the underlying event (COVID-19) into individual shocks, subsequently calibrated using principal component analysis and microsimulations based on historical and current data. The shocks are combined in a manner consistent with the event timeline and expectation formations, and at all stages, sensitivity analysis is carried to differing calibrations and expectations applied to sector and regional dimensions. The estimates were triangulated using the latest reported impacts of the COVID-19 on MSMEs in Europe, USA and China. It is assumed that the impact of the health shock as such due to the infection is marginal, and the supply and demand effects are caused by the restriction measures only.

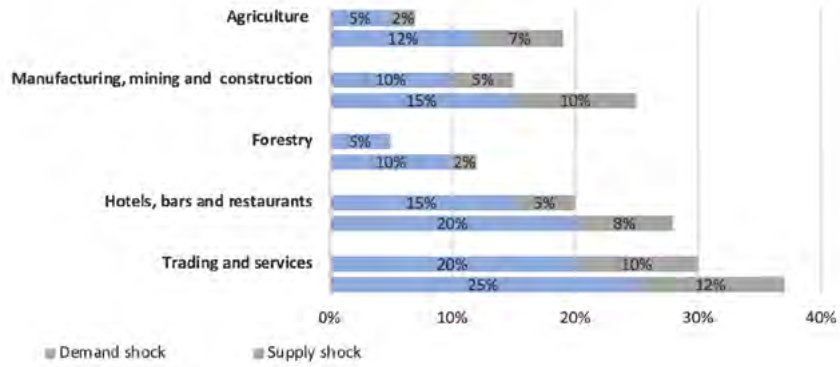
## 4.1 The Economic Shock of COVID-19 on Informal Micro and Small Enterprises

**The future of MSMEs and their contribution to economic growth has become uncertain.** Small businesses are losing revenue, unemployment levels and loan defaults are rising, putting significant pressure on the banking and financial system. The economic impact of the pandemic on MSMEs can be decomposed by supply shock, demand shock, and financial shock following previous studies.[59] On the supply side, operating MSMEs experience a reduction in the supply of raw materials and labour due to lockdowns and restriction on movement. The supply of labour is decreasing as workers need to look after children or other

56 (UIA, 2016)
57 (MTIC, 2015)
58 (UBOS, 2018). National Labour Force Survey 2016/2017.
59 (Ogawava and Tanaka, 2012)

dependents while schools are closed, and movements of people are restricted. Containment measures lead to severe drops in capacity utilization. Supply chains are interrupted leading to shortages of parts and intermediate goods. On the demand side, the measures negatively impact the access of customers to goods and services whereas the drop in personal incomes suppresses aggregate demand, particularly for non-food goods and other services. A dramatic and sudden loss of demand and revenue for SMEs severely affects their ability to function, and causes severe liquidity shortages. Consumers experience loss of income, fear of contagion and heightened uncertainty, which in turn reduces spending and consumption. These effects are compounded because workers are laid off and firms are not able to pay salaries.

**Figure 26. Total economic shock (revenue loss) for MSMEs (base case and worst-case scenarios).**




*Source: Authors' computations based on analysis of current and historical data.*

It is estimated that the COVID-19 combined economic shock (without the financial component) will be particularly pronounced in trading and services followed by the hospitality industry, which are likely to lose 20 percent to 30 percent of their total revenue assuming the current level of restriction measures is maintained over a period of three months. In the worst-case scenario, their losses may reach 28 percent to 37 percent. Agriculture and forestry are least affected. In the base case scenario, MSMEs in the two most affected sectors will lose about one full month of their revenues, implying up to a 10 percent annual loss (Figure 26). The economic shock presented in Figure 26 takes into account coping measures and compensation mechanisms that may be taken by MSMEs including higher production prices for goods with lower elasticity and fewer substitutes. However, a longer period of restriction at the same level (beyond the initial period of three months) will result in greater losses, primarily due to further decline in aggregate demand.

## THE IMPACT ON INFORMAL MSE WORKER INCOME BY SECTOR

**Estimating the impact of COVID-19 on MSMEs is complex since almost all sectors of the economy are affected, and the future trajectory of the pandemic remains uncertain.** Understanding the impacts of the pandemic on informal MSMEs is particularly important considering their large contribution to total employment and GDP. The sectoral structure of the informal businesses replicates the overall structure of the MSME

category, with 77 percent of informal enterprises working in trading and services and hospitality, the two sectors estimated to be affected most by the restriction measures. However, the informal sector consists of only micro and small enterprises and does not have any medium-size enterprises. Micro enterprises with four or less workers make up 95.6 percent of all informal enterprises, the rest represented by small enterprises with a maximum number of 25 workers. Hence, it is fair to speak about the COVID-19 impact on MSEs as far as the informal sector is concerned.

According to the Uganda National Manpower Survey (UNMS 2016), informal MSEs belong to six sectors analysed below. These sectors are (1) manufacturing; (2) trading and services; (3) hotels, bars and restaurants; (4) forestry; (5) agriculture; and (6) mining, quarrying and construction. Typical activities in each of these sectors are listed in Table 12 (this list is indicative and not exclusive).

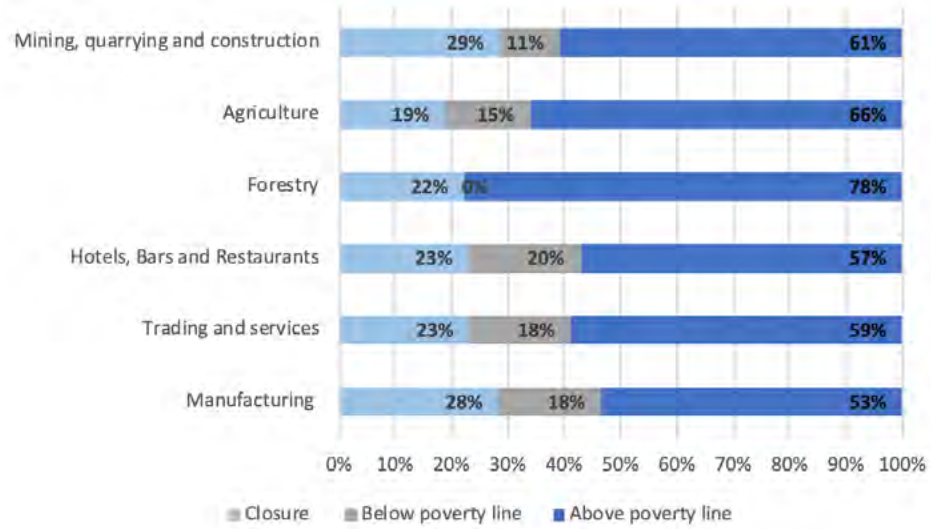
**Table 12. Informal economic sectors and typical activities.**

| Sector | Typical activities |
|---|---|
| Manufacturing | • Manufacturing: production of construction bricks, furniture, metal works, basketry, etc.<br>• Food production: bakeries, breweries and distilleries, production of chapati, mandazi and sambusa<br>• Production of clothes: tailoring and knitting |
| Trading and services | • Retail sale of general merchandise, household goods, clothes, food, pharmaceuticals, spare parts, construction materials, etc.<br>• Maintenance and repair of motor vehicles<br>• Repair of clothes, footwear and leather products<br>• Nursing and other personal services<br>• Hair dressing and plating, saloons<br>• Transportation, boda-boda services<br>• Photography and videography services<br>• Mobile money transfer services |
| Hotels, bars and restaurants | • Restaurants, eateries, food kiosks<br>• Bars and joints<br>• Cooking and serving cooked food<br>• Retail sale of beer and spirits<br>• Accommodation & breakfast |
| Forestry | • Charcoal production<br>• Seedling nurseries and farming |
| Agriculture | • Rearing pigs, goats, poultry<br>• Dairy and dairy products<br>• Flower growing |
| Mining, quarrying and construction | • Stone quarrying, clay/murram quarrying, sand mining |

*Source: Author's presentation based on UNMS 2016.*

**The COVID-19 outbreak and containment measures could have varying impacts on MSMEs, by sector, region, and other factors.** The UNMS (2016) dataset was used to estimate the combined impact of COVID-19 on Ugandan MSEs under the base case scenario. Principal component analysis of the data returns a strong and statistically significant correlation between the average income per workers in informal MSEs and the total gross income, resulting in a loss of UGX 6,710 in personal incomes per every UGX 10,000 lost by the business. The COVID-19 economic shock will therefore have a direct impact on the incomes of workers engaged in informal businesses with three possible outcomes: incomes falling below zero and hence resulting in discontinuation of business activities; incomes staying above zero but falling below the national poverty line of UGX 67,607; and lastly, incomes staying above the poverty line albeit at a reduced level of output. The results of this analysis are represented in Figure 27.

**Figure 27. Impact of reduced income on the operation of informal MSEs.**




*Source: Author's computations based on UNMS 2016 data set.*

**Reduced incomes for workers in informal MSEs due to the COVID-19 restriction measures are taking a particularly heavy toll on manufacturing, sending 46 percent of workers employed in informal businesses below the poverty line or into closure, as well as the hospitality industry (43 percent), followed by trading and services (41 percent).** Agriculture is also seriously affected, with 15 percent of workers in informal agriculture businesses slipping below the national poverty line and 19 percent discontinuing their operations altogether. This is explained by very low profit margins in this sector, which make it very vulnerable to an even relatively mild shock of COVID-19 estimated at below 10 percent for agriculture.

**Additionally, the impact on MSE employment by sector has several dimensions.** Assuming Uganda's working age population without those working in subsistence agriculture only at 13 million (NLFS 2016/17), an estimated 4.4 million informal sector workers will see their earning falling below the poverty line or totally drying up (Table 13).

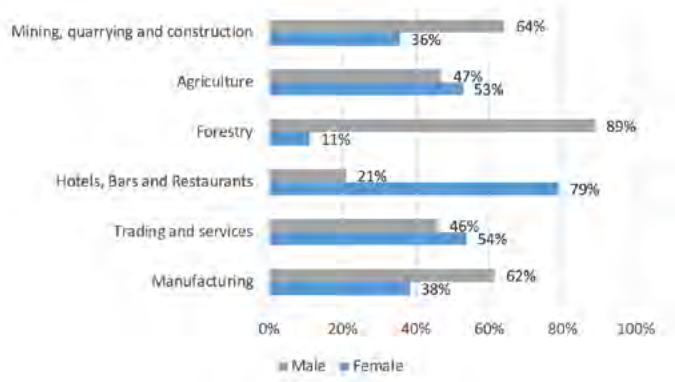
**Table 13. COVID-19 impact on informal MSEs by sector (number of workers affected).**

| Sector | Workers without earnings | Workers with earnings below the poverty line |
|---|---|---|
| Manufacturing | 582,239 | 373,836 |
| Trading and services | 1,510,384 | 1,168,775 |
| Hotels, Bars and Restaurants | 360,945 | 311,530 |
| Forestry | 4,297 | - |
| Agriculture | 64,454 | 51,564 |
| Mining, quarrying and construction | 17,188 | 6,445 |
| Total for informal sector | 2,539,507 | 1,912,150 |

*Note: Total includes farm sector workers. Source: Author's computations based on UNMS 2016 and NLFS 2016/17 data sets.*

**While the COVID-19 outbreak affects many subgroups of informal workers, women will be disproportionately affected by the pandemic and containment measures.** Because many informal workers diversify their employment by engaging in more than one economic activity, it is possible that some of the impact in the short run might be mitigated. However, there is a clear gender dimension. First, there are more businesses owned or managed by women (54 percent against 46 percent owned or managed by men), second, women are more likely to be engaged in micro enterprises with very low profit margins (in women-led businesses income per worker is UGX 4,113 less than in those led by men) and lastly, women are less likely to be engaged in several economic activities due to the amount of domestic unpaid work they perform. Hence, COVID-19 will affect women's businesses and their earnings to a larger extent than men's. In the total number of MSEs affected by COVID-19, there will be 11 percent more enterprises owned or managed by women. This gender dimension is also further explored in the next section 4.2.

**Figure 28. Impact on MSEs by sex of the owner/manager.**

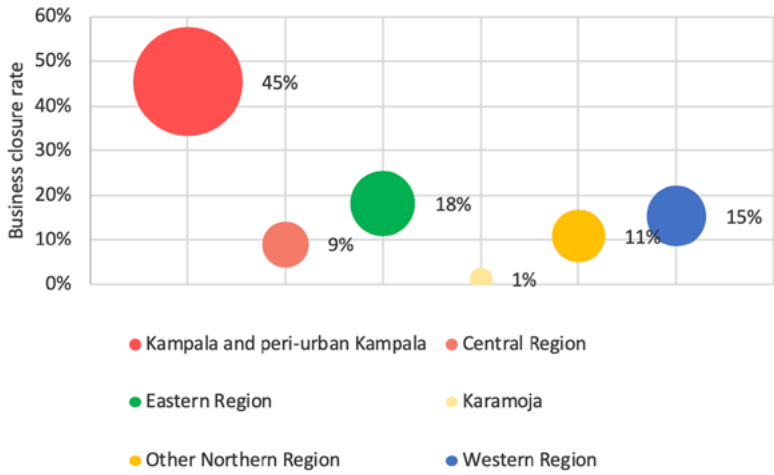



*Source: Author's computations based on UNMS 2016 data set.*

**Sector-wise (Figure 28), women-led enterprises will be particularly hit in trading and services and hospitality, the two sectors that will experience the worst brunt of the pandemic.** Women-led businesses will outnumber those led by men by 58 percent in hospitality (hotels, bars and restaurants) and by 8 percent in trading and services. Again, this gender dimension is further explored in Section 4.2.

**Greater Kampala has the largest number of informal MSEs, it will account for about 50 percent of the total loss of income and closure of informal businesses.** The regional shares of the total national impact on informal MSEs are closely correlated with the number of informal enterprises and their viability (Figure 30 shows the combined contribution by region).

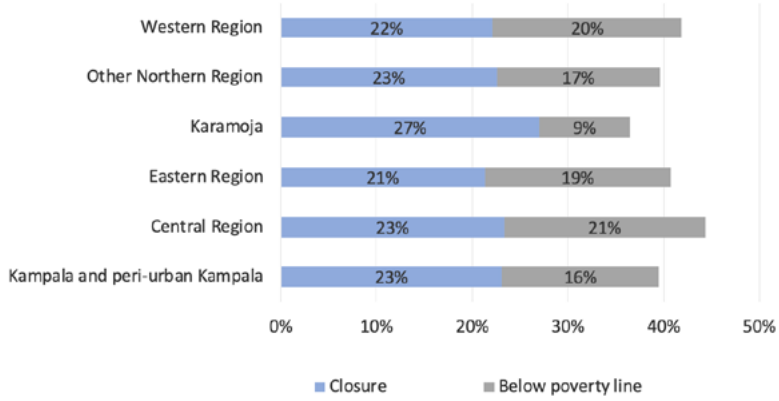
**Figure 29. Regional shares in the total MSE impact.**




*Source: Author's computations based on UNMS 2016.*
*Note: Size of the shape corresponds with the business closure rate.*

**The Eastern and Western Regions account for 33 percent of the total loss with the other regions contributing the remaining 20 percent.** However, an analysis of the COVID-19 impact within the regions provides a more nuanced picture (Figures 29 and 30). Karamoja, which contributes just 2 percent to the total national loss of income, will experience the strongest shock among other regions, with approximately one-third of its MSEs closing. This is an evidence of how fragile MSEs in that region are. The Central Region which follows Karamoja in terms of its share in the total loss of income will also be seriously affected (44 percent of its MSEs will be closed or move below the poverty level).

**Figure 30. Impact of COVID-19 on MSEs by region (number of businesses affected).**




*Source: Authors' computations based on UNMS 2016.*

**Furthermore, the losses of the informal sector in terms of incomes and jobs will translate into losses to the GDP.** In line with the IMF projections for Uganda's GDP, the total GDP contribution of the informal sector in 2020/2021 was expected to be UGX 73,320 billion. The expected contributions and relative shares by sector of economic activities in the non-farm sector (without agriculture whose contribution in the non-farm sector is marginal) is presented in Table 14.

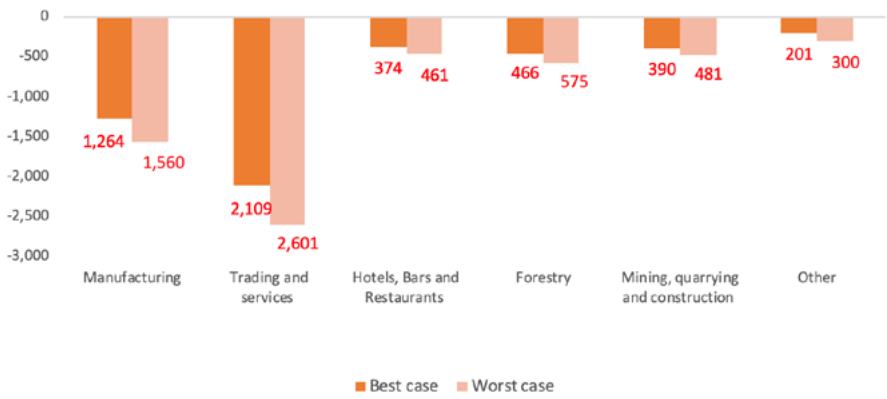
**Table 14. Informal sector by economic activity (non-farm sector), 2020/2021 projection.**

| | | |
|---|---|---|
| **Manufacturing** | 11239.8 | 27.5 |
| **Trading and services** | 18745.3 | 45.8 |
| **Hotels, Bars and Restaurants** | 3321.3 | 8.1 |
| **Forestry** | 4142.9 | 10.1 |
| **Mining, quarrying and construction** | 3470.2 | 8.5 |
| **Other** | 3482.4 | 8.5 |
| **Total** | **40919.7** | **100** |

*Source: Sector 2020/21 (proj.), UGX billion Share, %*
*Authors' computations based on UBOS Government Finance database and IMF projections*

Assuming a 3-month period of economic stress and a gradual 3-4 month recovery, the COVID-19 impact will translate in the following monetary losses for the informal sector and the GDP (Figure 31):

Figure 31. Informal sector losses due to COVID-19, million UGX.




*Source: Author's computations based on UBOS Government Finance database*

**The total loss is likely to be from UGX 4.6 trillion to UGX 5.7 trillion or from 3.17 percent to 3.91 percent of the national GDP depending on the scenario.** This is about one half (or more) of the projected GDP growth of 6.2 percent in 2020/2021. In line with the analysis in the previous sections, trading and services together with manufacturing will be the main contributors to the drop in the GDP growth. However, the impact on the employment in the other sectors, such as accommodation and food services, should not be ignored despite its relatively minor share in the GDP. This industry employs a large number of people and, as discussed in the previous section, will be seriously affected by unemployment, sending into poverty over 670,000 informal workers or 15 percent of the total number of those affected by the economic shock.

## 4.2 The Effect on Women Employed in the Informal Sector: A Case of Market and Street Vendors in Kampala and Northern Uganda

**As noted earlier, women are disproportionately affected by the realities that drive individuals into the informal sector (see Section 4.1.3 for more details).** This also includes women in particularly vulnerable age categories such as older women and women of reproductive age. Women are more likely to be poor; experience gaps in attaining full education; lower access to finance (at a proportion of 16.6 percent compared to males at 19.4 percent[60]), land and assets; lack childcare and disproportionate unpaid care work; and

60 (UBOS, 2018)

face both legal and social discrimination that leave no option other than informal employment.[61] Women's work in the informal sector is varied and may be paid or unpaid. Some women take on domestic work as cleaners or cooks, while others support their own or family businesses (14.3 percent compared to 13 percent of males in the same category[62]) or work as vendors for different merchandise. These are often very small, undercapitalized, and subsistence-level businesses. Even within the informal sector, however, women are often invisible. In many cases, there is limited gender disaggregated data which makes gender sensitive analysis and policy making difficult.

**Box 7. Methodological note for deep-dive into impacts on informally employed women.**

The methodology was based on secondary analysis of different studies in the sector. Comparison was done on reports from the study on Market Women commissioned by the Institute for Social Transformation (IST) with support from UN Women in 2017 and another report from SIHA Network in 2019 focusing on street vendors. The study in the markets was conducted in Kampala (Kalerwe and Nakawa), Gulu (Cerelano and Gulu Main), and Pader. This was conducted for purposes of understanding the situation of the women in the informal sector before COVID-19. Consultations further took place with different stakeholders and vendors who work in the market, to understand the present situation and on the basis of which, recommendations were proposed on how to mitigate the impact of the COVID-19 pandemic on women in the informal sector. Other literature from within and outside the country has been used to strengthen the analysis and generate the recommendations. A representative from a regulator KCCA was further consulted to triangulate the information gathered. The analysis further used other reference materials from similar studies completed on the informal sector from other countries to identify good practices on how to deal with the situation.

61 (SIHA Network, 2018)
62 (UBOS, 2018)
63 (IST, 2015)
64 (UBOS, 2018).

**Despite its precarious nature, informal sector work represents an important lifeline for many of those who participate.** According to a study commissioned by the Institute for Social Transformation, many market women noted that they had been able to build a house, educate their children and grandchildren, or expand their businesses as a result of working in the market.[63]

**Women are more vulnerable within the already vulnerable informal sector.** A deep-dive case study was undertaken to establish the impact of COVID-19 on market and street vendors, particularly women, who are the majority and more vulnerable in the sub-sector. While a high-level view of the informal sector shows a relative equal distribution between women and men, deeper scrutiny uncovers that women are more vulnerable within the already vulnerable informal sector. For example, by 2017, the median monthly income for informal employment outside agriculture for women was UGX 130,000 compared to UGX 250,000 for men.[64] This means that women are more likely to feel the shock of an economic downturn. Women are also less likely to be employers and more likely to be paid employees within the informal sector, limiting their ability to make decisions or take actions regarding social protection, which could help absorb economic shocks they may face.

**During the COVID-19 lockdown period, analysis has shown that women vendors have been exposed to unprecedented uncertainties, particularly related to maintaining health and well-being of their families as well as ensuring that their businesses survive.** This is because they do not have access to any form of social safety nets, including social protection arrangement by Government or other institutions. Women also experience health and nutrition challenges. For example, the current closure of Kalerwe Market

has resulted in the loss of livelihoods and income for approximately 10,000 market vendors, 8,000 of which are women. Street vendors, another category of vulnerable women, are largely out of business. The few businesses that are surviving are operating under very difficult conditions and vendors are at risk of being arrested and having their goods confiscated. Additionally, in living under very challenging circumstances these vulnerable and informally employed women may be exposed to greater risk of exploitation and abuse or result to negative coping strategies such as transactional sex or commercial sex to survive or support their families. This is especially true for single, widowed, or divorced mothers with a large family.

**The analysis also explored the reasons behind this vulnerability and the factors leading women vendors into such insecure businesses.** Women vendors on the streets of Kampala pointed to their inability to access formal employment as a main reason for engaging in the informal sector and their lack of education and skills as key obstacles to accessing formal employment.[65] The study by IST revealed that most of the market vendors are women who, for several reasons, opted for market vending as their main source of livelihood. Factors include market businesses are less capital intensive, high rates of unemployment and poverty, the increasing role for women as the main household bread winner, low literacy levels, need for personal development, lack of childcare support, and domestic violence. In addition, most women vendors lack entrepreneurship skills to manage larger business ventures. Most of the traders in the markets live close to their workplace and walk to work. Most are supporting large families, and the case of older women, often tend to grandchildren for a range of reasons. By comparison, male vendors engage in larger sized businesses, such as market supplies, that require relatively larger capital and generate greater profits.

**Further, the analysis of the products sold by women in the five markets revealed that majority of women dealt in food products, fruits and vegetables; this also applies to women street vendors.** Since food is perishable, most of the items must be sold within a day or two. The financial implication is that women vendors either must trade in limited stocks or sell goods at reduced prices due to fear of spoilage. During this COVID-19 period, many of the women have lost businesses, as the supply chains have been affected as well as the customer base reduced because of restricted mobility. Kalerwe Market, which accommodates over 8,000 market women, was abruptly closed and many of these women experienced financial losses because they could not immediately sell their perishable goods. Due to transportation restrictions, even women operating in markets that remain open have had to make a choice to either reside in the market – with all the related protection and sanitation risks – or stop operating until the public transportation ban was lifted.

**Market vendors are providing an essential service during the COVID-19 response, however, there was inadequate preparation to support the market vendors to adopt the SOPs and adjust modes of operation.** The Chairman of Nakawa Market, Mr. Charles Okuni, observed the conditions as below:

65 (SIHA Network, 2018)

> "For those that are residing in the market, there are many challenges: For instance, inappropriate bedding like lack of blankets particularly at this time of the rain season makes the situation awful. The Nakawa Market has no bathing facilities, and no temporary provision has been made to cater for vendors particularly the women who are very susceptible to hygiene related diseases. They have resorted to using the toilets as bathing facilities. Soap and other hygiene requirements are in short supply and this puts the market vendors and their clients at a risk. Government promised mosquito nets but not all vendors have received them. These conditions have affected the operations of the market vendors." ***Chairman, Nakawa Market***

**The situation is even worse for market vendors and street vendors who have completely lost their businesses and livelihood.** The Chairman of Nakawa Market said:

> "There is a category of market vendors particularly women who have lost jobs. These include vendors who owned the cooked food stalls and were supplying food to the market vendors and the surrounding community. Due to the limited number of people in the market, the businesses cannot be sustained since it cannot break even. These have also been employing people who were vending the cooked food to different clients and they earn a daily rate of approximately UGX 5,000. This includes transport and other necessities. These ones have also lost their jobs and the daily earnings."
>
> ***Chairman, Nakawa Market***

**Despite the loss of income and meagre earnings, market women are still subjected to multiple ongoing charges.** For example, even vendors who are not able to continue working or generate income are required to pay rent for permanent market stalls. Otherwise, they risk losing future access to such important facilities.

**COVID-19 also impacts women's ability to access much-needed capital to reinvigorate their businesses or to start up new businesses once restrictions are lifted.** According to the above-mentioned IST Study, most market women used their personal savings or financial support from family to establish their business. Related research undertaken by SIHA Network on women street vendors in Kampala found that many women are attracted to work in the informal sector because of the minimal start-up capital that it requires. Older women also face discrimination when seeking financial support to start or maintain a business. Since many vendors are not operating, nor are their spouses and family members, their limited savings are now being utilized for daily sustenance. This drain on savings and unemployment of potential benefactors, limits women's ability to recover their businesses or start new businesses – for those that had previously been saving for a new business. This leaves many with SACCOs and money lenders as their only options. However, the interest rate on these loans are very high (4 - 5 percent weekly) and, given vendors' small profit margins, are often not an economically viable option. To pay back these loans, women may be forced to work extremely long hours which, along with the overall economic stress on their families, enhances the risk of domestic violence. Women who are not able to pay back the loans will lose key assets and business properties to the money lenders. In one of the focus group discussions held in Pader market, one of the market women shared that:

> "Even if you are sick or have lost a close relative, or during childbirth etc., you should never miss to pay the loan."
>
> ***Female vendor in Pader***

**Group loans that are offered by microfinance institutions are likewise not a viable option for most women.** The high interest rate (35-48.4 percent annually) is a significant challenge and barrier to access for the most vulnerable. Bank loans also require collateral, which most women vendors do not have. During the post COVID-19 recovery period, many vendors will find it hard to get soft loans or start-up capital to revive their businesses – pushing many out of business completely.

**The overall welfare of informal sector workers, their children, and their families are deeply impacted by COVID-19, with potentially long-term consequences.** Market women make significant contributions to their households and communities. The IST study revealed that many market women – whether married or unmarried – are the main source of household income, including for children's school fees, food and health needs. For others, including women-headed households, adolescent mothers, widows, and elderly women, it is the sole source of household income. High levels of poverty, low wages earned by male spouses, and increases in women-headed households, require more women to seek paid work outside of the home to sustain their families. Women's role in the formal and informal work force is vital, yet their experiences are often overlooked. Their lost incomes during COVID-19 impact not only themselves, but also the nutritional, safety, and health needs of their children and families.

### Box 8. Gender, children, and COVID-19 in Uganda.

In Uganda, **at least seven women in labour have died** on their way to hospital amid the lockdown and transportation bans. Reported lack of access to contraceptives has long-term impacts due to unwanted and repeat pregnancies. **Women constitute the majority of health workers**; this puts them at higher risk of infection. There have been reported cases of healthcare workers lacking adequate PPE especially in remote health facilities, and their specific needs are often overlooked, including menstrual and hygiene needs. Women and girls are facing **increased care-giving roles** in the home, putting them under additional stress and potentially increasing their risk of infection. The high burden of care is exacerbated by school closure and care for sick family members as healthcare systems become stretched. In addition to lost learning time, school closure also exacerbates risks of potential harm for children where **closures interrupt school-based services and interventions for at-risk children**. Greater difficulties in accessing health services, as well as increased burdens and separation from caregivers (due to lockdown, or severe illness or death), may lead to sexual exploitation and violence against children, in particular girls, including child/forced marriage or transactional sex.

Further, increased stress levels, economic and food insecurity, unemployment, isolation and confinement, negative coping mechanisms and shifting frontline service priorities all create conditions which contribute to spikes in already **high rates of domestic violence** – including intimate partner violence and violence against children – and harmful practices of child marriage and FGM. Since the partial lockdown, Government estimates that Uganda has recorded over 3,000 domestic violence (DV) cases by the end of April. It is also likely that cases of domestic violence and other forms of sexual and gender-based violence (SGBV) are being under-reported (MIA, 2020). Emergency calls for domestic violence and walk-ins to legal aid providers have seen a 20% increase in March over February (Source: Justice Centers Uganda, Uganda Law Society, and CDFU hotline). Following the reopening of the Child Helpline (10 April 2020), over 700 cases of physical and sexual violence, neglect and abandonment of children was recorded from different districts and sub-counties. In April and May 2020, these numbers have certainly risen. These increased incidents are taking place alongside a decrease in services and response. **Life-saving care and support for victims/survivors of sexual or gender-based violence (SGBV) and violence against children (VAC) have been disrupted** – including provision of clinical management of rape, sexual and reproductive health, mental health, psychosocial support, safety and security, and access to justice – as service providers cannot reach survivors due to lockdowns, are overburdened and preoccupied with handling COVID-19 cases, and as national resources shift to the management of COVID-19. The protection system in Uganda is already under-resourced and not able to systematically provide care and protection to women and children at risk. Therefore, **children in residential care and detention centers,** including rehabilitation centers are at greater risk of protection concerns.

# 4.3 Recovery Period for Informal Micro and Small Enterprises

**Although up to 60 percent of informal MSEs (in the worst-case scenario) are likely to go out of business during COVID-19, the impact on their structure and business potential will be limited.** With very few assets, reliance on predominantly local raw materials and labour force, and informal and flexible working arrangements, many enterprises are likely to resume their operation within days after the COVID-19 restriction measures are lifted. This concerns MSEs in trading, services and hospitality that account for about 80 percent of all informal businesses. That said, there may be complications such as loss of business location, health challenges, and other potential longer-term consequences of the lockdown that may prevent MSE from resuming operations. There may also be increased need to access credit to initially re-start business activities for many MSEs that will lack working capital.

**The main consideration for forecasting the recovery time is the period required for demand to pick up since the supply shock is relatively mild and will take much less time to recover given reliance in many cases on easily obtainable local materials**. The possibility of inadequate supply, particularly for consumable goods, immediately after the lockdown should not be entirely discounted. This may become an issue in cases of wholesalers hoarding goods and hiking prices beyond what is affordable to MSEs who in addition to that are likely to face lack of working capital to resume their operation. However, the suppressed demand will take a longer time to pick up, implying that many of these enterprises will not be able to operate at their full capacity for some time. Informal businesses that depend on imported goods and materials or involved in export operations (such as cross-border trade) are likely to take longer to recover in line with the time required for full resumption of cross-border movement and international trade flows.

**A microsimulation based on a V-type recovery[66] shows the approximate recovery timing to pre-COVID-19 levels by sector as presented in Figure 32.**

**Figure 32. Post-COVID recovery by sector (pre-COVID level of activity = 100%).**


66 Dai et al., 2020; Yu, 2020)

**It is expected that the situation will return to the pre-COVID-19 levels within three months, earlier for such sectors as forestry, agriculture, trading and services and somewhat later for manufacturing and hospitality.** It does not mean that all enterprises operational before COVID-19 will come back to businesses as some of them may lose their business due to a combination of factors such as loss of assets and loss of market share to more viable businesses. In this case, the workers from such enterprises are likely to move to other businesses as owners or operators assuming that demand fully recovers in three months. Additionally, if demand remains suppressed due to lower incomes, recovery could be more gradual.

**To further provide a comprehensive picture of the impact of the pandemic on the full spectrum of the private sector,** the econometric modelling and forecasting for this section for informal micro and small enterprises, is complemented with a Business Impact Survey presented under the next section (4.4), conducted by UNCDF in partnership with Makerere University and with the support of the Uganda Revenue Authority (URA). The survey targeted mainly SMEs in the formal sector. The next sections describe the actual and expected impact of COVID-19 on formal sector SMEs.

## 4.4 The Effect on Formal SMEs

**In addition to the effects on informal businesses, COVID-19 is taking its toll on formal businesses in the private sector, as well.** According to the Ministry of Trade and Cooperatives, 4,200 companies across the country have shut down as a result of the lockdown, and only 215 industries/factories, especially those producing essential commodities, are still operating.[67] The 4,200 companies that have since shut down could not maintain the workers and SOPs requiring the factories to keep staff on site if they were to continue operating during the lockdown. As part of a broader socio-economic assessment of COVID-19 undertaken by the United Nations in Uganda, UNCDF in cooperation with Makerere University (the College of Business and Management Sciences) and with the support of the Uganda Revenue Authority (URA) conducted a business survey of Ugandan enterprises in April 2020.[68] The survey had two primary objectives: (1) to establish the actual and expected impact of COVID-19 on their operations and (2) to provide feedback for development of policy recommendations and a business relief package to alleviate the negative impact of COVID-19 on the private sector and to accelerate economic recovery.

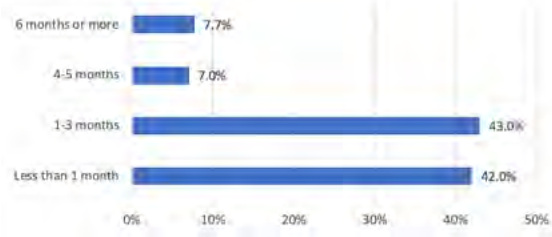
**Businesses have been affected by the COVID-19 pandemic as their operations contracted and cash flows plummeted.** The situation is compounded by the relatively low cash flow coverage of most businesses. The results of the Business Enterprises Survey indicate that Ugandan companies are fragile and have a relatively low cash flow coverage (Figure 33). Only about 15 percent of surveyed companies can sustain more than three months of operation on their current cash flow. Others must take adjustment measures to keep their profitability at a level that would allow their continued operation.

67 (Daily Monitor, 2020)
68 (UNCDF et al., 2020)

**Box 9. Information on the Business Enterprises Survey for formal small and medium enterprises analysis.**

A total of 1,012 firms registered in the URA database participated in the survey, almost all of them small and medium enterprises. The survey covered businesses in all key economic sectors. The largest numbers of respondents belong to wholesale and retail trade (11.3%), construction, mining and quarrying (10.0%) and other non-categorised sectors (26.2%). There were no micro enterprises among the responding businesses. By the number of employees, 93% of the responding enterprises had less than 50 employees and can be categorised as small although only 0.1% of them reported annual revenues in 2019 below UGX 100 million. At the same time, 98% of the enterprises with less than 50 employees had their annual revenue in 2019 less than UGX 150 million. Medium enterprises of up to 100 employees accounted for 4.4% of the total responding businesses. 44% of these businesses earned from UGX 150 million to UGX 200 million in 2019 and another 18.6% in the same category, from UGX 200 million to UGX 300 million. The remaining 2.2% of the responding businesses were in the category of large enterprises.

Figure 33. Cash flow coverage (left) and respondents' strategies for dealing with cash flow shortage (right).



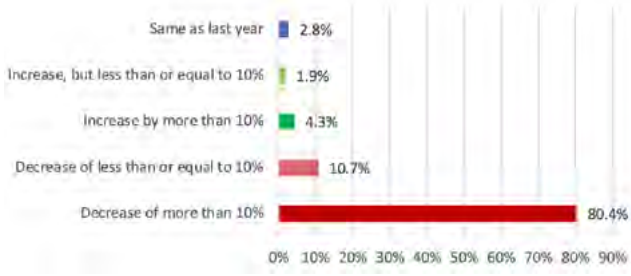


**With very few exceptions, over 85 percent of businesses across all categories will not be able to last beyond three months.** The exceptions (where this share is below 70 percent) include leasing and business services as well as residential services, repair and other services. Sectors with particularly short cash flow coverage include a variety of traditional and modern industries which operate predominantly on a cash basis. Payment of staff wages and benefits is the most common problem experienced by 51.3 percent of all companies across the sectors, payment of taxes and rents rank next to it (38.6 percent and 34.5 percent respectively).

**Businesses are trying to address the shortage of cash flow by acquiring loans from commercial banks (40.8 percent) and reduction in operating costs (39.5 percent).** Loan restructuring and equity finance come a distant third and fourth at 12.2 percent and 7.2 percent, respectively, while loans by fin-tech companies are negligible. Companies may be overoptimistic about the willingness of the financial sector to extend additional lending in this situation. Special measures, such as extension of the existing guarantee schemes or new guarantees, will be required to unlock credit finance from commercial banks to businesses who are likely to be in financial distress and in need of liquidity for working capital, both during the crisis and the recovery phase.

**Overall, Ugandan companies are not particularly optimistic about the future;** 91 percent expect their 2020 revenues to be less than the previous year, 80 percent expecting the drop to be more than 10 percent of last year's revenues (Figure 34). Only 6.2 percent of firms anticipate an increase in their revenues. The companies that expect a drop in their revenues of above 10 percent this year belong to the following sectors: accommodation and catering; health and social work; manufacturing; mining and quarrying; production and supply of electricity, heat, gas and water; residential services, repair and other services.

Figure 34. Expected change in total revenue in 2020 (compared to 2019).

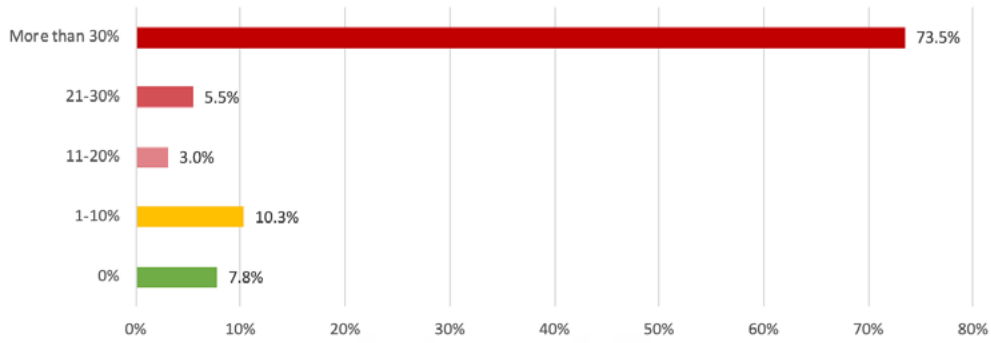



**The companies working in accommodation and catering, health and social work, manufacturing, mining and quarrying, production and supply of electricity, heat, gas and water; residential services, repair and other services expect a drop in their revenues of above 10 percent this year.** These companies account for over 80 percent of respondents.

**The sectors where companies expect an increase in their revenues include financial industry (18.7 percent); information and technology services (9.4 percent); manufacturing (9.8 percent) and scientific research and technological services (11.1 percent).** Companies in three sectors expect a smaller increase in their revenues in 2020: agriculture, forestry, animal husbandry and fisheries (6.4 percent); construction (4.3 percent); education (3.2 percent). The trend is clear: industries with higher value addition expect their revenue to increase (even when the overall expected drop in revenues is significant as is the case for manufacturing) whereas lower value adding sectors are more likely to experience an overall decrease in revenues.

**Next, the impacts on the workforce are expected to be severe.** Work attendance has dropped significantly. 73.5 percent of the responding companies miss over 30 percent of their employees due to the lockdown and another 8.5 percent miss at least 10 percent of their workers. The sectors with more than 75 percent of enterprises reporting the absence of above 30 percent of the total workforce include accommodation and catering; construction; social and business services.

Figure 35. Percentage of employees unable to report to work.



**Layoffs have started and are likely to continue.** The industries that are bracing for the biggest layoffs include accommodation and catering, mining and quarrying, manufacturing, culture, sport and entertainment, and wholesale and retail trade (Figures 36 and 37). This trend would mean a loss of job for over 100,000 employees in the formal sector who are as a rule very qualified and experienced. The downward pressure of declining production due to a combined effect of a reduced workforce and slowing demand forces companies to look for ways to reduce their operating expenses including labour. Findings on layoff indicate that 62.3 percent of the respondent companies are considering or have already started cutting jobs.

**Figure 36. Percentage of actual or intended layoffs.**

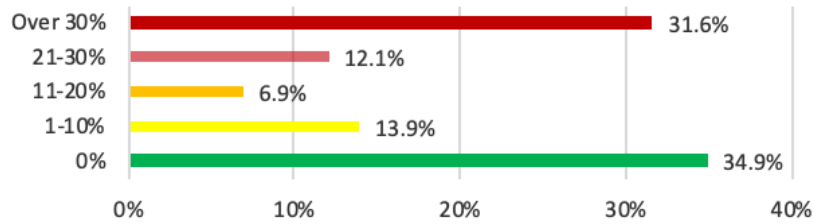
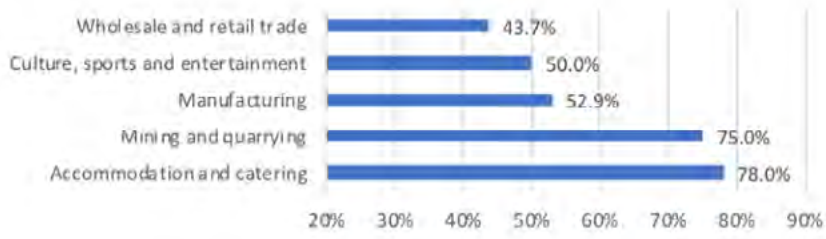



**Figure 37. Percentage of actual or intended layoffs by sector of economic activity**



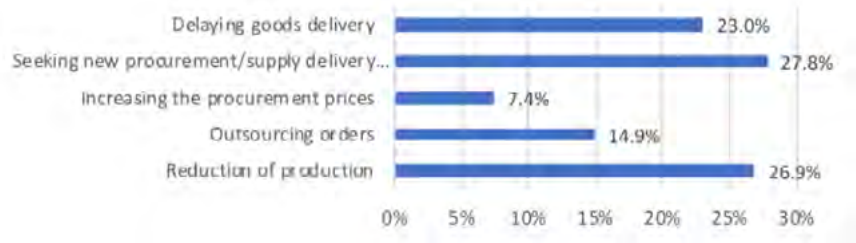

**Although more than 30 percent of workers are currently absent in 73.5 percent of respondent businesses, only 31.6 percent of companies are planning (or exercising) a proportional layoff.** Also, 34.9 percent of the surveyed companies are not planning any job cuts although the share of businesses with a 100 percent presence is only 7.8 percent. The share of laid off workers is significantly lower than the share of workers who are currently unable to work. This is mainly because many of these layoffs are of a temporary nature, one can hope for a relatively quick recovery of employment to its pre-COVID-19 level (of course, subject to the restored demand).

**The loss of jobs will be particularly felt in the North and Southwest of the country.** Regions least affected by job cuts include Kampala, Eastern and Central regions (Figure 38). Conversely, Karamoja, West Nile, Northern Region (without Karamoja and West Nile) and the South Western Region are the ones where the largest layoffs are likely to take place (above 20 percent of the total workforce), with 70 percent of Karamoja businesses implementing or planning layoffs of more than 20 percent of their employees.

Figure 38. Planned lay-offs by region


**Companies deal with the challenge of shortages of inputs through a combination of using new procurement/supply delivery channels (27.8 percent), reduction of production (26.9 percent) or delaying the delivery of final goods (23 percent).** Some industries expect an increase of over 30 percent in the cost of inputs and operating costs (see UNCDF, 2020). These include manufacturing and production and supply of utilities (electricity, heat, gas and water), where 45 percent of companies expect an increase of more than 10 percent. The other industries where many respondents expect the cost of doing business to increase above 10 percent include the real estate industry and culture, sports and entertainment (37.5 percent each) as well as agriculture (28.6 percent) and wholesale and retail trade (26.8 percent) (see UNCDF, 2020). Businesses are unlikely to absorb these costs in the aftermath of COVID-19, reflecting in higher prices for the consumers on these essential goods and services.

Figure 39. Ways of dealing with the shortage of raw materials and other supplies.



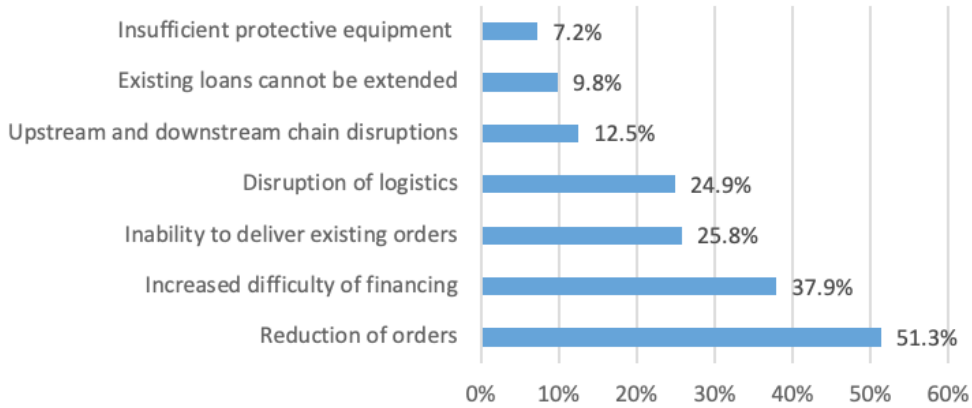

**A decrease in aggregated demand due to the lockdown measures is cited as the most important other challenge listed by a majority of companies (51.3 percent) as they experience a reduction of orders.** Increased difficulty of financing business operations comes second (37.9 percent). As discussed above, businesses are facing liquidity problems and an accumulation of outstanding payments, which they cannot pay because of the reduced cash inflows. Disruption of logistics and upstream and downstream

chains was mentioned as a challenge by 37.4 percent of the respondent companies (see UNCDF, 2020). They also mentioned the challenge of extending the existing loans (9.8 percent) and lack of protective equipment (7.2 percent) to be able to continue their business in a safe manner.

**Export-oriented industries are vulnerable and prepare for a large decline in export volumes.** Export-oriented companies forecast that their export volumes will go down (62.8 percent of the responding companies) while 49.2 percent believe that their exports will decline by more than 20 percent. Only 6 percent expect their exports to increase.

The hardest hit sectors are private educational institutions which cater for foreign students (91 percent). Almost 70 percent of companies in information transmission, software, and information technology services also expect a drop in their export volumes. The other affected sectors include agriculture, forestry, animal husbandry, fisheries (64.5 percent), health and social work (65.2 percent), construction (65.0 percent), wholesale and retail trade (64.3 percent), and transport, storage, and postal industry (63.6 percent) (see UNCDF, 2020).

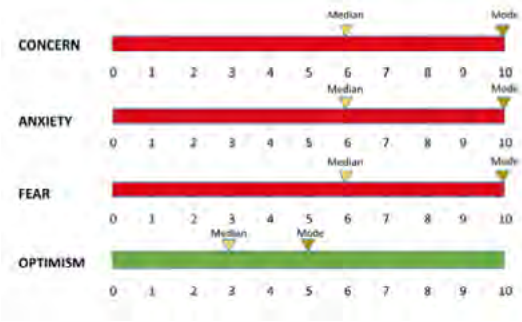
**Figure 40. Other challenges faced by MSMEs.**




The Ugandan business community is concerned about the impact of COVID-19 and its longer-term effects. A 10-point Likert scale was used to measure the feelings of the business community, focusing specifically on two values, the median and the mode (Figure 41). Both are measures of central tendency that indicate the typical value for a dataset. The mode is a value with the highest frequency whereas the median is the value that divides the data in half.

The survey indicated that such feelings as concern, anxiety and fear run very high at the modal value of 10 (the median is 6) whereas optimism scored only 5 (the median is 3). The results for the negative sentiments indicate a left-skewed distribution meaning a high intensity of feeling across all negative categories.

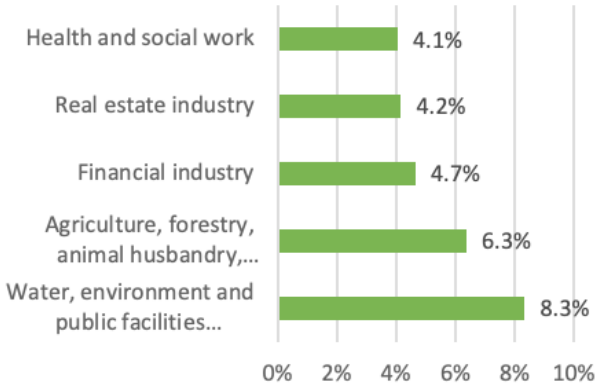
Figure 41. Feelings about COVID-19.



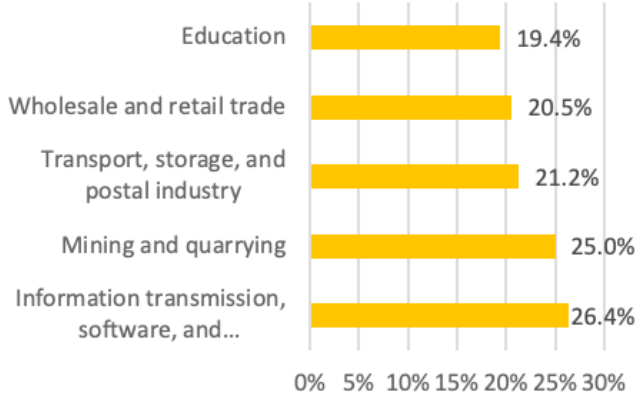

Recovery for most businesses is expected to take more than three months and possibly until the end of the year. Findings indicate that 70 percent of the respondent businesses estimate their recovery time of more than three months; 4.1 percent believe that it will take one month or less whereas the remaining 25.6 percent envisage a recovery period of one to three months. Industries with the expectation of recovery taking more than three months include accommodation and catering (57.6 percent of respondents); production and supply of electricity, heat, gas, and water (54.2 percent); real estate industry (54.2 percent); financial industry (44.2 percent); and manufacturing (41.2 percent). The slowest recovery is expected in the Western and Eastern regions.

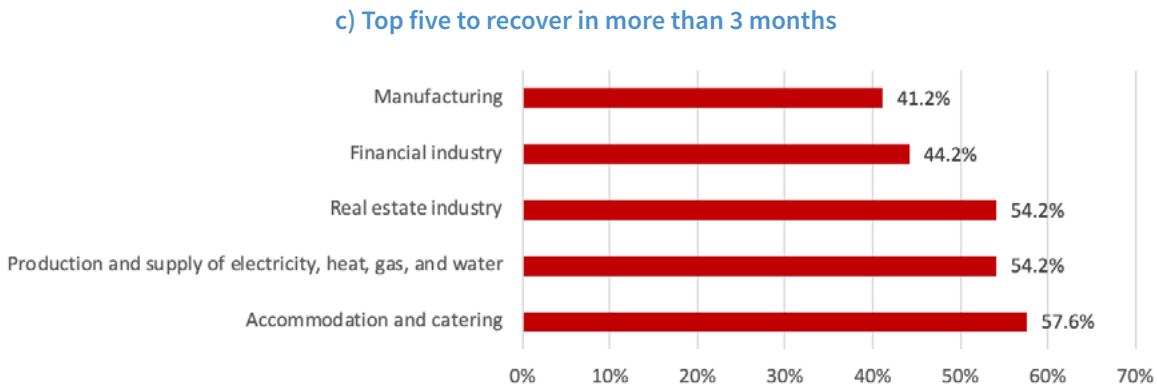
Figure 42. Expected period of recovery by industry.

a) Top five to recover within one-month




b) Top five to recover between 1 and 3 months



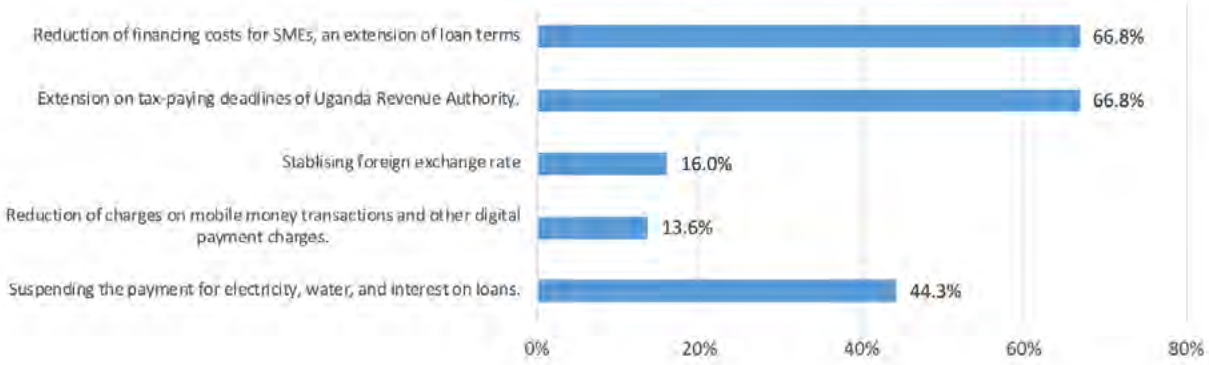



**The period of recovery is expected to differ markedly between various sectors (Figure 42).** The sectors with the highest percentage of companies expecting to recover within one month include water, environment and public facilities management (8.3 percent), agriculture, forestry, animal husbandry, fisheries (6.3 percent), financial industry (4.7 percent), real estate industry (4.2 percent), health and social work (4.1 percent). Even in those industries the expectation of a speedy recovery within one month is shared by just 5.5 percent of companies.

**Among the companies expecting to recover within a period of one to three months, information and software companies are most optimistic (26.4 percent).** About 20 percent of companies hope to recover within the same period in mining and quarrying; transport, storage, and postal industry; wholesale and retail trade; and education.

**A number of sectors anticipate a longer recovery period of over three months.** Particularly concerned with longer-term consequences of COVID-19 are accommodation and catering where 57.6 percent of respondents are preparing for a long recovery; production and supply of electricity, heat, gas, and water (54.2 percent); real estate industry (54.2 percent); financial industry (44.2 percent); and manufacturing (41.2 percent). The tourism industry, which started slowing down in January and all but stopped in early February, does not expect to recover until over a year from now, bringing the full recovery to the second quarter of 2021.

**Figure 43. Effectiveness of the relief measures**




**Relief measures introduced by the Government and financial institutions are effective.** The two most appreciated business relief measures are an extension of loans terms and reduction of financing costs for SMEs (66.8 percent) as well as an extension of tax payment deadlines to the Uganda Revenue Authority (URA) (66.8 percent). Suspending payments for the utilities and loan interests is also viewed as an effective relief measure by 44.3 percent of the respondents (Figure 43).

# 4.5 Policy Recommendations

**DEVELOP A COMPREHENSIVE RECOVERY PACKAGE WHICH SUPPORTS BUSINESSES' ESSENTIAL NEEDS AND LEADS TO A MORE RESILIENT ECONOMY.** Such a package could entail, but may not be limited to, 1) continued and vigorously enforcement of eviction freezes due to non-payment of the rent including waiver or deferment for spaces leased by LGs to prevent business closure; 2) utility waivers for households to enable business operate at home; 3) supporting informal businesses to transition to e-commerce platforms and home delivery applications to retain and increase their customer base; 4) establishing a fund for facilitating uptake of innovative and/or digital-based business ideas and technology innovations; 5) establishing a Market Vendors' Fund to support women vendors, managed through financial institutions with established linkages with market vendors' SACCOS , and capacity to develop tailored financial products; 5) and retrofitting public spaces to ensure safety to continued functioning of informal businesses.

**PROTECT CURRENT EMPLOYMENT THROUGH A STIMULUS PACKAGE TO SUPPORT INFORMAL MSEs.** A stimulus or support to those informally employed or with their own MSEs would help offset inevitable economic hardship, particularly for women. This could amount to a direct subsidy to informal MSEs, including market vendors. In addition, offering free or subsidized vocational and skill training for employees who may experience structural unemployment as a consequence of the pandemic with the intention to skill them for activities which enjoy higher demand. Results indicate that this measure would be effective in supporting informal workers and keeping many Ugandans out of poverty.

**IMPROVE LIQUIDITY/CASH FLOW OF BUSINESSES, CREATING AFFORDABLE AND INCLUSIVE LENDING OR GRANT MECHANISMS TO PROVIDE ACCESS TO FINANCE FOR BUSINESSES WITH INSUFFICIENT WORKING CAPITAL.** Several options could be considered, including: 1) a "Liquidity Facility" targeting informal businesses on a blended finance approach to provide required working capital; engaging with microfinance providers and SACCOs to ease requirements and terms for microcredit loans by availing funds through Uganda Development Bank (UDB) or Microfinance Support Centre (MSC), to empower individuals who would like to start a new business (especially those who have lost their jobs); 2) Special Sectors Credit to compensate a percentage of lost revenue or offer a lump sum compensation to the businesses that had to temporarily shut down, with this offered allowance going to specific sectors that are considered highly impacted; 3) enacting policies that make it easier for affected groups to access digital financial services accounts like mobile money, in addition to a temporary or long-term relaxation of mobile money taxation for smaller transactions typical of MSEs (this could also be combined with subsidization of lost fees by Digital Financial Services (DFS) providers and commissioned agents); and 4) incentivise banks and other financial institutions to develop tailor-made financial products for MSEs combined with financial literacy f training or the vulnerable.

**IMPROVE THE LEGAL AND POLICY ENVIRONMENT.** This should derive from an in-depth and all-embracing Informal Sector Economy Audit for Uganda, which will highlight key issues in this sector and provide empirical data to support evidence-based decision-making for the sector. The Market Act 2019 Bill that has been proposed is an opportunity that is available to resolve these issues. The key issues that need to be addressed include leadership and participation particularly by market women, taxes and fees levied on the market vendors, provision of childcare and other gender-related infrastructure as well as regulation of the middlemen and other supply chain issues. The proposed legislation will repeal the Market CAP 94 of 1942. Additionally, improving the data environment is also key. Government and development partners should leverage data from all sectors to support decision-making. Uganda will also need to leverage ICT to collect new data and apply analytics throughout the recovery phase. Data tools can be leveraged from a variety of sources, including the private sector.

**PROVIDE FINANCIAL RELIEF FOR THE FORMAL SECTOR SMEs.** This could take the form of: 1) reduction in taxes and holidays on statutory deduction like NSSF, and 2) improved access to affordable capital to accelerate recovery, which involves (i) increasing the amount of capital companies can use to cover their immediate needs during the pandemic and to accelerate their recovery and (ii) maintaining the existing loan obligations affordable in view of the changed cash flows to prevent business defaults. Some additional specific proposals include: 1) establishment of an SME Recovery Facility that would allow access to liquidity and working capital as well as capital investments when appropriate in the context of recovery on concessional terms. This would include a grace period of up to two years and interest rates not exceeding 14-15 percent annually, preferably even interest-free. 2) There is a direct role for the Government in negotiating with banks and providing guarantees to postpone loan repayments where applicable for businesses to recover. Some businesses suggest a moratorium on loan repayments for at least three months or even waving off all loan interests for three months on all business loans. And, lastly, 3) a more aggressive monetary policy could lower interest rates, reducing loan burdens to prevent business collapse.

**PROTECT AND GENERATE EMPLOYMENT IN FORMAL SECTORS.** This could be accomplished through: 1) direct financial support to companies employing the youth; and 2) waiving the Pay as You Earn (PAYE) tax on salaries during this time to reduce the employment costs for the employers and increase PAYE threshold to at least UGX 500,000. Other recommendations for employment protection and generation include: 3) halting the ongoing Government procurement contracts and increasing the volume of public procurement available to domestic enterprises; 4) clearing all Government suppliers' outstanding bills and all domestic arrears as part of the relief package.

CHAPTERS 2-7:

# POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

05

CHAPTER FIVE

# SERVICE DELIVERY AND HUMAN DEVELOPMENT

# KEY MESSAGES

**LGs NEED SUPPORT**

Inadequate involvement and support to the LGs will undermine future progress on human development at the sub-national level. Health impacts and the knock-on effects of containment measures for the health sector will also affect human development and general welfare of Ugandans.

**IMPROVE HDI**

The rate of improvement in Uganda's Human Development Index (HDI) has slowed down in recent years, rising marginally from 0.46 in 2013/2014 to 0.50 in 2015/2016 and 0.517 in 2018/2019, which has continued to position the country below the regional average. This could pose significant negative implication on the inclusiveness of growth and the achievement of 2030 Agenda.

**INEQUALITY IN HDI**

The state of human development varies significantly between sub-regions. The difference between the highest and lowest HDI sub-regions has risen from a gap of 0.197 in 2013/2014 to a gap of 0.214 in 2018/2019, indicating a widening rift in terms of inequality in human development between the top and bottom sub-regions.

**67% EXPOSED TO >4 RISK FACTORS**

Close to 67 percent of the population is at risk of exposure to more than four risk factors, with exposure highest among 84 percent of the poor and in Karamoja at 94 percent. This could be exacerbated by impacts on and inequalities in health service delivery at the local level.

**LGs FISCAL GAP**

LGs will most likely experience significant fiscal gap of UGX 15.7 trillion, with District Governments being most seriously affected and accounting for 88 percent of the total loss. Continued release of transfers is essential for maintaining basic services and utilities.

**LGs BUDGET LOSSES**

The reduction in Central Government releases of non-wage recurrent budget to LGs and constraints in mobilizing the already meagre local revenues is likely to impact service delivery heavily, given its complementary role to the development and wage budgets.

**SUPPORT PRIVATE SECTOR**

Strengthening the performance of the private sector through enhancement of local economic development is key to diversify the sources of revenue at Local Government Level.

# 5.1 State of Human Development in Uganda

**In order to better understand the implications of COVID-19 for human development and demand for service delivery in Uganda, the National Human Development Index (NHDI) is developed.** NHDI, like the Global Human Development Index, is the geometric mean of three dimensions of human development: life expectancy, education, and standard of living.

**Although Uganda has made significant improvement in human development over time, the rate of improvement has started to slow down significantly in recent years.** As illustrated in Table 15, Uganda has seen a slight increase in Human Development Index value over time at national level in the pre-COVID-19 period. NHDI value increased from 0.46 in 2013/2014 to 0.50 in 2015/2016, and then reached 0.517, showing marginal increase in 2018/2019.[69] The rate at which HDI value increased was higher between 2013/2014 to 2015/2016 than between 2015/2016 to 2018/2019. This means there is a need to enhance human development, noting that Uganda's overall HDI is still below Sub-Saharan Africa average. The sub-regions with the lowest levels of human development are Karamoja, West Nile, Kigezi, Lango, and Bukedi (Figures 44 and 45).

**The state of human development varies significantly between sub-regions.** The difference between the highest and lowest HDI sub-regions has risen from a gap of 0.197 in 2013/2014 to a gap of 0.214 in 2018/2019, indicating a widening rift in terms of inequality in human development between the top and bottom sub-regions (Table 15). This has important implications for the COVID-19 response, as areas with pre-COVID-19 gaps in human development may, when coupled with the risk factors for COVID-19 identified in the next section, experience even greater direct and indirect impacts from the COVID-19 crisis.

**Table 15. Sub regional-level Human Development Index for Uganda.**

| Region | Sub-region | 13/14 | 15/16 | 18/19 |
|---|---|---|---|---|
| Central | KAMPALA | 0.567936 | 0.613678 | 0.625798 |
| Central | NORTH BUGANDA | 0.506078 | 0.533875 | 0.576182 |
| Central | SOUTH BUGANDA | 0.483329 | 0.522982 | 0.549446 |
| Eastern | TESO | 0.463355 | 0.498783 | 0.514656 |
| Eastern | ELGON | 0.44436 | 0.508572 | 0.521587 |
| Eastern | BUKEDI | 0.457006 | 0.531123 | 0.493558 |
| Eastern | BUSOGA | 0.464286 | 0.513989 | 0.526419 |
| Eastern | TORO | 0.470055 | 0.49951 | 0.520881 |
| Northern | KARAMOJA | 0.371283 | 0.405154 | 0.412182 |
| Northern | ACHOLI | 0.441369 | 0.489965 | 0.532714 |
| Northern | LANGO | 0.434109 | 0.480367 | 0.483262 |
| Northern | WEST NILE | 0.423891 | 0.468324 | 0.479638 |
| Western | KIGEZI | 0.433898 | 0.472362 | 0.480836 |
| Western | BUNYORO | 0.463922 | 0.49565 | 0.517007 |
| Western | ANKOLE | 0.476686 | 0.517636 | 0.531916 |
| Average | | 0.460104 | 0.503465 | 0.517739 |
| Range | | 0.196653 | 0.208524 | 0.213616 |

69 (UNDP Uganda, 2020)

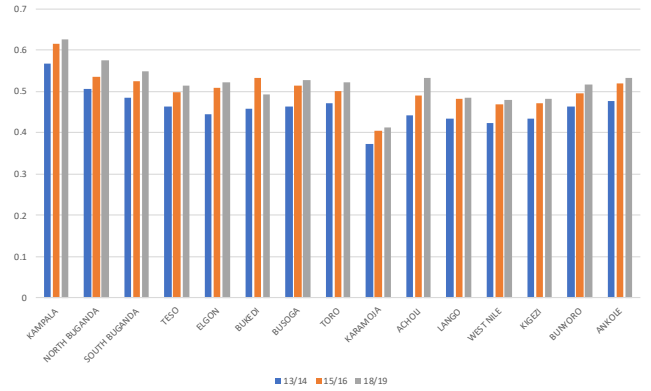



Figure 44. NDHI over time and by subregion.

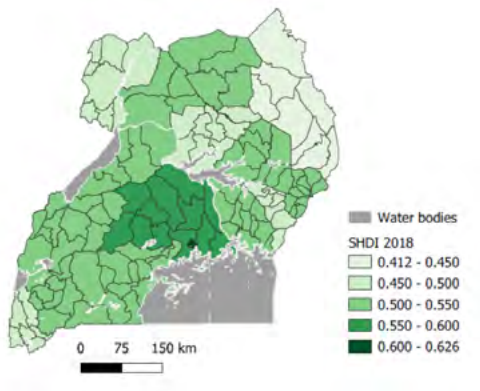



Figure 45. NDHI in 2018/19 by subregion.

## 5.2 COVID-19 Risk Factors: Implications for Human Development and Service Delivery

**In order to better understand the impact of COVID-19 on human development and service delivery, the population that could be at high risk due to COVID-19 is assessed.** Seven critical indicators have been identified which will help contextualize the impact of a national lockdown.[70] These are: 1) levels of overcrowding; 2) population living with an older person (aged 60+); 3) population with no access to water in their dwelling or on their premises (yard/plot); 4) population that reports having to collect their own water; 5) population who have to share their sanitation facilities with others, or who lack any toilet facilities; 6) population who report not having hand washing facilities near their toilets; 7) population who have to collect fuel for cooking.

**Each of these variables is directly linked to risks associated with the transmission of the virus.** For example, disease transmission is more likely in overcrowded conditions, or in homes where household members need to leave the home/compound/plot to collect water or wood from outside. The precise impact/magnitude of each risk factor is not known, and this analysis does not attempt to quantify it. However, by using the indicators above, attempt has been made to identify the share of the total population that is at high, medium and low risk of contracting COVID-19.

**Large segments of the Ugandan population are at high risk for COVID-19 infection.** Close to 67 percent of population has a high risk of exposure for more than four risk factors while rural areas (73 percent) have a higher risk exposure than urban (46 percent) (Table 16). The region with the largest share of its population

70 (UNICEF et al., 2020)

exposed to more than four risk factors is Karamoja (94 percent) followed by Acholi (86 percent), and 84 percent of the poor are exposed to more than four risk factors. The difference in terms of risk exposure by the gender of head of household is minor between male and female headed households. In terms of the type of risk factors, large segments of the population have high risk of exposure arising from limited access to energy (98 percent) and limited access to water (88 percent).[71]

**Table 16. Number of risk factors to which people are exposed. Red indicates higher risk, yellow indicates moderate risk, and green indicates lower risk.[72]**

| | | HH-EXPOSURE TO COVID19 RISK FACTORS | | | | | |
|---|---|---|---|---|---|---|---|
| | | NONE | | 1-3 RISK FACTORS | | 4+ RISK FACTORS | |
| | | COUNT | ROW N (%) | COUNT | ROW N % | COUNT | ROW N (%) |
| **Uganda** | **National** | 869 | 2 | 13,012 | 31 | 27,587 | 67 |
| **Place of Residence** | **Rural** | 130 | 0 | 8,104 | 26 | 22,823 | 73 |
| | **Urban** | 739 | 7 | 4,888 | 47 | 4,764 | 46 |
| **Sub-region** | **Kampala** | 160 | 9 | 884 | 49 | 752 | 42 |
| | **Central1** | 374 | 7 | 2,727 | 50 | 2,324 | 43 |
| | **Central2** | 105 | 2 | 1,744 | 39 | 2,590 | 58 |
| | **Busoga** | 23 | 1 | 974 | 23 | 3,203 | 76 |
| | **Bukedi** | 19 | 1 | 322 | 15 | 1,842 | 84 |
| | **Bugishu** | 11 | 1 | 520 | 25 | 1,536 | 74 |
| | **Teso** | 2 | 0 | 381 | 18 | 1,784 | 82 |
| | **Karamoja** | - | 0 | 74 | 6 | 1,086 | 94 |
| | **Lango** | 27 | 1 | 619 | 24 | 1,891 | 75 |
| | **Acholi** | - | 0 | 256 | 14 | 1,536 | 86 |
| | **West Nile** | 12 | 0 | 539 | 18 | 2,523 | 82 |
| | **Bunyoro** | 35 | 1 | 794 | 32 | 1,677 | 67 |
| | **Toro** | 37 | 1 | 1,046 | 34 | 1,994 | 65 |
| | **Ankole** | 59 | 2 | 1,591 | 46 | 1,818 | 52 |
| | **Kigezi** | 7 | 0 | 523 | 34 | 1,030 | 66 |
| **Poverty status (UBOS)** | **Non-poor** | 868 | 3 | 11,902 | 36 | 20,099 | 61 |
| | **Poor** | - | 0 | 952 | 11 | 7,462 | 89 |
| **Poverty Group** | **Poor** | 4 | 0 | 3,027 | 16 | 16,433 | 84 |
| | **Rising** | 37 | 4 | 371 | 44 | 434 | 52 |
| | **Vulnerable** | 10 | 0 | 1,387 | 33 | 2,749 | 66 |
| | **Not poor** | 819 | 5 | 8,226 | 48 | 7,972 | 47 |

*Source: UNHS 2016/17 (UBOS, 2018)*

71 Tables that provide further statistics for the above risk factors and the share of the population exposed to each risk are provided in the full report (UNICEF, 2020).

72 UNICEF et al., 2020

# 5.3 Impacts on Health and Health Sector Service Delivery

**From a health sector perspective, the Government of Uganda has made commendable efforts to contain the pandemic and "flatten the curve."**[73] However, policymakers face the incredible difficulty of balancing the positive health impacts of flattening the curve with the negative health impacts linked to flat-lined economic activity. There are two primary avenues through which the negative impact on the economy will affect the health sector. First, the slowdown of economic activity can substantially increase negative health outcomes (Table 17). Although preventive lockdown measures can help "buy time" for the health sector to prepare for increased COVID-19 cases, these measures come at a high price. Projections for sharp decline in economic growth and the response measures could be associated with hundreds of thousands of deaths in LMICs—without taking into account any deaths directly linked to the disease.[74] Second, the crisis has the potential to reduce welfare of Ugandans by limiting access to health services and straining health service delivery (Table 17), disproportionately impacting on several vulnerable and marginalized groups that are at risk of impoverishment (see Chapter 6).

**Table 17. Impact of Covid-19 on selected health indicators.**

| Health Service Variable / Indicator | Status |
|---|---|
| Antenatal Care visits attendance | Decreased by 7% |
| HIV positive pregnant women receiving ARVs | 12% decline |
| HIV Exposed Infants (HEI) who received ARVs at birth | 18% decline |
| Health facilities deliveries | 10% decline |
| Immunization services | 20% drop in children receiving DPT-3 |
| Severe Acute Malnutrition (SAM) | Cases of SAM have increased by 8% |
| Number of children born with low birth weight | Increased by 0.8% |
| HIV services | Number of HIV+ individuals declined by 36% |

*Source: MOH, 2020.*

**The pandemic could severely constrain health resources in the long-term.** Policymakers and Local Governments dealing with COVID-19 in Uganda face immediate and longer-term spending challenges that will have substantial impacts on people's health and wellbeing, through decisions made at the Central Government level and also in terms of service delivery at the local level. The crisis further presents substantial opportunities and challenges as Uganda aims to move towards universal health coverage. In the immediate term, Uganda can employ a variety of health financing measures to maximize their health system capacities

73 Flattening the curve, which refers to reduction in the number of cases in a short period of time (e.g., in graphical form, this reduces a curve of "cases over time" from a very sharp spike, which puts pressure on health systems in a very short time duration, to a flatter curve whereby the caseload remains the same but it is over a longer period of time, thereby giving the health system more time to respond), reduces the pressure on health systems during the wait for effective treatments and or vaccines for COVID-19 to become available.

74 Glassman et al., 2020a

for COVID-19 response (Barroy, 2020). These measures include reallocating non-essential expenditures and using exceptional spending measures. While these measures are being implemented, the Government of Uganda must also ensure that public funds are tracked and reach frontline healthcare providers around the country quickly.

**In the longer term, as the country grapples with the wake of a sharp economic downturn, and the strain that COVID-19 has placed on health workers, policymakers will be tasked with determining the possibilities and limitations for the health system vis-à-vis aspirations to achieve universal health coverage (UHC).** Immediate financial pressures may severely impact ability to mobilize domestic resources to deliver UHC (Glassman et al., 2020b).

## 5.4 Assessment of Local Government Service Delivery Capacity to Respond to COVID-19

**Drastic disruption of social and economic activities across all sectors of the local and national economy has been seen due to the measures to control the virus.** The closure of education institutions, manufacturing firms, and the requirement of people to stay at home has not only reduced production of goods and services but also curtailed demand and hence trade. Transport services and many informal sector services have been shut down leading to massive unemployment, which has increased the number of poor and vulnerable persons in the country.

**While the Central Government (CG) has been leading the fight against the pandemic, and its capacity to respond has been significantly boosted, LGs have not been provided the required support to effectively fulfil their responsibilities in the medium and long term.**[75] The CG has taken on the bulk of the responsibility for managing the spread of the disease and provision of other services. Subsequently, the CG has enhanced its capacity to deliver its increased responsibilities and counter some of the negative consequences, LGs that include Districts, Municipalities and Town Councils (TCs) have not been given the same consideration. Yet, sustainability in the management of the consequences of the pandemic over the medium to long-term will depend on the capabilities of LGs as the core organs of service delivery. The current positive results in terms of control of infections and treatment of the sick in Uganda need to be replicated in the broader development aspects of general service delivery across the country in order to secure lives and livelihoods both during and after COVID-19.

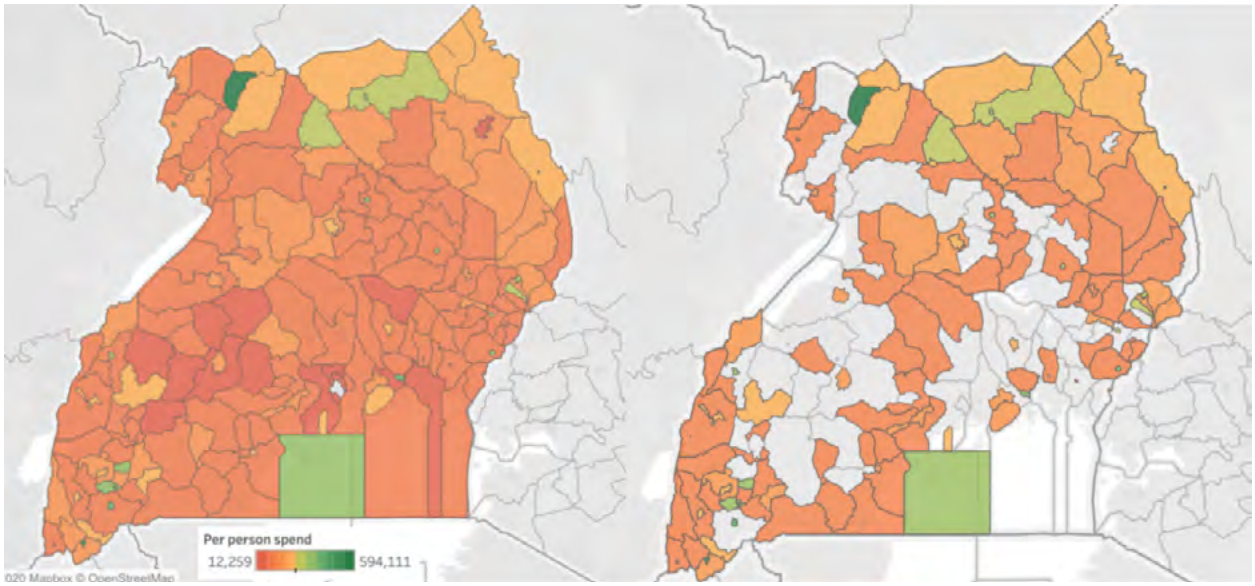
**There are growing concerns that the centralization of most activities and lack of adequate involvement and support to the LGs will undermine future social economic development at the community level.** Several services, within the decentralized Government system, lie within the mandate of LGs under both the Constitution and the LG Act 1997. The LGs are, among others, responsible for provision of public sector management services, education, health, agricultural production, marketing, water and environmental preservation. Although some of these services are jointly shared with the CG, the LGs still play a critical role as

75 For further information, see full report by UNCDF (2020).

they are mandated to do community level planning and implementation of most of the development initiatives.

**The capabilities of LGs need to be strengthened and sustained to ensure continuity of services that are currently categorised as non-essential.** In addition to disrupting the flow of business and other activities, the COVID-19 pandemic is expected to reduce the LG revenue streams that mainly come from local revenues and CG transfers for specified activities. The selection of the revenue channel was largely informed by the fact that inadequate financial resources have often been raised by LGs as the major constraint to service delivery even before COVID-19. It is important to note that even before the outbreak, per capita spending by LGs has been significantly inadequate, with given that about 40 percent of them spend less than UGX 100,000 per capita (the right panel in Figure 46 shows those have spent over UGX 100,000).

**Figure 46. Local government spending per capita, FY 2019/20.**




*Source: MoFPED, https://budget.go.ug/*

**The analysis adopted a systems approach to service delivery largely on account of the many and complex interactions between MDAs of Government as well as households and firms in the private sector.** The private sector provides certain services on behalf of the Government but is also a major source of revenue through payment of taxes. The disruption of businesses and livelihood strategies of households has multiple effects on the capacity of LGs in the sense that it increases the demand for public sector support while at the same time reducing the revenues from business firms. This can impact highly beneficial outcomes for LGs and service delivery (Figure 47).

**Figure 47. Logical model of service delivery and outcomes.**


*Source: Authors.*

**The data collection involved qualitative and quantitative approaches following identification of potential transmission channels of the shock to the service delivery systems and related outcomes.** The variables and interactions identified from the literature were corroborated by qualitative information from the survey that was based on the critical case sampling of senior officials from a cross-section of LGs. The information collected ranged from types of services provided by the LG that were likely to be most affected by the pandemic as well as the nature of the impacts. Information on types of revenues received by the LG was obtained through secondary sources while the assessment on likely impacts on these revenues and general service delivery was informed by correlations between various pieces of data and survey information.

**The analysis relied on both descriptive statistics of trends and relationships that were adopted to identify the effects of a systemic shock on revenues of LGs and likely impacts on service delivery.** Additional insights on the linkages between budgets and service delivery were derived from interviews with senior staff of select LGs. The selected respondents have practical experience on the immediate impact of the COVID-19 as well as a history of shocks in the form of budget cuts (sudden reductions in the releases from CG and shortfalls in LG revenues). The survey information provided numerical insights on expected relative declines in the various types of and sources of revenue as well as impacts of physical disruption services provision.

**The findings begin with descriptions of the immediate impacts of the pandemic on service delivery systems based on evidence from the survey.** This is followed by results from the trend and proportionate analysis of budgets of different services as well as the effects on current and future flows of such revenues. The measures instituted by the CG reduced both total and specific transfers to the LGs with significant implications for service delivery.

## IMPLICATIONS ON SERVICE DELIVERY

**The officials were asked to identify the types of services that are most affected by the pandemic and the immediate effects on the LGs.** Information from 20 respondents converged on the following types of services and effects. These are illustrated in Table 18.

**Table 18. Survey responses for types of services that are most affected by the pandemic and the immediate effects on the LGs.**

| Services most affected by COVID-19 | Immediate effects on LGs |
|---|---|
| • Maintenance of basic infrastructure (roads, water, energy, etc.) that support production, trade and access to basic social services<br>• Basic social services such as health, education and agricultural extension services.<br>• Supporting livelihoods through production and related services.<br>• Official meetings to resolve routine issues such as approval of budgets, procurement and planning as well as other issues that are of an emergency nature. Presently, the LGs cannot meet, and online facilities are poor.<br>• Support to the poor, marginalized, and most vulnerable with emergency or regular health care support.<br>• Garbage collection<br>• Revenue collection | • Only key skeleton staff are allowed to work, and there are certain services that require staff to leave their duty stations late, which have been constrained by the curfew.<br>• LGs are unable to hold meetings because of the lock-down. For instance, the budgets have not yet been passed because of the limitation of the number of people in meetings to five.<br>• LGs are unable to collect local revenue because most business sources such as shops and cattle markets are closed. This has affected provision of basic services that were dependent on local resources. The CG transfers are mainly restricted to capital overheads and wages, which leave local revenues to complement non-wage recurrent expenditure.<br>• Work overload for the few staff who are allowed to work and are able to reach the office.<br>• Limited or no technical support from CG and partners (mainly NGOs) for many sectors except health and security. |

**Officials also identified the revenue sources most affected by COVID-19, which are the following:**

a) Trading licenses and operational permits, which normally reach a peak period during this season are expected to reduce to 15–30 percent.

b) Land fees reduced to nil since the offices are closed for this period.

c) Market charges reduced by 30-60 percent due to reduced number of people in the daily markets and the suspension of open weekly and monthly markets, which in turn greatly support the daily markets.

d) Revenue collection points for the mining of sand and stone quarries reduced to 30 percent since hardware shops are closed and limited movement of builders and property developers.

e) Local Hotel Tax, which is based on the number of occupied rooms and number of occupants per night reduced by 90 percent due to suspension of hotels and bars under the lockdown.

f) Application/Tender Fees reduced to an average of less than 25 percent due to few or no payments because of limited movement of people.

g) Property Tax had already been suspended by the President before COVID-19 implying that LGs had lost 100 percent of this revenue from trading centres. However, the revenue was still being collected by TCs and Municipalities and it has reduced by 60 percent. It is largely being paid by factories and industries since the landlords are finding it difficult to collect rent from tenants under the lockdown period.

**According to respondents, urgent support is needed to LGs in the following key areas:**

- Support continuity of health service delivery at health facilities including providing transport for health workers to their duty stations.
- Provision of requirements to meet the SOPs at all offices and for all essential staff.
- The LGs have also reduced staff in compliance with the directives of the President.
- Conduct monitoring and spot checks on facilities to ensure continuity of service.
- Conduct community social mobilization and supporting enforcement of COVID-19 preventive measures among the population. This includes surveillance and responding to alerts for contact tracing, collection of samples for onward transmission to UVRI;
- Provision of transport to support referral of patients for non-COVID-19 essential health care services. Despite this initiative, the LGs have not been able to transport more that 10 percent of the total OPD daily attendance in the Health facilities.

LGs identified several challenges that they are facing in discharging their roles.
These include enhancement of local revenue, human resource capacity and budget flexibility.


**ENHANCEMENT OF LOCAL REVENUE:**
There are very few options to revive local revenues during the lockdown that has affected the businesses and other activities such as consumption that form the major sources of revenue from hotels, markets, factories and shops. Several LGs indicated inability to develop any strategies to beef up local revenues since the lock down has affected most of the core activities.

**HUMAN RESOURCES:**
TCs were the most affected in terms of administrative staff with significant shortfalls that reached 60 percent in some locations. The service sector was mostly affected in facilities at Health Centre (HC) II and HCIII in the case of health and secondary schools in the educations sector. In case of need, the LG officials indicated ability to recruit rapidly using contract provisions but were constrained by availability of potential people with the required qualifications, lack of financial resources and the disruption of processes by the lockdown.

**BUDGET FLEXIBILITY:**
The LGs were not able to adjust the budgets because of the rigidities embedded in the conditionality provisions set by CG. The management of emergencies has not been reflected adequately in most LG plans and budgets and experience shows a tendency of trying to handle them directly from the CG without engaging the local leaders.

## TRENDS IN LOCAL REVENUES AND IMPACT ON SERVICE DELIVERY

To establish the potential impact on service delivery as a result of revenue shortfalls the variation between planned/budgeted and actual revenues of LGs was established. The span of five years was intended to give a reliable trend and correlation between the key variables as well as capturing events in the country that reflected a shock in economic activity. The selected districts had to have audited accounts, which is the reason for exclusion of the data for 2018/2019, and with data covering at least four years. Accordingly, a number of new LGs were excluded from the sample. The results for the 117 LGs are indicated in Table 19.

Adverse economic conditions reflected in slow growth of the economy and reduction in household consumption expenditure (HCE) are main drivers of local revenues as shown by the year 2014/2015 and 2015/2016. Specifically, an increase in household expenditure in 2014/2015 resulted in a decline in the variation between planned and actual revenues to 12 percent from 22 percent in 2013/2014. The same variation of 12 percent was observed in 2015/2016 following adjustments in planned budgets for 2015/2016. Slower growth in HCE registered in 2016/2017 and 2017/2018 resulted in higher variations of 18 percent and 29 percent respectively.

**Table 19. Relating local revenue LG performance to economic selected economic parameters.**

| Fiscal Year | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 |
|---|---|---|---|---|---|
| Variation between planned and actual local revenues for selected LGs (%) | 22 | 12 | 12 | 18 | 29 |
| Constant price GDP growth rate (%) | 5.1 | 5.2 | 4.8 | 3.9 | 6.1 |
| Household consumption expenditure | 2.4 | 11.3 | 0.1 | 3.3 | 4.1 |
| Exchange Rate (UGX/$) | 2,538 | 2,828 | 3,443 | 3,530 | 3,659 |

*Source: Authors' analysis of data from the LGFC*

**It is clear from the analysis that an adverse shock to the economy that affects household consumption expenditure is likely to cause a bigger shortfall in projected local revenues and hence result in a negative impact on service delivery by the LGs.**

**LGs need to diversify their sources of own revenue.** A major lesson from this finding is the need to diversify alternative sources of revenues for LGs and strengthening the performance of the private sector through enhancement of local economic development. In the survey, the LGs indicated having drawn significant support from the NGO sector during the ongoing COVID-19 period. The support was in form of personnel, food supplies and other non-monetary contributions.

**The combination of revenue coming from property income and sale of goods and services, as well as various fees and fines, constitute the major source of revenue for LGs.** The other major categories are: Property tax, User fees, Local service tax (LST) and Business licences. As shown in Table 20, the percentage contributions (averages for five years) and the most dominant tax for all LGs is categorised as other, which includes property tax income, sale of goods and services as well as various fees and fines for districts (45 percent), Municipalities (28 percent) and Town councils (34.8 percent). This is followed by property tax and user fees across all LGs.

**Table 20. Average percentage contribution of local tax by type for 2013/2014 – 2017/2018.**

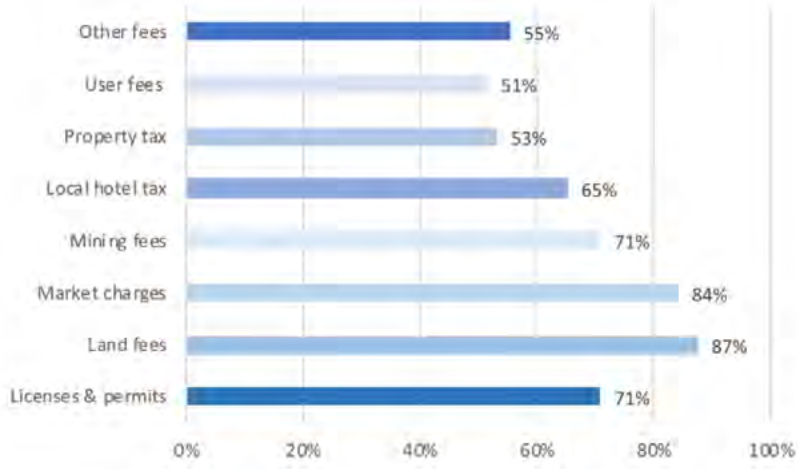
| | Districts | Municipalities | Town Councils |
|---|---|---|---|
| Local Service Tax | 12.0 | 3.8 | 8.8 |
| Hotel Tax | 1.0 | 1.2 | 1.0 |
| Property Tax | 17.6 | 23.9 | 22.1 |
| User Fees | 17.0 | 20.4 | 21.3 |
| Business License | 5.1 | 9.6 | 12.0 |
| Other Fees | 47.3 | 28.4 | 34.8 |

*Source: Authors' analysis of LGFC data.*

**The impact of the COVID-19 pandemic is most significant across all major sources of revenue through both direct and indirect effects.** Components such as business licences, user fees and LST have a direct impact while property tax will have indirect but immediate impacts due to reduced business opportunities that have negatively affected the financial ability of taxpayers. The conclusion was corroborated by findings from the survey among the senior LG officials.

**A Monte Carlo simulation of the COVID-19 impact on the local revenue collection in 2020 is presented in Figure 48.** The simulation assumes a 3-month period of strong containment measures followed by a gradual relaxation and recovery over the next 3-4 months.

**Figure 48. Level of Own Source Revenue (OSR) annual collection with COVID-19 stress added.**

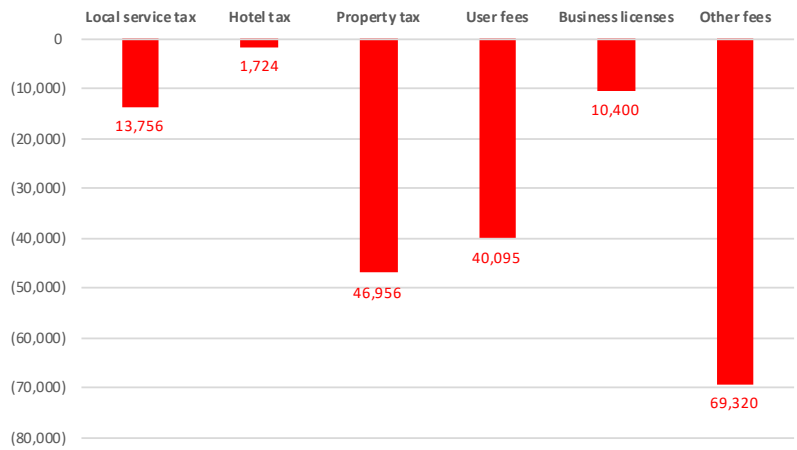



*Source: Author's computations based on the survey of select local Governments.*

**The most hard-hit sources of revenues include property tax, user fees and other fees (Figure 48).** Collectively these sources of revenues account for 82 percent of Own Source Revenue (OSR) in districts, 73 percent in municipalities and 78 percent in town councils. On average, own source revenues account approximately for 4 percent of the total budget of Local Governments, this amount however varies significantly between different regions and between different types of Local Governments: districts, municipalities, and townships. In total, Local Governments are likely to lose about UGX 180 billion. In urban Local Governments relying more on own source revenues the total fiscal space due to loss of own source revenues will shrink from 5 percent to 10 percent.

**LGs will face a drop in their own sources of revenue following the outbreak.** The result of the impact modelling of the drop in own source revenues across different categories of revenues based on the projected Local Government budget for 2020/2021 is presented in Figure 49.

**Figure 49. COVID-19 impact on Local Government own source revenues million UGX.**




*Source: Author's computations based on the UBOS Government Finance database and budget projections.*

**The category of other fees will be most affected contributing 30 percent to the overall decline in own source revenues for all LGs.** It is followed by property tax and user fees, each contributing about 20 percent. The loss of other fees will be particularly felt in districts where this source of revenue accounts for almost one half of total revenues. The drop in property tax and user fees will affect mostly urban LGs which on average rely on this source of revenue 8-10 percent more than districts.

## CENTRAL GOVERNMENT TRANSFERS

**The major service areas that are covered by LGs include: Public Sector Management (PSM), Agriculture, Health, Education, Water and Environment, and Social sector development.** The bulk of the financial support, over 80 percent in most cases, is received from the CG and goes to wages (over 70 percent of the transfers) in several LGs. Each of the above sectors is critical as PSM includes coordination services that are critical during COVID-19, while health and agriculture are vital for treatment and prevention including nutrition.

The bulk of the budget from the CG is comprised of wages that account for over 60 percent of the transfers, which is followed by non-wage recurrent that accounts for 20- 25 percent of the resources (Table 21).

**Table 21. Approved Budget percentage share for each category.**

| Category | 2013/2014 | 2014/2015 | 2015/2016 | 2016/2017 | 2017/2018 |
|---|---|---|---|---|---|
| **GoU Development** | 17.57 | 11.75 | 11.07 | 11.22 | 10.62 |
| **Non-Wage Recurrent** | 19.40 | 19.71 | 24.87 | 21.57 | 23.43 |
| **Wage Recurrent** | 63.04 | 65.87 | 60.96 | 62.93 | 62.45 |
| **Donor** | - | 2.67 | 3.10 | 4.28 | 3.50 |

*Source: MFPED. www.finance.go.ug.*

**Following the COVID-19 pandemic, the Central Government has directed the LGs to only pay salaries, pensions and use the non-wage recurrent budget for critical essential services related to the control and management of the pandemic.** It is therefore likely that the LGs will see a significant reduction on the 35 percent of their budgets from the Central Government, which is supposed to complement the wage budget for effective service delivery. In terms of allocations by sector, indicated in Table 22, the education and health account for almost 70 percent of the transfers from the Central Government, with the bulk of the budget (over 85 percent) ring-fenced for the payment of salaries.

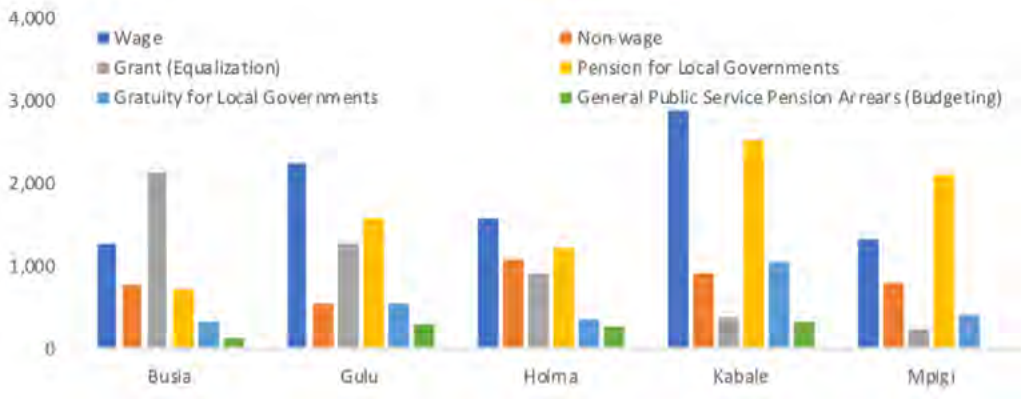
**Table 22. Sectoral allocation by percentage share based on approved budget.**

| Sector | 2013/2014 | 2014/2015 | 2015/2016 | Average for 3 years |
|---|---|---|---|---|
| **Agriculture** | 7.50 | 2.67 | 1.29 | 3.82 |
| **Works and Transport** | 1.30 | 1.11 | 1.51 | 1.31 |
| **Education** | 54.54 | 59.02 | 54.72 | 56.09 |
| **Health** | 14.93 | 13.95 | 13.52 | 14.13 |
| **Water and Environment** | 3.32 | 2.89 | 2.89 | 3.03 |
| **Social Development** | 0.36 | 0.30 | 0.30 | 0.32 |
| **Public Sector Management** | 2.52 | 2.50 | 8.08 | 4.37 |
| **District Discretionary** | 12.79 | 12.55 | 12.54 | 12.63 |
| **Urban Discretionary** | 2.56 | 4.85 | 4.99 | 4.13 |
| **District Equalization** | 0.15 | 0.13 | 0.13 | 0.14 |
| **Urban Equalization** | 0.02 | 0.03 | 0.03 | 0.03 |

*Source: MoFPED. www.finance.go.ug.*

The public sector management budget, which is crucial for coordination, supervision and monitoring of programmes as well as covering political oversight and accountability, is dominated by wages and pensions (as seen in Figure 50 for a selected sample of LGs).

**Figure 50. Decomposition of the Public sector management budget for 2016/2017 (UGX millions).**




*Source: MFPED. www.finance.go.ug.*

**The structure of the budget shows that CG is likely to continue transferring a significant portion of the budget, estimated at over 80 percent given the nature of activities that the transfers are meant to finance.** This is in line with findings from the survey whereby several LG officials indicated confidence that they expect a substantial portion of the resources from the CG to be released.

**However, the releases reduction in the non-wage recurrent budget and that in local revenues, both of which were already small components, is likely to impact service delivery greatly given its complementary role to the development and wage budgets.** Besides, this is the only budget where the LGs have some room for flexibility that would allow them to address both the unique and regular challenges posed by COVID-19. Thus, apart from the negative effects on service delivery arising from the direct effects of disruptions from the lockdown and closure of business activity, the pandemic is likely to affect service delivery through effects on the volume and composition of the budget.

## COVID-19 IMPACT ON LOCAL GOVERNMENT FISCAL SPACE

Local Government's fiscal space consists of three main components, own source revenues, intergovernmental fiscal transfers (grants) and borrowing.[76] The fiscal space of LGs displays a clear urban-rural dichotomy with rural governments (districts) being much more dependable on transfers than urban

76 Considering that the share of borrowing in local government fiscal space in Uganda is negligible, it can be ignored for the purposes of the subsequent analysis. Total fiscal space of local governments can be represented as $TFS = \sum_{i=1}^{n} OSR_i + \sum_{j=1}^{n} IGFT_j$ where $\sum_{i=1}^{n} OSR_i$ is the sum of all own source revenues and $\sum_{j=1}^{n} IGFT_j$ is the sum of all intergovernmental fiscal transfers (grants).

LGs (municipalities and towns) (Table 23). The average share of Central Government transfers in the total fiscal space of rural governments is 98 percent but drops to about 74 percent for urban LGs. This reflects a higher revenue generating potential of urban governments and their greater financial viability.

**Table 23. Composition of the local government fiscal space (percentage).**

| | Average percentage share (%) | LGs (%) | Districts Municipalities (%) | Towns (%) |
|---|---|---|---|---|
| **Transfers** | 96 | 98 | 74 | 73 |
| **OSR** | 4 | 2 | 26 | 27 |
| **Total** | 100 | 100 | 100 | 100 |

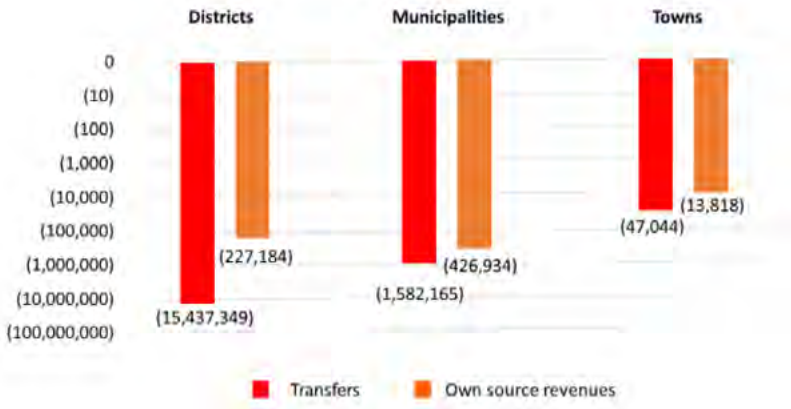
**Both components of Local Government fiscal space are dependent on the overall state of national economy.** Assuming that the Central Government intends to keep the grant share of Local Governments in the total government budget at about the same level, a change in the national GDP implies automatically a change in the Local Government grant allocation. On the other hand, own source revenues depend on how vibrant local economies are, which is closely correlated with the overall state of national economy and changes in the GDP.

**Unsurprisingly, a regression analysis of Ugandan Local Government fiscal space over a period between 2008/2009 and 2017/2018 shows a strong relationship between the GDP and transfers as well as between the GDP and own source revenue collection.** In particular, the transfer of grants is sensitive to changes in the GDP with an elasticity of 1.22. The latest IMF Regional Economic Outlook for Africa projects a drop in Ugandan GDP by 2.7 percent points, from 6.2 percent to 3.5 percent.[77] UN ECA projects an average drop of 3.1 percent points for its middle-case scenario.[78]

**The previous section has analysed the impact of COVID-19 on Local Government own source revenues based on the calibrated data.** Applying the results of the regression analysis to the projected Local Government budget for 2020/2021 allows making estimates of the effect on intergovernmental fiscal transfers. The resulting total fiscal gap for three categories of Local Governments (districts, municipalities and towns) is presented in Figure 51.

77 (IMF, 2020)
78 (UNECA, 2020)

Figure 51. Local Government fiscal gap under COVID-19 (UGX millions).




**LGs will most likely experience a significant fiscal gap.** The total fiscal gap is projected at UGX 15.7 trillion, with District Governments being most seriously affected and accounting for 88 percent of the total loss. The difference between rural and urban governments is explained by the fact that rural governments are more reliant on Central Government grants and receive about 90 percent of total annual transfers. On the other hand, urban governments will be more affected by the loss of own source revenues accounting for 66 percent of the total own source revenue decrease under COVID-19.

**The Central Government has a limited space for fiscal manoeuvre at the local level, primarily because of the structure of its transfers, 90 percent of which consist of earmarked wage and nonwage grants to the relevant sectors.** Continued release of these transfers is essential for maintaining basic services and utilities. Hence, there is a concern that the fiscal pressure may cause the Central Government to reduce the share of development grants. This would be an undesirable outcome with serious longer-term implications for local development and recovery. All efforts should be made to not only maintain the current level of development grants to local Governments but also to increase them to maintain the development fiscal space and accelerate post-COVID-19 Local Economic recovery.

## 5.5 Policy Recommendations

**INVEST MORE IN HUMAN DEVELOPMENT.** Ugandan competitiveness in the East African region largely depends on how it has built human capital. To reverse the recent trends in which Ugandan's human capital development has slowed, significant change to boost investments both in health and education is needed. Investing in E-Learning Platforms to support continuous learning in the short, medium and long run, particularly with rapid deployment in light of COVID-19 school closures, could prevent additional hits to education at all stages and overall human capital development in Uganda. On this note, investment in some other productivity capacities such as improvement of power supply and telecommunication infrastructure are also critical.

**PROACTIVELY FORECAST THE NET IMPACT ON HEALTH AND HEALTH SECTOR TO INFORM ACTION.** This means estimating morbidity and mortality that is directly linked to COVID-19 and rise in other health issues associated with a decline in health service delivery. These forecasts should be communicated to policymakers as regularly and as eminently as possible, for example using real-time data in online dashboards.

**ENHANCE SERVICE DELIVERY (WASH).** Support the respective ministries, agencies and private sector to ensure Ugandans have access to basic social services, including health, water, electricity and education services in this difficult time. Outside of the aforementioned health service delivery needs, to ensure effective delivery of services in the short and medium terms, Government should work with utility companies to reduce the burden of households in paying bills, particularly for those in the informal sector. A long-term payment scheme should be identified for households that could utilize mobile systems as advance credit for households to continue have access to basic social services. It would be useful to prioritize the most important Government agencies and ministries to provide electricity, water, etc., to benefit from e-governance platforms, and focus on increasing the resources for LGs to provide these services. This could also involve working with the private sector on innovative ways to ensure basic services to cater for the poorest and most vulnerable, for example as a public-private partnership (PPP).

**CREATE ADEQUATE FISCAL SPACE FOR LGs** to be able to implement emergency response measures, ensure continued delivery of basic services such as health, support local economies and prepare for recovery. Introducing a flexible financial mechanism to allow a timely and comprehensive response by LGs is needed to boost basic service delivery in Uganda in post-COVID-19 period. The Government has already moved in this direction by allocating operational funds to the District Task Forces. However, neither the amounts nor the type of eligible expenditures fits the challenge faced by LGs. Additional resources required for the Local Government response should come from reprioritization of central and local budgets and be supported by external resources and domestic borrowing given the current restrictions on revenues for the CG as well. Ensure that a plan is in place to maintain continuity of health services, and in the longer term, determine what is necessary in terms of funding and equipment to support UHC.

**SUPPORT LGs TO ENHANCE AND DIVERSIFY OWN REVENUE SOURCES.** The LGs should engage in preparatory activities that will enable improved revenue collections after the pandemic. These include reviewing taxpayer registers to ascertain status of payment and missing potential taxpayers and making strategies for collection after lockdown. Where possible, the LGs should establish which businesses are still operating and can pay taxes or fees and encourage them to pay the appropriate dues. There is a need to provide alternative finance to replace the local revenue lost owing to the closure of businesses and limitation of movement by people.

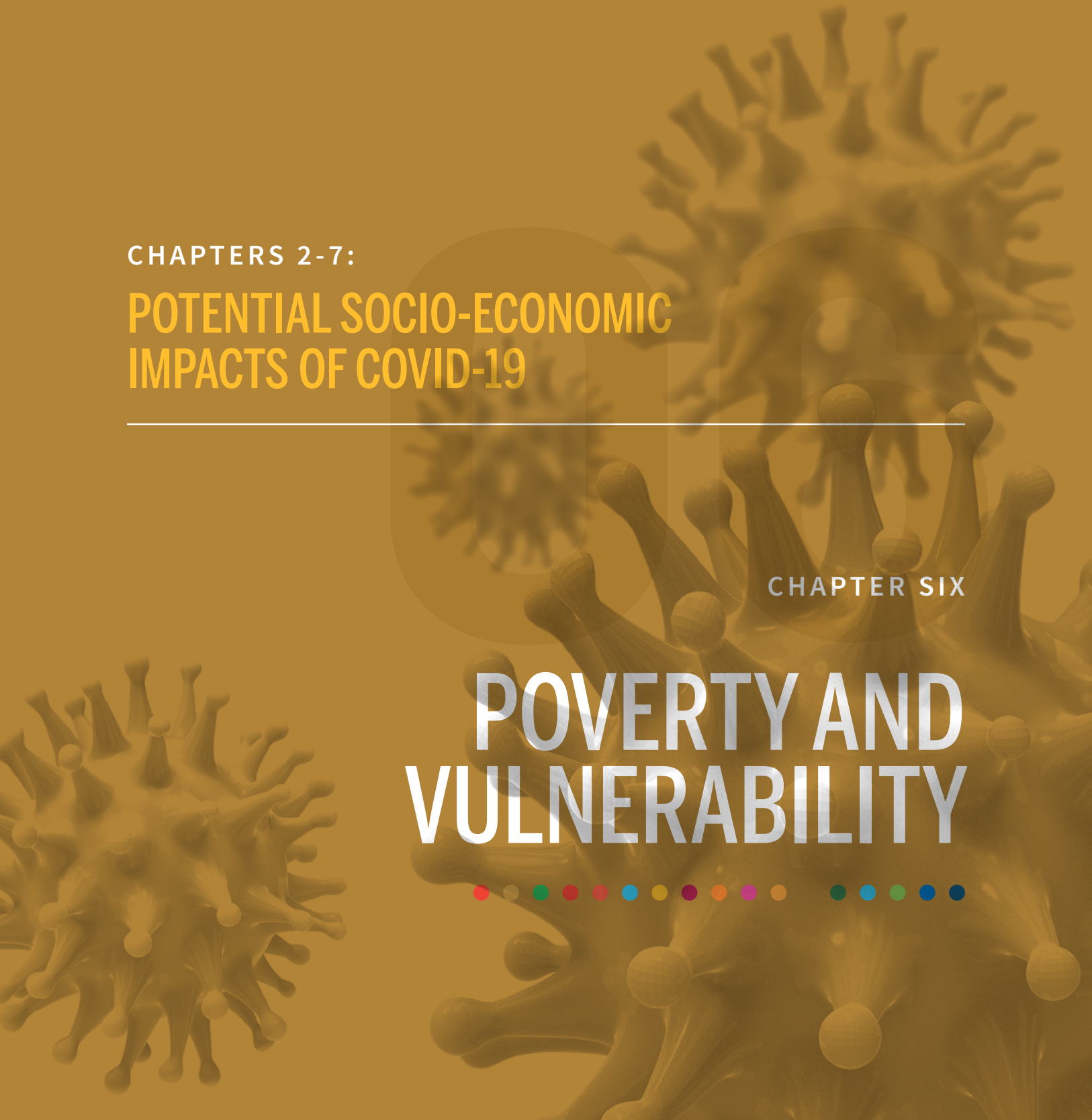
**PROMOTE E-GOVERNANCE, INCLUDING AT LOCAL GOVERNMENT LEVEL.** Government at all levels should embrace the use of new technologies that enable working from different physical locations including home and field environments. LGs staff should be supported with the required IT equipment and data to enable use of facilities such as video conferencing such as Zoom and sharing of reports through Google documents where possible and reasonable. Going forward, such new modes of operation will make staff more efficient and effective in addition to saving on the use of scarce resources. E-governance modalities and platforms for the services that can be delivered using digital channels such as delivery of permits, licenses and other documents as well as collection of certain fees and charges will enable continuous LG operations from remote locations and will reduce the need for physical contacts.

CHAPTERS 2-7:

# POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

CHAPTER SIX

# POVERTY AND VULNERABILITY



# KEY MESSAGES

The impact of COVID-19 will be different across population subgroups (for instance, age, gender, socio-economic status, household consumption, type and sector of employment, number or ratio of persons with specific needs in the household [i.e., elderly, those with disabilities, or pre-existing medical conditions such as HIV/AIDS], location, and refugee status). Some of these impacts may have immediate and lasting implications, particularly for the poorest and most vulnerable or marginalized, including refugees and Indigenous communities.

**2-8% POVERTY RATE**

National poverty rates could rise between approximately 2 and 8 percentage points depending on the scenarios under consideration.

**POVERTY AMONG INFORMAL WORKERS**

If the pandemic is not contained in the short term and the current social distancing measures remains in place, the increase in unemployment could increase the poverty rate among wage earners by 15.7 percentage point increase. The combined effect of unemployment and price could lead to a 2.2 percent increase in the poverty at national level.

**CHRONIC POVERTY**

As a result of the lockdown, and the associated loss of incomes poor are likely to stay poor and chronic poverty may be further entrenched; this trend worsens disproportionately with increased time of lockdown.

**5.2% REDUCTION OF MIDDLE CLASS**

As a result of the eight-week lockdown, it is possible that the poverty rate could increase approximately by 5.2 percent. The size of the middle class could reduce by 5.2 percent, sending many of those households into the non-poor insecure.

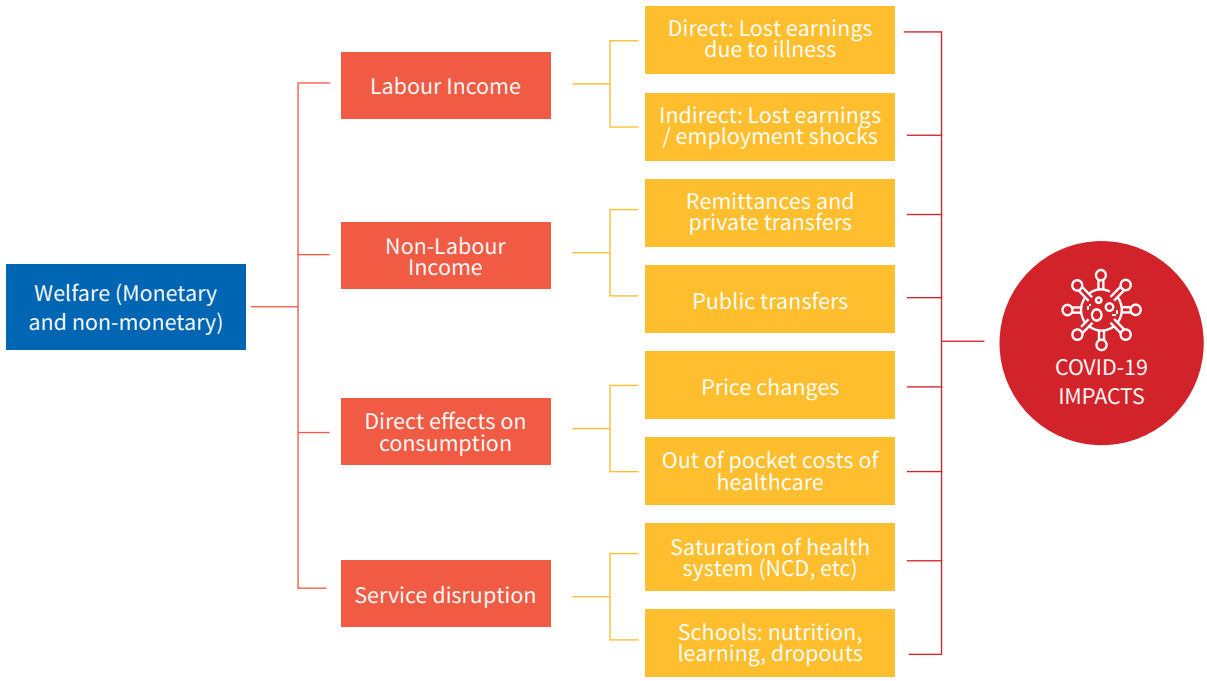
Government support which is spatially expanded to be more widespread than the initially Kampala-focused food distributions would be effective in cushioning many vulnerable Ugandans from the COVID-19 shock.

Vulnerable and marginalized groups, including refugees, will be disproportionately impacted across several critical dimensions and require additional support.

Social spending is not only protecting the lives of the most vulnerable and marginalized, but rather an investment that can provide beneficial returns to the economy. Targeted social protection programmes have significant potential to cushion the impact of COVID-19 on poverty. The informal worker programme, which would provide a one-off transfer to households whose income is derived solely from informal work, could provide the greatest cushion for the effect of COVID-19 on poverty. As a result of the program poverty rates could decline ranging from 1.8 to 2.08 percentage points from the base COVID-19 scenario.

**There will be wide-reaching impacts of the virus containment measures throughout Uganda's health systems, economy, and society, including undesirable impacts on the welfare of households outside of the direct effects of the virus itself.** Building on the impact transmission channels identified for Uganda in Chapter 1, transmission channels speficically for welfare and well-being at the household and individual levels are also presented (Figure 52).[79] These include loss of labour and non-labour income, direct effects on consumption, and service disruption.

## Figure 52. Transmission channels for COVID-19 impacts on household welfare specifically.




*Source: World Bank, 2020.*

**The impact of COVID-19 will also be different across population subgroups.** The impact by each sub-group will be dependent upon several factors such as source of income, availability of other source of income, direct effect on consumption, and service disruptions. Furthermore, the effect will be dependent on interaction of the various transmission channels. These include factors such as age, gender, socioeconomic status, household consumption, type and sector of employment, number or ratio of persons with specific needs (PSN) in the household (i.e., elderly, those with disabilities, or pre-existing medical conditions such as HIV/AIDS) and location, in addition to refugee status. For poor households, effects may also vary by access to insurance, and level of dependence on public services.

79 (WBG, 2020)

**While commendable in terms of their efforts to contain the spread of the pandemic, the containment measures could have both immediate and lasting implications for Ugandan families, particularly for the poorest and most vulnerable and marginalized.** More than 17.5 million people are enrolled in both public and private schools, currently all closed. The loss of this time in education will hit the poorest and most vulnerable the hardest, as education has been identified as a key variable in reducing vulnerability to poverty and increasing household resilience to shocks (UNDP-Uganda, 2020a). Unemployment and food insecurity could also result from loss of wages and economic activity. Further, there are well-known disparities in development throughout the country, and improvements in household income and opportunity have not been evenly distributed; these inequalities persist both by region and by consumption quintile (UNDP-Uganda, 2020a). This means that, while some regions may be hit less by the pandemic, some populations within them may be hit harder by the economic impacts of the containment measures. Historically, while Kampala and Central sub-regions have seen improvement in human development, sub-regions particularly in the East and North have been left behind (UNDP-Uganda, 2020b). There will also be disproportionate impacts on vulnerable population subgroups such as the elderly and people living with disabilities and those with HIV/AIDS, as there may be limited access to caregivers and health care facilities due not only to the public health crisis itself but also due to the lockdown measures restricting transportation. This is notwithstanding the fact that elderly and those with pre-existing medical conditions are already at a higher risk of death from the virus.[80]

**Economic shock may severely impact most, if not all, the sub-regions.** In addition, households in low consumption quintiles, including the bottom 40 percent of the population, have slower improvement as well, and these disparities are also seen across sectors of employment, poverty status, education levels, and due to household characteristics, such as having large family size. This greatly affects their ability to cope with shocks. Women of reproductive age, children, persons with disabilities, those living with HIV/AIDS, and additional vulnerable and marginalized groups are also at risk of experiencing more impactful shocks and have less ability to recover (UNDP-Uganda, 2020a). This also includes women who may be at greater risk from gender-based violence when during.

**The impacts of COVID-19 also extend to the 1.4 million refugees that account for 3.5 percent of Uganda's population of April 2020.** According to UNHCR, approximately 43 percent of these households are headed by women and children (41 percent female, 2 percent children), while roughly 11 percent of the entire population is categorized as vulnerable, consisting of persons with specific needs (disabled, elderly and other groups at risk). The situation particularly presents an unprecedented challenge for international protection of refugees resulting from the closure of borders and restriction of movements, which significantly impedes access to asylum and overall access to rights for refugees and asylum seekers. Refugees in Uganda are amongst the population groups considered to be most at risk of the socio-economic impacts of the outbreak as they occupy areas prone to shocks with limited capacities and opportunities to cope and adapt. Although all refugees are affected, the pandemic situation in the refugee settlements is expected to disproportionally impact women, children, older persons, persons with disabilities, medically at risk and other groups with specific protection needs. The risks of disruption and limited availability of essential care and support to refugees with specific needs as well as disruption of existing learning systems, social networks and support mechanisms due to social distancing and shifts in social safety nets, are likely to expose these vulnerable and marginalized groups to increased risks of rights violations.

80 Many of the impacts are also compounded. For example, loss of revenues from the loss of work in the informal sector will have an even more negative impact on the poverty rate for vulnerable and less protected subgroups.

**In the context of these potentially critical impacts on households, this chapter presents a series of analyses illustrating the potential effect of COVID-19 and mitigation measures on poverty and vulnerability.** These are developed in order to better understand the possible effects of the crisis on poverty and leaving no one behind, and in order to identify steps that the Government can take immediately in order to cushion the most vulnerable and marginalized households. The effect of the loss of on non-labour income on households through remittances is also examined in the chapter. While none of the scenarios can capture the effect of every single impact transmission channel, each analysis assesses the potential impact of specific transmission channels, thus when assessed together they provide a comprehensive understanding of the potential impact of the COVID-19 crisis on poverty rates.

**Potential impacts of COVID-19 and its containment measures could lead to rise in national poverty rates between approximately 2 percent and 8 percent (Table 24).** To assess the potential impacts of COVID-19 and its containment measures on poverty, three different types of poverty scenarios were carried out. The three types of scenarios run, and respective comparative results are given in Table 24.

**Table 24. Types of poverty analysis conducted.**

| Scenario Methodology Type | Transmission channel (Figure 52) | Key result | Summary of unmitigated national poverty increase projections (by percentage point, pp) |
|---|---|---|---|
| Regression-based | • **Earnings/Employment Shocks**<br>• **Price Changes**<br>Regression-based estimates of consumption/welfare after one-off pandemic-related household shock including price fluctuations | Estimations of potential increases in poverty, **particularly for wage earners** and informally employed | **Wage earners only:** **+15.7pp**<br><br>**National:** Due to combined unemployment and price shocks: **+2.2pp** |
| Lockdown duration analysis | • **Earnings/Employment Shocks**<br>• **Service Disruption**<br>Income loss based on type and sector of primary employment, depending on duration of lockdown for 4-week, 8-week, and 12-week lockdown scenarios | Estimations of potential increases in poverty overall nationally with lockdown temporal dimension | **National:**<br>4-week lockdown: +2.3pp<br>8-week lockdown: +5.2pp<br>12-week lockdown: +8.3pp |
| Susceptible-Infected-Recovered (SIR) modelling | • **Direct Income Loss due to Illness**<br>• **Earnings/Employment Shocks**<br>• **Service Disruption**<br>Microsimulations of impact of different cash transfer packages to alleviate the burden of COVID-19 related economic shocks on vulnerable populations | **Potential poverty mitigation** resulting from one-off emergency cash transfers to vulnerable populations in Uganda (including those targeted by social protection programmes and those not yet eligible for existing social protection programmes) | **National:**<br>Depending on different scenarios of unemployment income loss for different sectors (see Annex I), and assuming the most conservative COVID-19 basic reproduction rate: +2.7pp, +5.6pp, or 8.4pp |

# 6.1 Poverty Rates[81]

**The impact of the COVID-19 containment measures on household welfare will be strongly felt by households that depend on wages as a major source of livelihood, in both the formal and informal sector.** The baseline information in Table 25 shows that as of 2016/2017, 17 percent of wage earners were living below the poverty line. The current loss of employment and a reduction in wages during and after the lock down is expected to push more households below the poverty line.

**Table 25. Household income sources and poverty**

| Source of income | Population | Share (%) | Poverty rate (%) | No. of the Poor |
|---|---|---|---|---|
| **Crop farming (small scale)** | 17,535,693 | 46.75 | 30 | 5,218,518 |
| **Livestock farming (small scale)** | 754,122 | 2.01 | 16 | 124,133 |
| **Commercial farming** | 955,557 | 2.55 | 14 | 130,672 |
| **Wage Employment** | 8,159,418 | 21.75 | 17 | 1,391,419 |
| **Non-Agric** | 7,228,706 | 19.27 | 11 | 820,946 |
| **Property income** | 516,486 | 1.38 | 6 | 29,110 |
| **Transfers Payments** | 70,551 | 0.19 | 5 | 3,454 |
| **Remittances** | 1,941,750 | 5.18 | 12 | 241,898 |
| **Organizations** | 5,183 | 0.01 | 0 | - |
| **Others** | 344,132 | 0.92 | 21 | 72,049 |
| **Total** | **37,511,598** | **100** | **21.4** | **8,032,202** |

*Source: computations from UNHS 2016/17.*

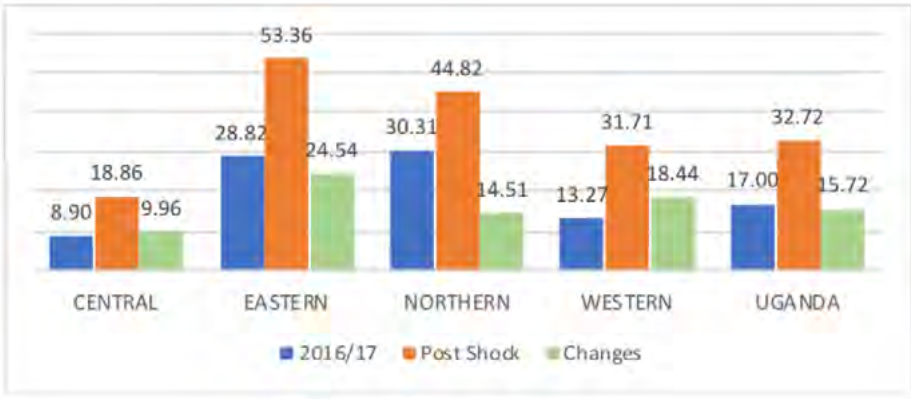
**The regression results in Annex 1 indicate that if a community is faced with unemployment as a shock, wages would fall by 28.1 percent.** Since wages are a major source of livelihood for 21.8 percent of the population, household consumption would fall, with knock-on effects on welfare.

**If the pandemic is not contained in the short term and the social distancing measures remains in place, the increase in unemployment is expected to increase the poverty rate among wage earners from 17 percent to 32.7 percent, representing a 15.7 percentage-point increase in poverty rate among households whose primary income is from wages.** This is not accounting for any mitigating effects of social protection, which will be discussed in Section 6.2. A sub-national analysis shows that the increase in poverty among wage earners shall be felt most in the Eastern and Western regions (Figure 53). The findings show that over 53.3 percent of this category Eastern Uganda could be plunged into poverty, up from 20.8 percent; in Northern Uganda, 44.8 percent, up from 30.3 percent and Western Uganda 31.7 percent up from

81 (UNICEF and EPRI, 2020; UNDP Uganda, 2020; UNCDF, 2020)

13.3 percent (Figure 53). Further examining the poverty effects specifically for this wage-earning portion of the population, the potential effects of different lockdown durations on poverty rates for the population, however, are explored in the next subsection.

**Figure 53. Poverty rate among wage earners before and after unemployment shocks (percent).**




*Source: Author's computations based on UNHS 2016/17.*
*Notes: A 28.1 percent reduction in wage was used to calibrate reduction in consumption per adult equivalent (CPAE, based on Annex I regression results).*[82]

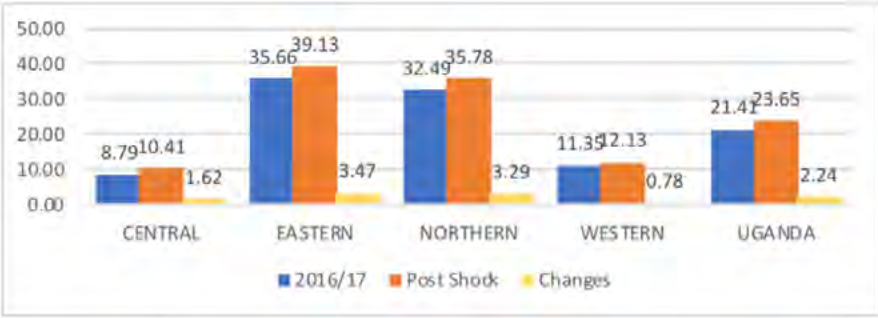
**The shocks of unemployment coupled with price fluctuations are associated with 16.5 percent and 10.4 percent reduction in welfare, respectively.** These effects mirror how social distancing measures and restriction on businesses affect households through increased unemployment and increased prices of consumer goods. There are a number of critical direct effects of the pandemic-related shocks on household welfare. Whereas high unemployment rates can lead to significant reduction in earnings among wage earners, a reduction in their income may not lead to sudden increase in poverty, if households have sufficient savings or social protection. However, COVID-19-related shocks, such as sudden increase in price of consumer goods, unemployment, and the likely food shortage due to the lockdown will reduce consumption and adversely affect household welfare.

**A reduction in welfare due to COVID-19 associated shocks can push more households into poverty.** If this percentage reduction of welfare due to unemployment and price shocks is applied, both the national and regional poverty rates would increase (Figure 54). Annex I provides further detail on the effect of unemployment only and price changes only, as two separate shocks.

**The combined effect of unemployment and price changes will lead to a 26.9 percent decrease in consumption, corresponding to a 2.2 percentage-point increase in poverty.** Regionally, the increase in poverty due to the combined effect of unemployment and price shock is more evident in the Eastern and Northern regions (Figure 43), with the national rate at 23.6 percent up from 21.4 percent, Eastern region, 39.1 percent up from 35.7 percent and Northern Uganda at 35.8 percent, up from 32.5 percent.

82 If the adjusted CPAE after unemployment shock is less than the national poverty line, then a household is considered to be poor. Poverty rates are then computed for wage earners to obtain post shock poverty rate. The increase in poverty rate is computed as the difference between post shock poverty rate and the 2016/2017 poverty rate amongst wage earners. A 95 percent confidence interval can be computed to show the expected lower and upper bounds of the effects.

**Figure 54. Increases in poverty rate for full sample resulting from combined unemployment and price shocks.**




*Source: Authors' computations based on UNHS 2016/17.*

## TEMPORAL EFFECT OF LOCKDOWN DURATION ON POVERTY RATES

This report focuses on the effects around thresholds, considering the movement of households between three categories: poor, non-poor but insecure, and non-poor, as identified in the Poverty Status Report 2014, using the UNHS 2016/2017. As in the previous section, poor households are categorized using the standard UNHS poverty line, which is revalued to 2009/2010 prices using the CPI and compared with the adjusted household consumption data for comparability across survey waves. This headcount poverty rate for the overall sample, beyond wage earners only, was UNHS 2016/2017 was 21.4 percent (Table 26). Non-poor but insecure households are those who have a consumption expenditure of less than double the poverty line. Non-poor households have a consumption expenditure per adult equivalent that is over double the poverty line. The categorizations are used to emphasise that while a household may not currently be below the poverty line, and therefore not considered "poor," those households (particularly those categorized as non-poor insecure) may be just above the poverty line and have characteristics that make them more vulnerable to falling into poverty in the future.[83]

**Table 26. Poverty categorizations used in analysis and their frequencies in UNHS 2016/2017.**

| *Poverty Status Category* | Population | Freq. | Cum. |
|---|---|---|---|
| *Poor* | 8,032,202 | 21.42 | 21.42 |
| *Non-poor but insecure* | 15,347,787 | 40.93 | 62.35 |
| *Non-poor* | 14,118,784 | 37.65 | 100.00 |
| ***Total*** | **37,498,773** | **100.00** | |

*Poverty rate and "non-poor but insecure" rates are based on UBoS-calculated survey weights.*
*Data source: UNHS 2016/17.*

83 (UNDP Uganda, 2020)

**The scenarios[84] for this rapid assessment included situations where** (i) households lost income based on the duration of lockdown, starting with four week lockdown then extended to eight and 12 weeks, following international and regional trends; (ii) income loss was based on the type of employment and sector in which households primarily work; (iii) households lost income based on the duration of lockdown but household consumption needs were reduced by food support from the Government distributions to Kampala and Wakiso (Table 27).[85]

**Identifying the impact on different types and sectors of employment was done in two parts.** First, type of employment was used to take into account more formal and informal types of work, considering that those in more formal employment may not experience as much impact even working in the same sector as those who are informally employed in that sector. For example, those who are self-employed may experience more impact than those who are paid employees, even working in the same sector. Therefore, those in the category "Paid employee (not casual labourer in agric.)," illustrated in Annex I Tables 3 and 4, are identified for income loss separately from self-employed. Impact on sectors is based on COVID-19 impact classifications from ILO (2020). Sectors which lost the most income during the lockdown period include manufacturing, trade, accommodation and food service, real estate activities, and administrative and support service (Annex I Tables 3 and 4).

**Importantly, there are a number of critical limitations to this component of analysis.** The scenarios are very coarse and are intended to paint a broad and general picture of potential effects of various lockdown durations on households resulting from the COVID-19 crisis. It is important to also note that this methodology is static and hence does not consider the dynamic transmission channels and the overall changes in the economy that could impact poverty dynamics. Therefore, these findings should be taken only to show direction of emerging trends and not be taken as precise measures of the impact of COVID-19 on poverty. The findings can be compared with those of the regression approach for wage earners in Table 24.

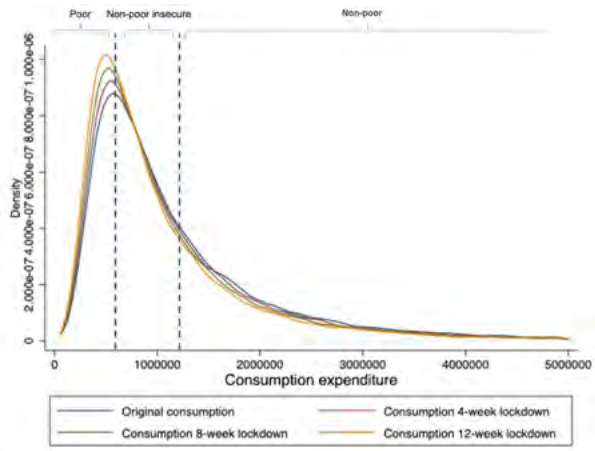
84 These are referred to as "scenarios" but are in-fact more "time-bound analysis."
85 (Daily Monitor, 2020)

**Table 27. Scenarios and assumptions used for analysis.**

| | Lockdown Duration[86] | Percentage of annual income lost[87] (by primary income source) | Government essential needs support[88] |
|---|---|---|---|
| **Scenario 1** | 30 March-30 April<br>Duration = 4 weeks | See Annex I Tables 3 and 4 | Targeted to households in Kampala<br>Sub-scenario: Targeted nationally |
| **Scenario 2** | 30 March-30 May<br>Duration = 8 weeks | See Annex I Tables 3 and 4 | Targeted to households in Kampala<br>Sub-scenario: Targeted nationally |
| **Scenario 3** | 30 March-30 June<br>Duration = 12 weeks | See Annex I Tables 3 and 4 | Targeted to households in Kampala<br>Sub-scenario: Targeted nationally |

**As a result of the lockdown, and the associated loss of incomes, poor are likely to stay poor and chronic poverty may be further entrenched; this trend worsens disproportionately with increased time of lockdown.** However, new households that were previously above the poverty line, in "non-poor insecure," may move into poverty, and some who were previously non-poor may move into income insecurity. The findings of the four-week lockdown duration scenario are available in Annex I. This section presents the findings of the eight-week lockdown and 12-week lockdown duration scenarios. Figure 55 illustrates how, with no government support, the number ("density" essentially meaning frequency) of households below the poverty line[89] increases with the duration of the lockdown and subsequent loss of incomes.

**Figure 55. Kernel density estimate showing the distribution of consumption in UNHS relative to lockdown scenarios, cutting off outliers at UGX 5,000,000. Scenario 2 was also extended to illustrate the effect of a 12-week lockdown.**




*Data source: UNHS 2016/17.*

86 Lock down duration assumption is calculated from the annual consumption expenditure of the household assuming that it is equally divided by the 52-week period.

87 Approximately 17.9 percent of households in UNHS 2016/2017 are paid employees (and are not casual labour in agriculture). It is true that some percentages of these have more formal employment contracts and will continue to be paid, and therefore households will not experience income loss. However, in the absence of concrete data on formally contracted employees, the analysis assumes that all experience income loss.

88 Roughly assuming that food expenditure is 75 percent of household income, and Government food distribution cushions households by reducing these food needs by 30 percent, it is assumed that Government support reduces household expenditure needs by 45 percent. It is further assumed that the wealthiest households (top 20 percent of consumption expenditure) will not receive these food distributions or other income support benefits.

89 Uganda uses a spatially variant poverty line, meaning that different regions and urban/rural areas in the country have different poverty lines depending on the living conditions and food prices. Here the visualization uses the Kampala poverty line.

### SCENARIO 2: EIGHT-WEEK LOCKDOWN

**As a result of the eight-week lockdown, it is possible that the poverty rate could increase approximately 5.2 percentage points, meaning that 1,948,279 Ugandans could fall into poverty (Tables 28 and 29).** This is more than double the additional poor Ugandans following a four-week lockdown, which could cause an increase in poverty rate by 2.3 percentage points, indicating that as the duration of the lockdown extends, the possible household-level economic impacts become worse. Further, while there were no non-poor that became poor, there was a significant impact in terms of non-poor becoming insecure and insecure becoming poor. However, with Government support for essential needs, particularly support that is more widespread than only the initially-targeted districts of Kampala and Wakiso, this could be cut down to an increase of approximately 0.72 percentage points (Table 28).[90] If Government support is only to Kampala and Wakiso, the reduction in increased poverty rate is marginal, only 0.03 percentage points lower than the no-support scenario. While the more widespread Government support will not entirely alleviate the shock for households, it will reduce the numbers pushed into poverty.

**Table 28. Results of Scenario 2 analysis.**

| Poverty Category | Base Population | Freq. | 8-Week Lockdown Population | Freq. | GoU support Kampala Population | Freq. | GoU support all Population | Freq. |
|---|---|---|---|---|---|---|---|---|
| *Poor* | 8,032,202 | 21.42 | 9,980,481 | 26.62 | 9,969,137 | 26.59 | 8,304,096 | 22.14 |
| *Non-poor insecure* | 15,347,787 | 40.93 | 15,355,587 | 40.95 | 15,310,529 | 40.83 | 15,598,998 | 41.60 |
| *Non-poor* | 14,118,784 | 37.65 | 12,162,704 | 32.43 | 12,219,106 | 32.59 | 13,595,679 | 36.26 |
| ***Total*** | **37,498,773** | **100.00** | **37,498,773** | **100.00** | **37,498,773** | **100.00** | **37,498,773** | **100.00** |

*Data source: Author's calculations from UNHS 2016/2017.*

90 This is also an improvement to the 4-week lockdown situation, possibly due to the longer duration of support which has been calculated as the same proportion for each recipient household regardless of sector of employment, a relationship that could be explored further in future studies.

**Table 29. Movement from base poverty status to new poverty status following eight-week lockdown scenario; overall percentages of movement presented below.**

| Base category | Poor after 8-week lockdown | Non-poor insecure after 8-week lockdown | Non-poor after 8-week lockdown | Total |
|---|---|---|---|---|
| *Poor* | 8,032,202 | 0 | 0 | 8,032,202 |
| *%* | 100.00 | 0.00 | 0.00 | 100.00 |
| *Non-poor insecure* | 1,948,279 | 13,399,508 | 0 | 15,347,787 |
| *%* | 12.69 | 87.31 | 0.00 | 100.00 |
| *Non-poor* | 0 | 1,956,080 | 12,162,704 | 14,118,784 |
| *%* | 0.00 | 13.85 | 86.15 | 100.00 |
| ***Total*** | **9,980,481** | **15,355,587** | **12,162,704** | **37,498,773** |
| **%** | **26.62** | **40.95** | **32.43** | **100.00** |

*Data source: Author's calculations from UNHS 2016/17.*

**Even though Kampala and Entebbe are hotspots for the actual cases of COVID-19, the lockdown and halting of economic activity effects all corners of the country.** Hence, the primary worsening of poverty status is coming from areas outside of Kampala, as evidenced in Table 30. This is especially true of agricultural households that are on the threshold of insecurity or poverty, that lack the resilience to prevent a multi-faceted shock such as COVID-19 lockdown from pushing their household over the edge of insecurity or poverty.

**The highest proportion of insecure that became poor as a result of the 8-week lockdown are in East rural, at 33.2 percent, followed by North rural and West rural.** For the non-poor that became insecure due to the 8-week lockdown, a higher proportion is concentrated in Central rural and West rural, which also explains why the Government support to Kampala and Wakiso marginally reduces the number of non-poor that become insecure but not those who are insecure and become poor. While households engaged in sectors such as trade, including retail, hospitality, and manufacturing are very hard hit by this crisis, there are also many rural agricultural households on the threshold that cannot be left behind.

**Table 30. Worsening in poverty status as a result of eight-week lockdown, by region and urban/rural.**

| Region | Non-poor became insecure | Insecure became poor | Total |
|---|---|---|---|
| **Central rural** | 390,585 | 245,785 | **5,524,714** |
| **%** | 19.97 | 12.62 | **14.73** |
| **Central urban** | 334,332 | 94,305 | **4,783,156** |
| **%** | 17.09 | 4.84 | **12.76** |
| **East rural** | 229,599 | 646,170 | **8,501,132** |
| **%** | 11.74 | 33.17 | **22.67** |
| **East urban** | 52,195 | 63,081 | **1,310,639** |
| **%** | 2.67 | 3.24 | **3.50** |
| **North rural** | 268,550 | 428,562 | **6,604,132** |
| **%** | 13.73 | 22.00 | **17.61** |
| **North urban** | 84,558 | 49,245 | **1,212,695** |
| **%** | 4.32 | 2.53 | **3.23** |
| **West rural** | 462,088 | 351,380 | **7,748,920** |
| **%** | 23.62 | 18.04 | **20.66** |
| **West urban** | 134,172 | 69,751 | **1,813,384** |
| **%** | 6.86 | 3.58 | **4.84** |
| **Total** | **1,956,080** | **1,948,279** | **37,498,773** |
| **%** | **100.00** | **100.00** | **100.00** |

*Data source: Author's calculations from UNHS 2016/2017.*

**The eight-week lockdown reduces the size of the middle class by 5.2 percentage points, sending many of those households into the non-poor insecure.** It is also important to note the effect of the lockdown on the middle class, or the non-poor. Middle class households, those with consumption expenditure over double the poverty line, are not always secure in times of shock (UNDP-Uganda, 2020a). It is also clear that the worsening poverty status of rural insecure households as a result of the lockdown and halting of economic activity needs to be addressed (Tables 29 and 30). With a longer lockdown, more of the non-poor movement to insecure is increasingly coming from Central rural and Central urban, but the longer duration of lockdown also continues to worsen the situation of East and North rural households. Indeed, if the lockdown is further extended from eight weeks to 12, the poverty rate may increase by approximately 8.3 percentage points (3.1 million) (Table 31). With the trends presented between the four- week scenario and eight-week scenario, this will have negative consequences for urban and rural households alike, across the country. This presents further evidence to support increased, nationwide support to households.

**Table 31. Results of an extended Scenario 2 analysis, showing the effect of a 12-week lockdown on poverty status.**

| Poverty Category | Base Population | Freq. | 12-Week Lockdown Population | Freq. |
|---|---|---|---|---|
| Poor | 8,032,202 | 21.42 | 11,162,006 | 29.77 |
| Non-poor insecure | 15,347,787 | 40.93 | 15,069,539 | 40.19 |
| Non-poor | 14,118,784 | 37.65 | 11,267,228 | 30.05 |
| **Total** | **37,498,773** | **100.00** | **37,498,773** | **100.00** |

*Data source: Author's calculations from UNHS 2016/2017.*

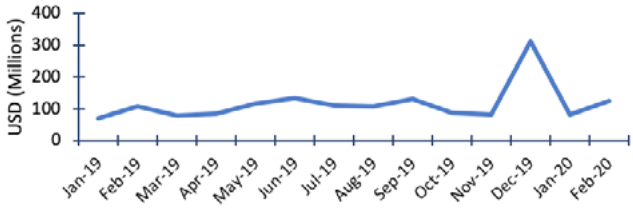
**Of course, there are several critical factors and limitations to consider when assessing these results.** The duration of the COVID-19 crisis and the containment measures taken is clearly important in the outcome, as it affects the severity of shock that households experience. However, households will experience this shock in different ways which are difficult to quantify. These scenarios attempted to provide an initial attempt to differentiate, for example, the effect on households that are employed in different ways and in different sectors. While a household head that is informally employed in the trade sector may lose 100 percent of their income for the duration of the lockdown, someone formally employed in the same sector may continue to be paid despite the measures, or only lose some smaller percentage of their anticipated income for the period. Further, many Ugandans involved in tourism and hospitality might be furloughed, placed on leave without pay, or lose employment outright, but may have the opportunity to quickly regain those jobs following the crisis and lifting of containment measures. The rate of return (immediate or gradual) to business as usual following the crisis will greatly shape the outcomes. It is therefore difficult to develop generalized scenarios and to assess the medium-term poverty implications in Uganda. Next, there are many vulnerable and marginalized groups that will be disproportionately negatively impacted by the COVID-19 crisis and which are at risk of being left behind, which include women and children (including women of reproductive age), people who are disabled or chronically ill, elderly, and others. These scenarios focus on vulnerable poor and insecure, those employed in vulnerable sectors or who are informally employed, and spatial inequalities, but cannot capture the negative impacts on all vulnerable groups.

**Government support that is more widespread than the initially Kampala-focused food distributions and other Government support is effective and could be cushioned from a major shock.** As the effects of the containment measures such as the lockdown are felt throughout the country, it is less effective to only target economic and food support to the areas that have reported the most confirmed cases such as Kampala. However, if there is hesitation to expand food distribution and other support nationwide, other coronavirus-hit areas could be the first to receive additional government support, such as Hoima.

## IMPACT OF REDUCTION OF REMITTANCES ON POVERTY AND HOUSEHOLD CONSUMPTION

**Remittances are an important source of household income, especially for the poorest households in Uganda.** Remittances contributing about 10 percent of total income for the poorest rural and urban households (Table 32; Figure 56). Therefore, a shock such as COVID-19 that reduces migrant remittances is likely to affect household consumption (especially for the poorest) and savings decisions and have an impact on output, growth and household income distribution.

**Figure 56. Workers Remittances.**




*Source: Bank of Uganda Personal Transfers data*

**The analysis of the economy-wide effects of a reduction in remittances is performed using the Social Accounting Matrix (SAM) multiplier model.** The anticipated short-term nature of the COVID-19 shock and the likelihood that the economy will return to a "business-as-usual" state once the crisis dissipates makes the SAM multiplier framework a more appropriate tool for analysing this particular shock.[91,92] Here, the SAM multiplier decomposition is presented for the economy-wide effects of two scenarios: 1) a less pessimistic case where remittances reduce by 8 percent; and ii) a moderately more pessimistic case where remittances reduce by 10 percent using the 2009/2010 Uganda SAM.[93] Although these reductions in remittances are relatively smaller than the potential loss of remittances discussed in Chapter 2, this provides an initial rapid estimate of the effects of loss of remittances on households; results are presented in terms of impacts on household incomes. The reduction in average income/expenditure per capita for the first three quintiles is shown in Table 32.

**Under Scenario 1, the reduction in average income ranges from about UGX 25,000 to UGX 64,000 per person per month for rural households while it ranges from about UGX 209,000 to UGX 293,000 per person per month for urban households.** A similar pattern is observed under Scenario 2 without significant differences between the two scenarios. Estimates from the recent 2016/2017 Social Accounting Matrix for Uganda, though not disaggregated by quintiles, also portray remittances as a vital source of income, particularly for rural households (Table 32).[94]

91 (Breisinger, Thomas, and Thurlow, 2009)

92 The analysis presented is only a short-run analysis, which in the context of the SAM multiplier analysis, assumes that technical input-output relationships, the output choices of producers, and the consumption patterns of households do not change in response to the simulated shock. Such behavioral responses are captured in computable general equilibrium models. However, following similar analysis done for other countries like Egypt, it is assumed that the shock of the COVID-19 will be a short-term nature, making the Ugandan economy and other economies return to normal once the crisis dissipates. Based on this assumption, the SAM multiplier framework is an appropriate tool for analyzing this particular shock.

93 MoFPED has utilized the SAM from 2016/2017 for a study developed with WFP and released in February 2020.For the analysis presented in this report, the 2009/2010 Uganda SAM was used for two reasons: 1) households are disaggregated by rural/urban as well as quintiles, enabling assessment of the impact on the poorest. In assessing the COVID-19 shock on remittances, authors were cognizant of the fact that the biggest recipients of remittances are the poorest households, that is, households in the bottom 40 percent. Therefore, a SAM that disaggregates by income quintiles was necessary. For this reason, the 2009/2010 Uganda SAM, which already had the required disaggregated households was used. Next, 2) the 2016/2017 SAM is not yet officially released by MoFPED at the time of this report. However, we also used the 2016/2017 SAM to check whether there have been significant changes in the share of remittances to total household incomes. Results (Tables 32 and 33) indicate that there is little difference, meaning that findings based on the 2009/2010 SAM can still hold even if it is a relatively old SAM.

94 Tables 32 and 33 provide background to show different sources of income. They were also used to ensure that income structure has not changed that much between the 2009/2010 SAM and the 2016/2017 SAM which has not been officially released. Therefore, only the SAM 2009/2010 was used to generate both macro and micro estimates.

### Table 32: Share of Total Household income by source, using 2009/2010. By percent (%).

| Household category | Labour | Capital | Land | Government transfer | Remittances | Total |
|---|---|---|---|---|---|---|
| **Rural-q1** | 18.6 | 41.5 | 29.5 | 0.4 | 10.0 | 100 |
| **Rural-q2** | 16.6 | 49.7 | 26.3 | 1.1 | 6.4 | 100 |
| **Rural -q3** | 13.1 | 58.9 | 20.1 | 2.2 | 5.8 | 100 |
| **Rural -q4** | 16.6 | 49.1 | 22.5 | 4.3 | 7.5 | 100 |
| **Rural -q5** | 14.0 | 59.8 | 10.9 | 12.1 | 3.1 | 100 |
| **Urban-q1** | 16.4 | 59.3 | 11.9 | 3.5 | 8.9 | 100 |
| **Urban-q2** | 14.9 | 61.2 | 14.8 | 2.8 | 6.3 | 100 |
| **Urban-q3** | 22.8 | 61.7 | 6.9 | 1.4 | 7.2 | 100 |
| **Urban-q4** | 18.8 | 66.4 | 5.6 | 5.6 | 3.6 | 100 |
| **Urban-q5** | 35.7 | 43.6 | 3.9 | 10.1 | 6.8 | 100 |

*Source: Authors' calculations using the 2009/2010 Uganda Social Accounting Matrix.*
*Note: Households are classified by rural/urban and quintiles (q1-q5)*

### Table 33. Share of Total Household income by source, 2016/2017. By percent.

| Labour | Capital | Government transfers | Remittances | Total | |
|---|---|---|---|---|---|
| **Central rural** | 25.8 | 65.9 | 1.4 | 6.9 | 100 |
| **Central urban** | 50.4 | 44 | 1.2 | 4.4 | 100 |
| **East rural** | 24.8 | 61.5 | 4.6 | 9.2 | 100 |
| **East urban** | 39.3 | 45.3 | 11.2 | 4.2 | 100 |
| **Northern rural** | 31 | 59.2 | 4.6 | 5.3 | 100 |
| **Northern urban** | 34.3 | 50.8 | 7.5 | 7.4 | 100 |
| **West rural** | 21 | 73.8 | 1.9 | 3.4 | 100 |
| **West urban** | 30.6 | 65.7 | 0.9 | 2.9 | 100 |

*Source: Calculations using the 2016/2017 Uganda Social Accounting Matrix.*
*Note: Households are not classified by quintiles but instead by region (Central, East, North, West) and rural/urban.*

**Table 34. Reduction in Average income/expenditure per capita, by household quintiles.**

| | 8% reduction in Remittances | | 10% reduction in Remittances | |
|---|---|---|---|---|
| | Rural | Urban | Rural | Urban |
| Quintile1 | 25,902 | 208,919 | 25,809 | 208,238 |
| Quintile 2 | 45,684 | 206,138 | 45,553 | 205,560 |
| Quintile3 | 64,228 | 293,235 | 64,052 | 292,364 |

*Source: Calculations using the 2009 Uganda SAM.*

**The reduction in remittances associated with COVID-19 will disproportionately affect the poorest households in both rural and urban areas in Uganda.** Many of these remittance recipients do not have any form of social protection or formal safety nets, so are unable to fill any gap in income arising from a decline in remittances received.[95] This is especially true due to Uganda's limited social protection and social care support. Without social protection and safety nets, these households' welfare is likely to deteriorate. On this note, the next section provides additional poverty estimates based on SIR modelling in addition to the microsimulations assessing the potential effectiveness of various social protection packages for mitigating the poverty impacts of COVID-19.

## IMPACTS ON INCOME AND OTHER DIMENSIONS FOR REFUGEES IN UGANDA

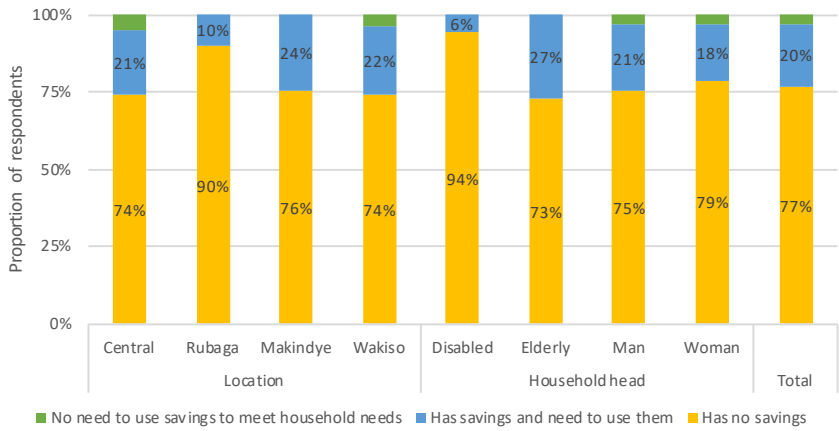
**Uganda has a large refugee population of 1.4 million, many of whom are in the 33 settlements across 12 districts in Uganda.** While this population is not necessarily accounted for in the analysis of effects on poverty rates, this is nonetheless a large and highly vulnerable population in Uganda with impacts that will occur across multiple dimensions. Although all refugees are affected by the COVID-19 crisis, the pandemic situation in the refugee settlements is expected to disproportionally impact women, children, older persons, persons with disabilities, medically at risk and other groups with specific protection needs. In this section we present the impacts on refugees in terms of food insecurity, gender, child protection, education, water sanitation and hygiene (WASH), and public health. First, income loss and food security are particularly identified as a major challenge having a higher impact on the vulnerable groups including refugees. Most refugees living in Kampala depend on informal jobs. Due to the COVID-19 restrictions, most of them have lost their jobs and with limited aid are at risk of destitution, currently manifested by an increased inability to pay their rent, access food, health care and other basic services. In order to inform a possible food assistance response to Kampala-based refugees, a rapid food security and essential needs assessment was conducted between 23-27 April. Data was collected using the administration, via phone call, of a structured questionnaire to 212 refugees registered in Kampala.[96]

95 Loss of remittances will affect all aspects of household well-being and given that remittances can help achieve Sustainable Development Goals (SDGs) related to poverty, economic growth, and others, their absence will hinder development.

96 (WFP, 2020)

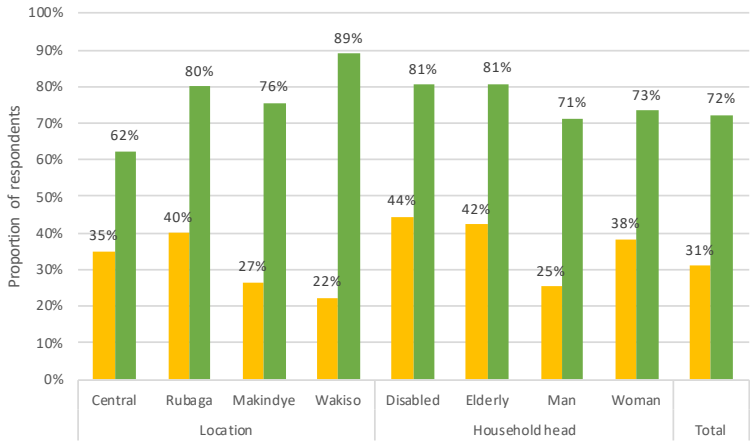
**The economic capacity of refugee households was found to have been severely impacted by the pandemic and the containment measures.** According to 87 percent of respondents there was a major negative impact on their livelihoods. Almost all Kampala-based refugees experienced some level of income loss, and about half of the sampled population lost over 75 percent of household income. The proportion of households without an income earner increased from 31 percent before the crisis to 72 percent at the time of the survey (Figures 57 and 58).

**Figure 57. Proportion of refugee households using savings as a coping strategy.**




*Source: WFP, 2020*

**Figure 58. Increases in proportion of refugee households with no income earners.**




*Source: WFP, 2020*

**Across many of the economic indicators, refugee households headed by a woman, a disabled person or an elderly person were more severely affected.** While food prices in Kampala were not collected as part of this study, food prices in the refugee settlements saw an increase in the January to April 2020 period and Kampala-based refugees reported being most concerned about a shortage of food in the market and increasing food prices. Indicating a limited ability to cope with the shocks, only 23 percent of respondents reported having savings to draw on; 14 percent had assets they could sell to meet essential needs; 10 percent had received some form of food assistance in the last month; and 57 percent of the respondents reported spending less on food than the price of the survival food minimum expenditure basket (MEB), indicating a widespread inability to meet basic food needs and other essential needs.

**In the rural areas refugees rely on livelihood activities in the settlements to complement the general food assistance provided through WFP.** With the COVID-19 restrictions on movement such as closing of small businesses and the general disruption on livelihood activities, the food security of refugees is expected to worsen. For instance, some of the refugee heads of families were cut off from their various settlements and have no access to their monthly WFP rations, while others who had small-businesses or employed in the informal sector can no longer move around the settlement to earn an income. In addition, due to lack of inputs and supply chain disruption an estimated 75 percent of refugees who are engaged in small-scale agriculture will not plant any crop in the first season of 2020. This coupled with low production and productivity, high vulnerability to climate change and post-harvest losses, will expose refugees to increased food insecurity. Additionally, women, and youth will be most affected due to their inability to access, control and own assets and resources (including land, tools, equipment) and services. Moreover, this loss of livelihoods especially for women, is likely to lead to increase in negative coping mechanisms including; skipping meals, eating once a day, engaging in survival sex and transactional sex to earn some money. Coincidentally, the pandemic hit at a time when WFP is reducing refugee lifesaving food assistance rations from 100 percent to 70 and anticipated to further reduce to 50 percent. This anticipated increase in household food insecurity is also expected to aggravate both acute and chronic malnutrition.

**In addition to the impacts on income and food security for refugee households, which are closely linked, there are also other impacts such as on child protection, additional gender implications, education, Water, Sanitation, and Hygiene (WASH), and public health. These impacts are highlighted below:**

**CHILD PROTECTION IMPLICATIONS FOR REFUGEES:** containment restrictions imply a significant impact on the rights and protection of refugee and host community children regarding their right to play, leisure and development, education, care as well as access to child protection. Due to the movement restrictions and the reduced access of UNHCR partner and governmental services - identification, monitoring and management of child protection risks has been significantly reduced, expected to result in increased separation, neglect, psychological distress, exploitation and violence against children. For example, the country-wide lock down has led to cases of separation of children from their parents /caregivers who have been unable to return to the settlement and family reunification procedures have been put on hold. There is a heightened risk of violence, abuse and neglect by parents or caregivers due to constrained resources, and lack of alternative care arrangements due to disruption of traditional care arrangements through grandparents or other family members caused by the fear of or likelihood of disease transmission.

In case of a large-scale COVID-19 outbreak and considering available health services, children might also face longer-term separation from parents or being left without care due to parents being placed in quarantine or in the unfortunate case of the death of the parents. Also, parents face aggravated challenges in providing for their families and children may resort to day-to-day work to support their families. Birth registration services for children will also be delayed with longer-term negative impact on the child's right to acquire nationality. This requires close follow up to ensure parental awareness and means to register children born during the COVID19 outbreak. The limited capacities in the health and social services sector, as well as the drastic reduction in services and limited outreach to the affected population will significantly aggravate existing child protection concerns and result in high number of children in need of protection services.

**GENDER DIMENSION FOR REFUGEES:** Notably, 82 percent of the refugee population are women and girls. Gender analysis demonstrates the existence of already deeply rooted discriminatory gender norms in refugee communities and conclude that women suffer entrenched inequality in all spheres of life, while men's worth is largely based on the capacity to provide for and protect his family. The COVID-19 restrictions are expected to further threaten men's roles as "providers" causing frustration and exacerbating tensions. This could in turn lead to economic violence against women and girls, such as the denial of resources or services and social exclusion, negatively impacting the economic empowerment of women. It also puts women and girls at heightened risk of Sexual and Gender Based Violence (SGBV) particularly intimate partner violence, psychological violence and other forms of domestic violence.

Emerging evidence suggests that COVID-19 will further exacerbate existing gender inequalities, which are already acute, and has the potential to diminish progress made on gender equality and women's (economic) empowerment. Among the refugee population, women and girls are more likely to live in poor households. Women also seem to disproportionally work in the informal sector, making them more vulnerable to the economic impacts of the COVID-19 measures. The negative economic impacts may increase the likelihood of survival sex, transactional sex and risks of sexual exploitation and abuse. School closures and a reduction in health services (for instance SRPH services) is also likely to affect women more than men; and there are valid concerns that the drop-out rates of girls will increase significantly, as many girls may not return to school due to SGBV or lack of funds.

**IMPACTS ON REFUGEE EDUCATION:** With the closure of schools and learning institutions at all levels in Uganda, Ministry of Education and Sports, in coordination with UN and NGO partners, has put in place a Preparedness and Response Plan for COVID-19. This plan aims to ensure continuity of learning at home whilst addressing challenges affecting teachers, students, caregivers and parents resulting from school closures, such as children's right to play, leisure and development, child labour and exploitation. UNHCR and partners are exploring several distant and remote learning options to enable children continue self-paced learning from home by supporting and making linkages with Government-led ongoing learning programmes through radio, home self-learning packages, TV and digital Ed tech solutions. The situation is evolving rapidly and likely to have significant impacts on the delivery of education programmes for refugees and host community children and youth.

**WASH:** The pandemic has increased demand for water for hygiene activities resulting in an increase in pumping hours for the 167 water schemes in the 33 settlements translating in additional fuel costs, increase frequency of repairs and servicing of schemes and recruitment of additional water technicians and pump attendants. The hygiene activities have also resulted in doubling of soap for distribution and other hand washing and hygiene supplies coupled with the scaling up of hygiene promotion and COVID-19 related Behaviour Change Communication (BCC) activities in all the refugee settlements. Following the COVID-19 measures restricting movement and promoting social distancing, coupled with the ongoing integrated WASH campaigns at the settlements, it is anticipated that the large-scale adoption of positive hygiene and behaviour change may translate into reduced disease burden particularly in the reduction of water borne such as diarrheal diseases. On the flipside, sanitation services have been deprioritized in favour of scaling up water supply, hand washing supplies and related infrastructure. The pandemic has also been concurrent with heavy and sustained rainfall which introduces other risks such as proliferation of mosquito breeding and collapsing of simple family latrines. Resources meant to counter seasonal cyclic risks are diverted to direct COVID-19 response heightening malaria and diarrhoea diseases risks. Momentum towards inclusion and long-term sustainability of WASH services from an institutional and community participation perspective has stalled re-introducing emergency relief mode. This has rolled the sector back several months if not years and regaining traction will indeed be a slow and painstaking process as the attendant economic downturn will weigh in on perceptions and viability of timelines.

**PUBLIC HEALTH IMPACTS FOR REFUGEES:** With the advent of COVID-19, the Ministry of Health developed the COVID-19 response plan which includes refugees and cascades to the district preparedness plans. These require the strengthening of coordination, community and facility surveillance, preparation for case management, infection prevention and control, as well as risk communication. The implementation of the response plan literally meant a switch from preparedness to response mode. The refugee health system which was already dealing with the yellow fever outbreak and the risk of Ebola spread from DRC, had to redirect much needed energy into readiness to manage the COVID-19 outbreak.

This re-direction coupled with the attendant restrictions has resulted in an upsurge of the communicable and non-communicable diseases such as malaria whose interventions previously required close community engagement; disruption hence reorganization of certain health services to refugees such as nutrition, maternal new-born health services, HIV/AIDS support, TB and non-communicable diseases, which are interrupted by the ban on mass gathering and public transport; and reduced access to health services since most common means of transport to the health facilities are no longer available. The situation has also execrated the inadequacy of the already stretched health infrastructure (outpatients, inpatients, ambulance services and staff accommodation) which now require more space to reduce the overcrowding and potential for cross-infections. Cumulatively, the shifts and changes are likely to result in an increase in morbidity and mortality among the refugee population.

### Box 10. Social Cohesion, security, and community resilience

Uganda is highly communal with the populations coalescing around common development issues affecting them. Initiatives such as Obuntubulamu - the interconnectedness of everyone's humanity - demonstrate the social capital that the communities lay on such positive cultural values as mutual respect, good neighborliness, hygiene, respect and care for elders. The common social capital creates a cohesive bond that ensures smooth and effective operation of the society. However, according to a recent Government of Uganda report, "at the societal level the social distancing measures and the lockdown have led to and continue to cause stigma and discrimination to persons (and their families) perceived to have the virus, [even those who have received] treatment and recovered" (MIA, 2020). The stigma, misinformation and the hate speech surrounding the spread COVID-19 has placed a tremendous strain on societal bonds in some communities and magnified existing fissures in others.

Moreover, the enforcement of the presidential directives on prevention of COVID-19 by some members of the security apparatus has been disproportionately forceful or fatal in some instances with the more vulnerable in society and the urban poor bearing the brunt of this. For example, during the period of partial lockdown in late March 2020, the following incidents were reported:

- On 26 March 2020, members of the Local Defence Unit (LDU) used wires and sticks to beat people, including vendors selling fruit and vegetables and motorcycle riders, in downtown Kampala in an apparent attempt to punish non-compliance with the measures to close non-food markets. This subsequently led to the Chief of Defence Forces (CDF) of Uganda Peoples Defence Force (UPDF), to apologize to the victims.
- On 28 March 2020, six police officers shot at a group of people in Bududa, injuring one ostensibly to enforce the ban on public gatherings.
- On 29 March 2020, police raided a shelter for homeless lesbian, gay, bisexual, and transgender youth in Wakiso, and beat and arrested 23 people including shelter residents.
- On 14 April 2020, a UPDF soldier lost one of his eyes after being attacked by residents while enforcing the COVID-19 curfew.
- Towards the end of the month, about ten police and six army officers were arrested in Amuru District over torturing civilians while enforcing government's anti-COVID-19 measures.
- At the beginning of April 2020, 11 police officers allegedly beat 38 people in Elegu, Nwoya District for disobeying presidential orders on curfew.
- On 19 April 2020, Mityana Member of Parliament was arrested for allegedly distributing food to his starving constituents in contravention of set guidelines. Soon after, it emerged that while in the custody of the security forces he had been tortured.

This creates an erosion of trust that will need to be carefully repaired for the communities to sufficiently recover from the impacts of the epidemic. **A number of critical potential conflict "red flags" have arisen, namely: (i) Conflict over communal or familial resources; (ii) conflicts between host communities and refugees; (iii) demonstrations and picketing over loss of livelihoods (MIA, 2020).** In response, the Ministry of Internal Affairs suggests, for example, improving regional coordination to ensure policy uniformity, in addition to emphasizing that "it is important to understand community culture, so that instead of working against it, the state works with it to confront the pandemic" (MIA, 2020). Further, "Government should reign in the security forces to curb their excesses against the civilian population in the enforcement of anti-COVID measures" (MIA, 2020). However, MIA also goes on to say that it is not yet clear when and where the virus will hit hardest, and how economic, social and political factors may converge to spark or aggravate subsequent crises. Thus, **investing in social cohesion during this period, encouraging communal dialogues, ensuring accurate information on the pandemic is accessible to all, and encouraging humane response by security apparatus will be pivotal in the uptake of the recovery efforts and building community resilience.**

# 6.2 Assessing Potential Effectiveness of Social Protection Programmes

**Based on the estimated impacts on household incomes and poverty, and for vulnerable and marginalized groups, outlined in the previous section, it is clear that additional measures to protect the most vulnerable and marginalized in Uganda from the severe impacts of the COVID-19 crisis will be necessary.** This section therefore examines the potential effectiveness of social protection programmes in mitigating COVID-19 impacts.

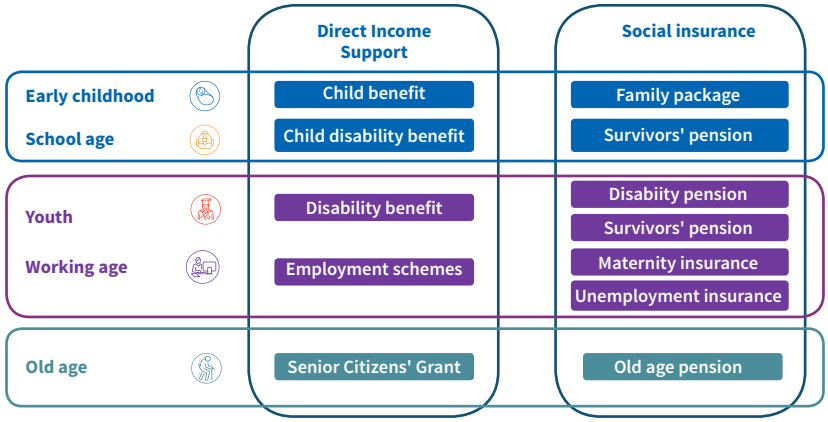
## 6.2.1 The current state of social protection in Uganda

**Social protection in Uganda is a relatively young sub-sector, regulated comprehensively for the first time by the National Social Protection Policy (NSPP) of 2015, that paved the way for the establishment of a social protection system.** Historically in Uganda's government budgeting, available resources for social spending have been limited by the focus on infrastructure and energy. Indeed, for upcoming NDPIII, priority areas for both interventions and in budgeting continue to include strengthening infrastructure, industrialization, and strengthening productive sectors (such as agriculture), governance and the private sector. However, NDPIII recognizes the importance of social protection for the development of the country's human capital, and Uganda's Vision 2040 commits to using social protection for addressing risk and vulnerability. NDPIII explicitly promotes *"increasing the productivity, inclusiveness and wellbeing of the population"* which will involve *"systematic expansion of national social protection programmes"*. Despite this assurance, however, evidence of the reduced emphasis on human capital is the decline in overall social spending as a proportion of total Government spending in the last decade.

**As defined by the NSPP, social protection has two pillars: social security and social case and support services.** Social security includes social insurance (contributory schemes targeting formal and informal workers), and direct income support (non-contributory schemes targeting vulnerable individuals). Uganda's vision for the social security component of social protection recognizes the important role of social security in reducing poverty, its contribution to economic growth and social cohesion, and its role in protecting against major shocks, both lifecycle and covariate shocks.[97] Going forward, the 2019 Social Protection Sub-Sector Review indicates that the future direction of social protection in Uganda will, hopefully, apply this lifecycle approach by seeking to provide safety nets for Ugandans throughout their lives (Figure 59). Again, however, despite an ambitious vision, the level of spending on and coverage of social protection schemes is among the lowest in the African continent.

97 (MGLSD, 2019)

Figure 59. Envisaged future life cycle approach to social security in Uganda.




*Source: adopted from the 2019 Social Protection Sub-Sector Review.*

**As it currently stands, the ongoing direct income support programmes are the Senior Citizens Grant (SCG), which has expanded and is due for a national roll-out, and the third phase of the Northern Uganda Social Action Fund (NUSAF3).** Overall recipients reached by direct income support programmes have fallen since 2014 because of programmes ending. Currently, the SCG and NUSAF3 only cover about 3 percent of the population, a response inadequate to reduce poverty at scale.

**Only 5 percent of the working age population is contributing to social insurance programmes, while closer to 25 percent could afford to contribute.** The main scheme is still the National Social Security Fund (NSSF, for which membership and benefit levels remain low. Health insurance coverage remains very limited. Informal labour workers are not included in any form of contributory schemes and based on the analysis done by the Social Protection sub-sector review, only 25 percent of the working age population would be able to afford a contributory scheme without a significant subsidy. Incentives to increase the pool of contributors is thus necessary.[98]

Social spending is not only protecting the lives of the most vulnerable and marginalized, but rather an investment that can provide beneficial returns to the economy. Although social protection programmes are currently benefitting a very small proportion of Ugandans, recent evidence using macro-simulations from the Ministry of Gender, Labour, and Social Development with support from World Food Programme further indicates that rather than a charitable effort, expanding social protection can provide returns economy-wide. These returns come in the form of consumption gains and reducing poverty, inequality, and increasing overall national income and revenues.

**Beyond the SCG and NSSF in Uganda, there has been limited but promising use of social protection programmes to respond to shocks, through the**

98 UNDP Regional Service Centre for Africa is currently developing a programme to support the capacities of government and civil society organizations to design and roll-out social protection schemes, particularly social insurance, to informal economy workers.

capacity of some programmes to scale-up in times of shocks (namely the disaster risk financing component of NUSAF3). In times of crisis, it becomes evident that a national social protection system is critical for a functioning shock-response system. Without a pre-defined mechanism to expand direct income support, the provision of emergency grants will itself provide support against shocks. Further, although not formally recognized as recipient of social protection programmes in the NSPP, refugees are emerging as recipients of specific programmes support[99]. It is advisable that measures put in place to mitigate the effect of COVD-19 also factor in the refugee population, as they are at greater risk of infection and already exposed to compounded vulnerabilities.

### 6.2.2 Assessing potential effectiveness of social protection for impact mitigation

Based on the Susceptible-Infected-Recovered (SIR) model[100], a micro-simulation of the infected population was performed along with the impact of several mitigating strategies, which included various social protection policies. These go beyond the food distribution mitigation sub-scenarios from the lockdown duration scenarios of the previous section, to identify the potential poverty mitigation interventions targeting specific groups. This also considers direct losses caused by the virus itself, which are not included in the previous sections.

These scenarios rely on the variation in two key variables: the level of household income loss due to loss of employment, and the basic reproduction ratio of the virus itself, leading to economic impacts via contracting the illness. The employment and income loss assumptions were classified into three different scenarios, which are described in Annex I. The impact on household expenditure was largely a result of identifying the industries that were under lockdown and approximating that 64 percent of MSMEs in these industries would collapse, while a total of 37.5 percent of employees in these industries would lose their jobs. Of healthy individuals that were not situated in an industry that was under lockdown, household expenditure was assumed to remain the same. Once an individual was infected or had lost his job/business, it was assumed that his/her per capita expenditure would decline. The magnitude of such a decline was dependent on the assumptions made.

**Box 11. Methodological note on SIR and microsimulations.**

The micro-simulation utilized data provided by the Ugandan National Household Survey of 2016. In order to assign the projected infected and recovered of the SIR model to the microdata and to ensure that individuals with preconditions and a higher age were more likely to be severely affected by the virus, a vulnerability index was composed. This index includes indicators in relation to the health status of an individual, pre-existing conditions, sanitation facilities, gender, multi-dimensional poverty, and a random component that increases with age (See Table 16; this is the same index which was described in reference to the Human Development and Service Delivery Implications in Chapter 5). In order to identify the individuals that have died and were hospitalized (severely ill), assumptions were based on those established in a study by Imperial College of London. Once these individuals were randomly assigned across age-groups, the impact of these infections on the expenditure of the households and there by the poverty rate of Uganda was investigated at a static point in time – 6 months into the pandemic.

99 (WBG, 2019)

100 The SIR model is based on a number of assumptions of which are elaborated in further detail in documentation provided by UNICEF. The initial values for the modelling were obtained from the Uganda Ministry of Health website, in which it was stated that 53 individuals were infected and 0 had recovered. As no individual is immune against the virus, a susceptible population of 45,740,947 was assumed. The projections were undertaken for a basic reproductive ratio of 2, 2.5 and 3 – in line with the recommendations made by the WHO.

**Next, in addition to scenarios varying levels of income loss, the SIR model enables scenarios which vary the basic reproduction ratio of the virus, meaning the average number of individuals to whom an infected person will pass the disease.** These enabled the estimation of potential poverty effects of the COVID-19 crisis not only based on scenarios of unemployment and income loss, but also based on varying degrees of viral load among the population. Therefore, in the scenarios and microsimulations run, not only can greater loss of income increase the poverty rates associated with the COVID-19 crises, but the higher viral basic reproduction ratio can as well. This report presents the findings only of the microsimulation results assuming the most conservative basic reproduction rate of 2 (Figure 60), but 2.5 and 3 were also included in the microsimulations run (Annex I Figures 3-5).

**Using the basic reproduction ratio of 2, the peak number of infections will occur on day 196 after the start of the pandemic.** At this point, just over half of the population will have been affected (including both infected and recovered) by COVID-19 in both the rural and urban areas of Uganda. This includes 5,576,913 individuals in the urban areas and 17,913,221 individuals residing in rural areas. With regards to poverty, prior to the COVID-19 outbreak, the poverty rate of Uganda was 21.4 percent. In urban areas this equated to 12.9 percent and in rural areas to 24.1 percent. Considering the unmitigated impact of the virus, six months into the pandemic, the poverty rates will increase – the magnitude of which will depend on the microsimulation scenario considered (see Annex I Box 1 for assumptions).

**Figure 60. The results of the SIR model for Uganda given a basic reproduction ratio of 2.**

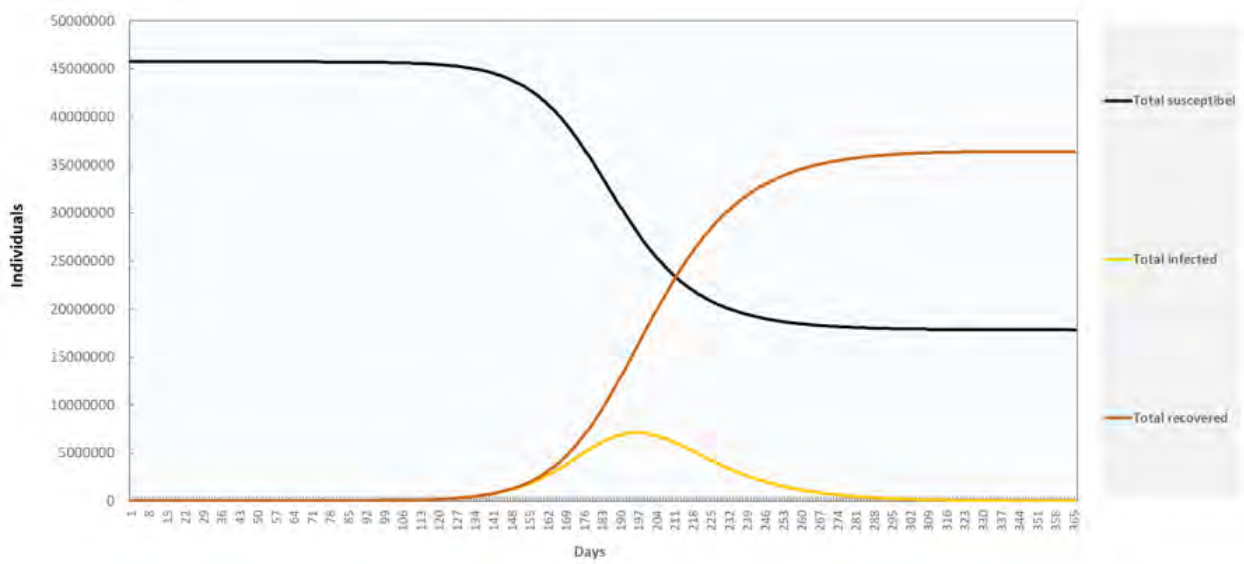


**Table 35. Unmitigated poverty impacts for basic reproduction ratio of 2.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Pre COVID-19** | | 21.4% (0.06) 8,870,047 | | | | | |
| | | **Scenario 1** | | **Scenario 2** | | **Scenario 3** | |
| **Post COVID-19** | **Unmitigated** | Total 24.1% (0.07) 10,003,258 | | Total 27.0% (0.08) 11,194,497 | | Total 29.8% (0.09) 12,369,985 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 15.0% (0.04) | 27.2% (0.08) | 17.3% (0.05) | 30.3% (0.09) | 20.8% (0.06) | 32.9% (0.10) |
| | | 1,561,624 | 8,441,681 | 1,802,426 | 9,391,719 | 2,162,849 | 10,207,014 |

**Note: Versions of this table for Basic Reproduction Ratio of 2.5 and 3 are presented in Annex I.*

If unmitigated, poverty could increase as little as 2.7 percentage points or as much as 8.4 percentage points, depending on the employment loss scenario assumptions given this most conservative basic reproduction ratio of 2 (see Annex I Box 1). This aligns with the potential poverty increases estimated in the regression-based and lockdown duration scenarios previously presented. Therefore, considering this estimated impact on expenditure and on poverty, microsimulations were run to assess the potential effectiveness of various social protection packages for poverty impact alleviation, based on this SIR modelling. The social protection microsimulations presented in this report are described in 6.

**Table 36. Social protection programme (one-off transfer packages) simulations presented.***

| Social Protection Microsimulation | Description |
|---|---|
| **One-off universal child grant intervention** | Every child under the age of six will be provided with a one-off transfer of UGX 60,000. This programme would provide cash transfers to 8,449,000 children under the age of six and cost a total of UGX 506,940,000,000 – equivalent to 0.37% of national GDP. |
| **One-off transfer to households composed entirely of informal workers** | In this case, an informal worker is defined as an individual undertaking own account work or being classified as a contributing family member. Every household that falls within this classification will be provided with a one-off transfer of UGX 150,000. This programme would provide cash transfers to 5,640,000 households consisting of informal workers and cost a total of UGX 846,000,000,000– equivalent to 0.62% of national GDP. |
| **One-off expansion of the SAGE grant to individuals aged 65 years and over** | Every individual over the age of 65 will be provided with a one-off transfer of UGX 150,000. This programme would provide cash transfers to 1,045,300 individuals over the age of 64 and cost a total of UGX 156,795,000,000 – equivalent to 0.12% of national GDP. The provision of such a one-off transfer will provide an immediate and targeted response to the pandemic, thereby shortening the window of economic vulnerability that has opened itself as a result of COVID-19. |
| **One-off transfer to households that are labour constrained** | A labour constrained household is any household that is characterized as having a dependency ratio of three or higher. Every such household will be provided with a one-off transfer of UGX 150,000. This programme would provide cash transfers to 1,610,585 households and cost a total of UGX 241,587,683,845 – equivalent to 0.19% of national GDP. |

**Note: Further detail regarding the methodology and how the cash transfer quantities were established vis-à-vis the actual poverty line and cost of living data can be found in (UNICEF, 2020).*

The rationale behind these simulations was that the provision of such one-off transfers would provide an immediate and targeted response to the pandemic, thereby shortening the window of economic vulnerability that has opened itself as a result of COVID-19. These are largely aimed at offsetting inevitable economic hardship as a result of the global pandemic, especially for poor and vulnerable communities.[101]

**Table 37. Unmitigated and mitigated poverty impacts for basic reproduction ratio of 2, with microsimulation results for the four social protection scenarios presented in this report.**

| **Poverty impacts: Basic Reproduction Ratio of 2*** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pre COVID-19 | | 21.4% (0.06)<br>8,870,047 | | | | | |
| | | **Scenario 1** | | **Scenario 2** | | **Scenario 3** | |
| Post COVID-19 | Unmitigated | **Total**<br>24.1% (0.07)<br>10,003,258 | | **Total**<br>27.0% (0.08)<br>11,194,497 | | **Total**<br>29.8% (0.09)<br>12,369,985 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 15.0% (0.04) | 27.2% (0.08) | 17.3% (0.05) | 30.3% (0.09) | 20.8% (0.06) | 32.9% (0.10) |
| | | 1,561,624 | 8,441,681 | 1,802,426 | 9,391,719 | 2,162,849 | 10,207,014 |
| | Mitigated with Child Grant 5 years and younger | **Total**<br>22.7% (0.06)<br>9,412,198 | | **Total**<br>25.4% (0.07)<br>10,515,565 | | **Total**<br>28.4% (0.08)<br>11,757,372 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 14.3% (0.04) | 25.5% (0.07) | 16.4% (0.05) | 28.4% (0.08) | 19.6% (0.06) | 31.3% (0.09) |
| | | 1,490,684 | 7,921,644 | 1,708,498 | 8,807,104 | 2,035,427 | 9,722,060 |
| | Difference between unmitigated and mitigated scenario | 1.4pp<br>591,060 | | 1.6pp<br>678,932 | | 1.5pp<br>612,614 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 0.68pp | 1.68pp | 0.90pp | 1.88pp | 1.23pp | 1.56pp |
| | | 70,940 | 520,037 | 93,928 | 584,615 | 127,422 | 484,954 |

101 There are, of course, other vulnerable groups, such as persons with disabilities, which were not included in these scenarios. However, in light of the rapid assessment required due to quickly changing COVID-19 situation, these were the initial scenarios selected for analysis.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mitigated with the informal worker programme | **Total**<br>22.3% (0.06)<br>9,248,060 | | **Total**<br>25.0% (0.07)<br>10,346,454 | | **Total**<br>27.8% (0.08)<br>11,509,922 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 14.5% (0.04) | 24.9% (0.07) | 16.6% (0.05) | 27.8% (0.08) | 19.3% (0.06) | 30.6% (0.09) |
| | | 1,505,038 | 7,742,813 | 1,723,580 | 8,622,996 | 2,011,606 | 9,498,521 |
| | Difference between unmitigated and mitigated scenario | 1.82pp<br>755,197 | | 2.05pp<br>848,043 | | 2.08pp<br>860,063 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 0.54pp<br>56,586 | 2.25pp<br>698,868 | 0.76pp<br>78,846 | 2.48pp<br>768,724 | 1.45pp<br>151,242 | 2.28pp<br>708,493 |
| | Mitigated with expanded SAGE grant | **Total**<br>23.9% (0.07)<br>9,899,636 | | **Total**<br>26.2% (0.08)<br>11,058,545 | | **Total**<br>29.3% (0.09)<br>12,275,896 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 14.8% (0.04) | 26.9% (0.08) | 17.0% (0.05) | 29.9% (0.09) | 20.6% (0.06) | 32.6% (0.10) |
| | | 1,539,780 | 8,359,717 | 1,769,140 | 9,289,264 | 2,142,253 | 10,133,743 |
| | Difference between unmitigated and mitigated scenario | 0.25pp<br>103,622 | | 0.33pp<br>135,952 | | 0.23pp<br>94,089 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 0.21pp<br>21,844 | 0.26pp<br>81,964 | 0.32pp<br>33,286 | 0.33pp<br>102,455 | 0.20pp<br>20,596 | 0.24pp<br>73,271 |
| | Mitigated with the programme for the labour constrained | **Total**<br>23.4% (0.07)<br>9,691,977 | | **Total**<br>26.2% (0.08)<br>10,870,781 | | **Total**<br>29.3% (0.09)<br>12,128,339 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 14.7% (0.04) | 26.3% (0.08) | 16.9% (0.05) | 29.4% (0.09) | 20.4% (0.06) | 32.2% (0.10) |
| | | 1,527,194 | 8,164,742 | 1,757,178 | 9,113,849 | 2,122,906 | 10,005,519 |
| | Difference between unmitigated and mitigated scenario | 0.75pp<br>311,281 | | 0.78pp<br>323,715 | | 0.58pp<br>241,647 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 0.33pp | 0.89pp | 0.43pp | 0.90pp | 0.38pp | 0.68pp |
| | | 34,430 | 276,939 | 45,248 | 277,871 | 39,943 | 201,495 |

**Targeted social protection programmes have significant potential to cushion the impact of COVID-19 on poverty.** The informal worker programme, which would provide a one-off transfer to households whose income is derived solely from informal work, provides the greatest cushion for effect of COVID-19 on poverty rates. As demonstrated in Table 37, for all social protection microsimulations, including those scaling up existing programmes such as SAGE, the poverty impact of COVID-19 is reduced. This is largely due to the fact that, as has been previously explored, the greatest impact of COVID-19 in terms of type of employment falls on informal workers, and particularly women employed in the informal sector (see also Sections 4.1 and 4.2). Vulnerable rural populations are also disproportionately affected and could benefit from this kind of programme.

**Social Protection Programmes with wide coverage, coupled with the spatially targeted food distribution scenarios presented in section 6.1, provide evidence that the poverty impacts of COVID-19, while potentially severe, can be alleviated with well-targeted social protection packages.** These include packages not only going beyond Kampala and Wakiso, but also targeted to specific population subgroups such as informal workers, elderly, youth and children, female-headed households, Indigenous peoples, persons with disabilities, and households that are considered labour constrained, particularly in rural areas.

# 6.3 Policy Recommendations

**CONTROL THE SPREAD OF THE VIRUS IN THE SHORTEST TIME POSSIBLE TO REDUCE THE NEGATIVE IMPACT OF THE PANDEMIC ON THE LIVES OF UGANDANS AND THE ECONOMY.** Effective, swift measures will help to contain the pandemic impact, in terms of both losses of lives and morbidity but also to reduce the time it takes to re-establish normalcy in economic and social development activities. Furthermore, acting now and effectively will help reduce the impact on medium-term and long-term on SDGs, particularly poverty, hunger, health, and inequality. Specific actions include: 1) increasing spending for immediate health-related expenditures such as supplies including masks, gloves, other personal productive equipment, in addition to ICU beds; and 2) advancing innovative approaches such as artificial intelligence in high risk/high traffic sites to enhance COVID-19 detection efficiency. Any deployment of artificial intelligence, however, needs to respect privacy, confidentiality and other human rights principles.

**IMPLEMENT SOCIAL PROTECTION MEASURES TO SUPPORT VULNERABLE AND MARGINALIZED POPULATIONS WHICH GO BEYOND EMERGENCY SOCIAL PROTECTION AND ARE EXPANDED TO PREVIOUSLY UNPROTECTED POPULATIONS**. This can be accomplished by: 1) building a robust coordination infrastructure through developing a costed rapid Social Protection Plan working with CSOs, LGs and other players; 2) establishing a physical and automated platform for coordination and resource mobilization for support to the vulnerable (as a part of this process, there is also need to ensure meaningful and effective participation of affected groups in plans and programmes that concern them, in line with Human Rights Based Approach); 3) evaluating the effectiveness of administration/management of social protection measures after the pandemic; and 4) implementing emergency transfers, and establish a plan to continue programmes after emergency phase ends. Deployment of emergency transfers would entail: (i) Immediately mapping, re-purposing and scaling up social protection programmes, complemented with rapid assessment by Local Government to identify the most vulnerable and marginalized; (ii) scaling up food assistance and provision of critical non-food items, assessing the most effective delivery mechanism and in support for most vulnerable and marginalized; (iii) promoting effective transfer modalities building on existing schemes and systems and diversifying into digital payments, particularly to informal workers; and (iv) relaxing conditions for recipients of emergency transfers to maximize coverage in the shortest amount of time.

**IN THE LONG RUN, INCLUDING INCENTIVES TO FIRMS SETTING UP BUSINESSES IN THE MOST DEPRESSED REGIONS AS A STIMULUS COULD CREATE NEW JOBS AND LOCAL ECONOMIC REVITALISATION.** It is further recommended, as previously mentioned, that in the longer-term the informal workers cash transfer programme be instituted not just as a short-term measure but as a fixture in the current social protection system. Contributory, non-contributory and a mixture of instruments can be considered. Additional support to the refugee response is recommended to ensure that refugees and the many highly vulnerable refugee population subgroups, are not left behind in the COVID-19 response.

CHAPTERS 2-7:

POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

07

CHAPTER SEVEN

# LONG-TERM IMPLICATIONS FOR SDGS

## KEY MESSAGES

COVID-19 poses a threat to Uganda's progress towards SDGs in the medium-term to long-term if the response is not swift and effective.

If funding for the COVID-19 response comes only from resources in the existing Government budget envelope without mobilizing additional resources, and assuming a 3 percent decline in GDP growth for 2020 followed by an approximately 2 percent decline in GDP growth for 2021, there could be potential negative performance across all SDGs into 2030, with the general exception of environmental SDGs such as SDG 13.

The potential SDG impacts are particularly severe for eliminating poverty (SDG1), zero hunger (SDG2), good health and well-being (SDG3), gender equality (SDG5), and economic SDGs such as decent work and economic growth (SDG8).

If the Government response to COVID-19 mobilises additional resources to avoid pulling funds from existing development objectives, and implements a response focused not only on health but also on economic stimulus, it could help to improve performance – or at least cushion performance loss— in several SDGs by 2030.

**COVID-19 poses a serious challenge, as previously discussed, in the immediate term for health and wider socio-economic development including decline in human development and increase in poverty; however, COVID-19 also poses a threat to Uganda's progress towards SDGs in the medium-term to long-term if the response is not swift and effective.** This goes beyond only SDG1, eliminating poverty, which was the focus of the previous section. In light of the immediate direct and indirect health, social, and economic effects of COVID-19 and response, including the effects on vulnerable Ugandan households, it is clear that Uganda will need to divert significant spending from previously planned development activities into the health sector in order to both mitigate and respond to the outbreak of COVID1-19. Furthermore, direct and indirect revenue will decline due to the loss of incomes and consumption resulting from the outbreak mitigation measures. The Government of Uganda is expected to draw on previously unplanned concessionary loans from the World Bank and IMF in order to cover components of this response. These fiscal policy options are discussed in further detail in the following section.

**The timing of the COVID-19 pandemic is concerning in light of the recent progress and effort Uganda has made to achieve the SDGs. Uganda has embedded SDGs into its national development planning process, as evidenced in the NDPII and NDPIII.** It has also increasingly aligned its budget to SDG-related spending, with close to 61 percent of budget in 2019/2021 having been directly contributing to SDGs.[102] While progress towards SDGs may vary from one goal to another, Uganda has nonetheless made significant progress on the whole. According to the Sustainable Development Solutions Network (SDSN) 2019 Africa: SDG Index and Dashboard Report, Uganda ranks 18th among 52 African countries based on 97 indicators across all 17 Goals. Uganda further received an overall score of 54.88 compared to the regional average of 52.7. The score indicates that, by SDSN's calculations, Uganda is more than 50 percent of the way towards achieving SDGs by 2030, on track with the rest of the continent. However, Uganda needs to accelerate progress to achieve the SDGs. While Uganda is making significant progress on health, gender equality, decent work and economic growth, industry innovation and infrastructure and partnerships, notably, performance is stagnating when considering SDGs related to poverty, hunger, education, clean water and sanitation, affordable and clean energy, sustainable cities, life on land, and peace and justice.[103]

**In order to analyse the effect of COVID-19 on medium and long term, this component of the report uses the iSDG model,[104] a system dynamics model developed specifically for Uganda (see Annex II).** From the iSDG-Uganda model's data-calibrated base, or business-as-usual, simple scenario analysis is then performed to illustrate the effect of fiscal policy changes now on SDGs into 2030 for Uganda. In these scenarios, fiscal policy response is called upon in short-term interventions, either by supporting the health sector or strengthening economic activities to buffer the economy and protect social development gains. Two simplified scenarios were developed around potential fiscal policy changes, to understand implications for SDGs. The two simplified scenarios developed to assess COVID-19 response against SDGs are outlined in Tables 38 and Table 39.

**The first simple scenario assumes that the current budget envelope will be the only available resource that the Government of Uganda has at its disposal to reallocate in response to COVID-19 in the 2020/2021 budget period.** While the full effects of COVID-19 are still largely unknown, the true resource requirement to mitigate the impact of the pandemic is also relatively unknown. The scenarios are therefore built using indicative resources mobilize by Government. Hence, these may not be the full resources sufficient to tackle COVID-19. However, these scenarios showcase the impact of Government action under these circumstances and can guide Government choice in spending and resource mobilization.[105] For the purposes of this analysis it was assumed that Uganda will need to double its health spending, reallocating 3 percent GDP of funding from the existing budget envelope. A further assumption was that Government would pull this money from infrastructure and industry-related interventions in the next budget period. The summary of this assumption is provided in Table 38.

102 (NPA, 2020)
103 (SDSN, 2019)
104 Developed by National Planning Authority and Millennium Institute with support of UNECA and UNDP.
105 Based on the estimate provided by MFPED's "worst case scenario" for Uganda from March 2020, in addition to the IMF's World Economic Outlook from April 2020, which revises growth estimates down due to COVID-19. For GDP growth projections for Uganda, IMF estimates 4.9% for 2019, revises the 2020 growth estimate down to 3.5% for 2020 from 6.2%, and revises 2021 down to 4.3% (MFPED, 2020).

**Table 38. Scenario 1 assumptions.**

| Scenario | Increased budget allocation | Reduced budget allocation | Growth assumption | Other assumptions |
|---|---|---|---|---|
| 1 | 3% of GDP increased in health sector | • 2% of GDP infrastructure-related interventions<br>• 1% of GDP industry-related interventions, including energy[106] | Approximately 3% reduction in nominal GDP growth for 2020, and approximately 2% reduction in nominal GDP growth for 2021 | No additional resources mobilized; only Government budget envelope for 2020/2021 |

**The second scenario is builds on the first, maintaining the same downward-revised GDP growth, but assumes that rather than reallocate existing funds, the Government of Uganda will mobilize additional concessional resources to combat the health effect.** It is assumed in this scenario that additional resources are mobilized for the COVID-19 response, including $491.5 million from the IMF and Government of Uganda will mobilize additional $490 million total from development partners.[107] This means that the Government will have extra budget resources to fight COVID-19, strengthening health sector response, but will also be able to provide swift fiscal interventions to stimulate the economy, including private sector investments and social protection. This scenario also assumes direct tax revenue will decline by 1 percent of GDP (Table 39) due to loss of household incomes.

**Table 39. Scenario 2 assumption.**

| Scenario | Increased budget allocation | Reduced budget allocation | Growth assumption | Other assumptions |
|---|---|---|---|---|
| 2 | No money shifted away from current development objectives in existing resource envelope, but externally mobilized resources (see Other assumptions) go to the health sector for the direct response and half to economic stimulus 50-50 split | No money shifted away from current development objectives in existing resource envelope | Approximately 3% reduction in nominal GDP growth for 2020, and approximately 2% reduction in nominal GDP growth for 2021 | Additional resources mobilized at almost USD 1 billion ($980 million), split between 2020 and 2021 [108, 109, 110]<br><br>Loss in direct tax revenue of 1% of GDP for 2020 and 2021. |

106 Energy is a component in the industry module. Hence the deduction is, in part, from energy sector interventions.
107 (IMF, 2020)
108 (IMF, 2020)
109 (*Ibid*.)
110 (UN in Uganda, 2020)

**Section 7.1 presents findings from these scenarios for comparative purposes.** To reiterate, the findings presented are selected results of a simplified rapid assessment of fiscal policy adjustment scenarios for SDGs into 2030 based on the COVID-19 spending and revenue reallocations described above. Importantly, this is a rapid assessment that is limited in scope, due not only to the limitations of the model itself (described in the MI Final Report[111]) but also due to the fact that the COVID-19 situation changes on a weekly, if not daily, basis. The changing nature of the situation and strict measures implemented make estimating the medium-term and long-term effects on Uganda difficult to quantify.

# 7.1 Impact of COVID-19 on SDGs Achievement

### SCENARIO 1: SPENDING REALLOCATION (NO ADDITIONAL RESOURCES MOBILIZED)

**Based on the assumptions presented for Scenario 1, which reallocates budget in the current envelope without additional resources and assumes 3 percent decline in GDP growth for 2020 followed by an approximately 2 percent decline in GDP growth for 2021, there could be potential negative performance across all SDGs into 2030, with the general exception of environmental SDGs such as SDG 13 (Figure 61).**[112] The model dashboard illustrating impact on SDGs is presented in Figure 61. Indeed, net change in SDG potential achievement into 2030 drops -17.8 percent for eliminating poverty (SDG1), -9.2 percent for gender equality (SDG5), and -6.7 percent for infrastructure and industry development (SDG9) as compared to achievement in the base run. However, climate and forest-related SDGs 13 and 15 remain roughly even (Figure 61). Furthermore, the increase in budget allocated to the health sector (double its current allocation) is insufficient to outweigh the overall effects of economic decline, and performance in health outcomes (SDG3) drops by 6.2 percent. Furthermore, this simple scenario analysis does not capture the distinction between access to basic health care and the COVID-19-only health care. Most of the funding reallocated to the health sector would likely go to COVID-19 -related care. The world has witnessed that due to the high transmission rates of COVID-19 coupled with its mortality rate of approximately 3 percent, health systems in countries around the world are unable to handle health problems outside of COVID-19 during an outbreak. Thus, this may not paint a full picture of the potential impacts for SDG3. In terms of eliminating hunger, performance in SDG2 also declines, although with a 4.4 percent decline, this drop is less severe than the declines seen in other SDGs.[113]

**The reallocation of spending within the current envelope away from infrastructure will negatively affect Industry, Innovation, and Infrastructure (SDG9), which is the SDG demonstrating the greatest decline in performance by 2030 (Figure 61).** On the bright side, the loss of investment in road infrastructure and lockdown may result in lower carbon emissions over time (for an alternative view, however, see Box 5 in Chapter 3) (Figure 62). In the graphs (on the right hand side of the figure), the solid line represents the base run trend, while the dashed line represents the trend for carbon emissions given the spending reallocation and economic growth decline.

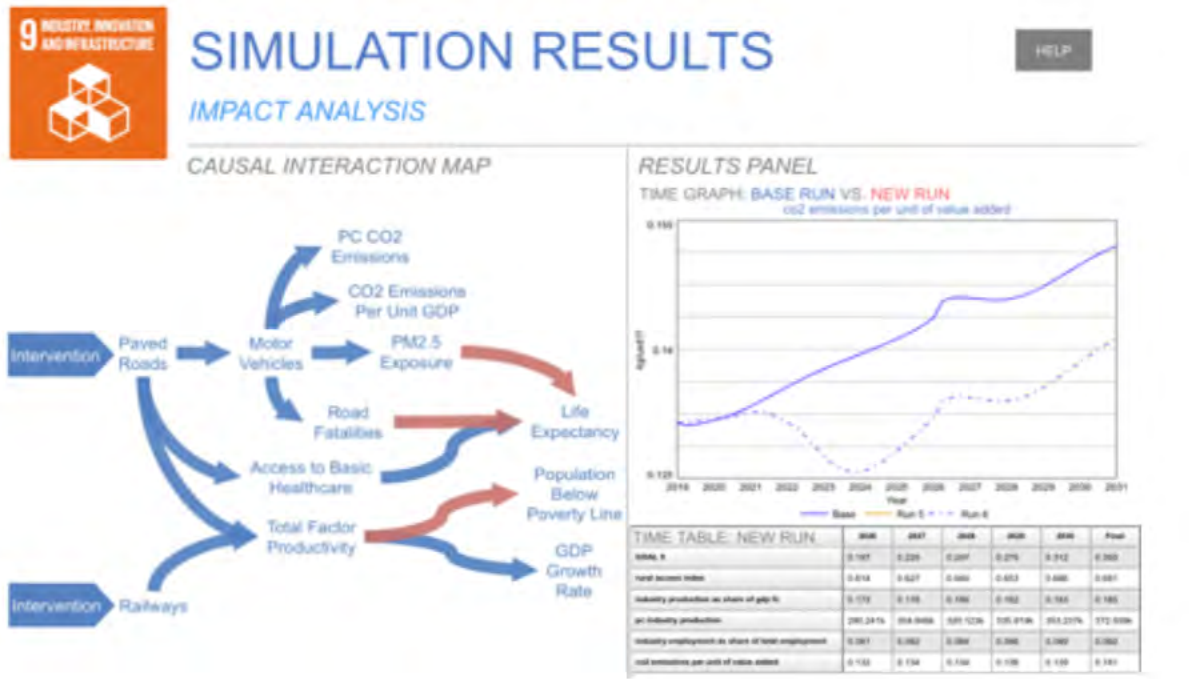
111 (MI, 2020)
112 See Box 5 in Chapter 3 for further information on the mixed effects for environment and, subsequently, environmental SDGs.
113 The marginal increase in SDG16 and in SDG17 could be caused by knock-on effects from the budget reallocation.

These results thus can be cautiously interpreted to indicate that if the COVID-19 response only reallocates existing resources without securing additional resources, there may be longer-term implications for Uganda's achievement of SDGs and other development objectives.

**Figure 61. Results dashboard indicating the effect of spending reallocation coupled with expected decline in GDP growth on SDG performance by 2030.**


*Note: The blue bar next to each SDG indicates the achievement by 2030 in the base run, and the red bar indicates achievement in the scenario run.*

**Figure 62. Reduction in carbon emissions as a result of reduction in infrastructure investment and overall loss of economic growth and activity.**



### SCENARIO 2: FISCAL POLICY ADJUSTMENT INCL. SPENDING AND REVENUE (BORROWING GOES TO HEALTH IN Y1, ECONOMIC SUPPORT IN Y2)

**Scenario 2 (Figure 63) builds upon Scenario 1 but goes further in also assuming decline in direct tax revenue for the next two years.** However, this scenario also assumes that Government mobilizes concessional funding equivalent to approximately $1 billion (the figure of current concessional borrowing from IMF and World Bank as of mid-May 2020) to be released between 2020 and 2021 to respond to the COVID-19 health crisis. It is also assumed that the funding goes into interventions to address the health component of the crisis or towards economic and livelihoods support.[114] This therefore increases foreign debt.

**Figure 63. Results dashboard indicating the effect of spending reallocation coupled with expected decline in GDP growth, direct tax decline, and foreign debt increase on SDG performance by 2030.**


*Note: The blue bar next to each SDG indicates the achievement by 2030 in the base run, and the red bar indicates achievement in the scenario run.*

114 Within the model, this manifests as funding in interventions such as household energy and agricultural training.

**The scenario shows that a balanced approach in Government response, which mobilizes additional resources to avoid pulling funds from existing development objectives, and which is focused not only on health but also on economic stimulus, could help to improve performance – or at least cushion performance loss— in several SDGs by 2030 (Figure 63) in comparison to Scenario 1, where Government relies on its current resource envelope**. For example, Scenario 2 improves industry, innovation, and infrastructure (SDG 9), as money is not being pulled away from developing these areas in order to address the COVID-19 response and reduces the potential negative effect in terms of widening inequality (SDG10). Scenario 2 also improves the outlook for zero hunger (SDG2), although this still takes a hit due to the COVID-19 response. The economic stimulus will not affect significantly the achievement of environmental SDGs (SDGs 12, 13, and 15). That said, the overall economic decline still leads to losses in decent work and economic growth (SDG8), although the damage is less at -1.8 percent relative to -3.3 percent in Scenario 1. In summary, the Scenario 2 response, which includes both health sector as well as economic stimulus from external resource mobilization, illustrates a potentially boosted health sector capacity to absorb COVID-19 shock while also cushioning the potential prolonged effect of the virus on economic growth.

**It is also important to note that the SDG1 result may be in part due the model attributing the 1 percent of GDP loss of direct tax revenue to a lessened tax burden on households, more than as a result of the loss of household income.** Additionally, as has been described further in Chapter 6 of this report, depending on the duration of these lockdown measures, the result on the poverty could change. Therefore, further analysis is necessary to better understand the actual implications of fiscal policy adjustment on SDG1 achievement by 2030.

## 7.2 Policy Recommendations

**The simple scenarios presented in Chapter 7 have illustrated that the COVID-19 outbreak is expected to have medium-term to long-term effects on Uganda's development objectives into 2030, including progress across all SDGs.** As indicated in the analysis, coronavirus and the efficacy and adequacy of Government response will determine the nature and severity of these long-term effects.

**Therefore, the socio-economic response to the COVID-19 crisis requires not only short-term, immediate response, but also long-term thinking.** The response can be viewed with a three-phase approach to assist policymakers and regulators in making balanced choices:

| | |
|---|---|
| **COVID-19 CONTAINMENT PHASE** | SHORT-TERM NEEDS |
| **TRANSITION PHASE** | BOTH CONTAINMENT AND PROTECTING VULNERABLE PEOPLE AND SECTORS |
| **SUSTAINABLE RECOVERY PHASE** | LONGER-TERM ISSUES AND OPPORTUNITIES |

**Entering the transition phase and considering potential implications for the sustainable recovery phase, if Government acts without mobilizing external funds, using its own resources reallocated from the existing resource envelope, Uganda's progress on several SDGs could be reduced.** Although almost all SDGs will be potentially impacted negatively into 2030, based on this analysis the greatest negative impacts in terms of effect on SDG indicators are in poverty, reduction of hunger, decent work and economic growth, industry and infrastructure, and worsening of inequality and gender equality. This is due to the massive and economy-wide effect of the pandemic and the need for measures to control the spread of the virus that ultimately have multi-sectoral implications. It can also be attributed to the fact that reallocation of funding to address this public health emergency, if taken from the existing resource envelope, will be drawing funds away from areas already intended to help further other development objectives, such as major growth promoting sectors like infrastructure.

**On the other hand, if the Government has access to additional resources in addition to its own and distributes the externally mobilized funds to both health and economic stimulus, the potential negative impact of COVID-19 on SDG progress could be cushioned.** Uganda thus has a potential opportunity to limit the blow of this unprecedented health emergency and prevent progress towards the achievement of SDGs from being derailed by effectively mobilizing new resources from development partners. It is not possible at this stage to estimate the exact resources required by Uganda to fully tackle COVID-19 pandemic as the situation evolves, but the report does commend the Government of Uganda's efforts already underway to mobilize external resources to address the crisis.

**In order to avoid derailing SDG progress in the longer term, it will be critical to expand investment in SDG accelerators that were identified by the iSDG modelling and interventions under the Governance and Industry categories to propel progress for the entire spectrum of SDGs (MI, 2020).** This modelling work was integrated into NDPIII pre-COVID-19, and the analysis within this chapter has affirmed that the investment in NDPIII programmes and interventions which focus on Governance and Industry will continue to be particularly effective in providing leverage points for improving performance on the SDGs. It is critical to respond to the emergency short-term needs during the containment phase and transition phases and to take the sustainable recovery phase into consideration.

CHAPTERS 2-7:

## POTENTIAL SOCIO-ECONOMIC IMPACTS OF COVID-19

08

CHAPTER EIGHT

# CONCLUSIONS

**This report has provided a preliminary assessment of the impact of the COVID-19 on Uganda and compliments existing assessments.** It provides the first UN inter-agency effort to generate understanding of the COVID-19 pandemic at the country level and potential entry points for recovery. Analysis has been made on selected sectors and segments of the population in an effort to identify who might be the hardest-hit, or left behind, in the response, and which are the most effective interventions to address these short, medium, and long-term impacts.

**The COVID-19 crisis will have far-reaching impacts on the entire economy and society, although some areas will be hit disproportionately hard.** This report places focus on sectors that have direct impact on households, providing policy and programme recommendations to enable recovery but also ensure that the country keeps its development aspirations in sight. From this report, it is clear that beyond recovery, the country will have to emphasise building an economy in which all critical sectors are resilient to shocks of this nature, some of which may be multiple. It is also clear that there will be no return to business as usual. This calls for harnessing opportunities presented by the growing innovation space for business and government, strengthening and sustaining partnerships, and building institutional coherence to effectively enable the public and private sector for response to crises. The likelihood that the negative impacts of the pandemic could last throughout the Decade of Action calls for more agile, comprehensive and coordinated action, leveraging existing innovative pathways.

**This report is expected to inform the re-prioritization of the National Development Plan III and the development of a costed recovery plan, addressing the impact and emerging realities occasioned from COVID-19 and simultaneous disasters such as the desert locust invasion.** These can be completed with the national development aspirations in view, as the FY2020/2021 budget review and re-alignment processes are currently ongoing, and this can be integrated into future budget and expenditure review processes. Further, it is clear that the pandemic will negatively impact the results earlier envisaged for NDPIII. For example, the plan relied on high expectations for growth trajectory, improvement in the current account balance, and strides in the tourism sector, along with additional gains in human development (such as education, health and employment). However, the findings in this study indicate that each of these could be derailed. To ensure that the country stays on its course, the report provides several recommendations for possible bold investments that could be made, especially in the short and medium term but also with longer term recovery in view. To focus the readers of this report, a summary of the impact on NDPIII results is highlighted in the Executive Summary.

**Finally, this report comes with caveats. First, having been prepared in the fast-paced conditions of the COVID-19 pandemic and response, some benchmarks and results are bound to change frequently, though this may not significantly alter the direction of the results and the conclusions drawn.** Second, given that the evolution of the pandemic and duration of the response is not known with certainty, the envisaged impact may change with unforeseen circumstances. To address uncertainties posed by the pandemic and response, is recommended that assessments of this nature are conducted regularly within the year. This report presents a starting point to advance and sustain dialogue to inform the policy direction.

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# ANNEXES

**ANNEX I.**

# Vulnerability and Resilience: Methodology Detail and Supplementary Tables

## REGRESSION-BASED APPROACH

### FOR THE REGRESSION-BASED APPROACH TO ESTIMATING INCREASES IN POVERTY, THE METHODOLOGICAL DETAIL AND REGRESSION OUTPUT TABLES ARE THE FOLLOWING:

Conceptually, a household can consume market and non-market goods, which include health and non-health goods. Households may supply labour to the market as well as hire some labour from the market and these influence their welfare and income. Households also derive utility from leisure and health. Considering these stylized facts, a household can be assumed to seek to maximize its utility $(U)$ subject to a budget and time constraints. Symbolically, households maximize: $U = U(L,C,M,H)$ where $L$ is leisure time, $C$ is consumption of home produced goods, $M$ is consumption of non-health market goods, $H$ is health status which depends on time devoted for health and consumption of health goods. The utility is maximized subject to budget and time constraints, implying the welfare impact of diseases or a pandemic like COVID-19 can be measured by changes in utility or changes in the inputs that goes into a utility function such as leisure, non-market consumption, and market consumption of health inputs. With this backdrop, the measurable changes in wages and consumption due to shocks were used to mimic the impact of COVID-19 on household welfare. Fixed effects regression analysis was utilized to estimate the effect of COVID-19 on associated wages and welfare (consumption per adult equivalent) losses. The shocks considered in estimating the losses include: disease burden, unemployment, increase in price of consumer goods and other disasters such as food shortages. Data on these shocks are contained in the community section of the Uganda National Household Survey 2016/2017. In the regression analysis, consumption expenditure was modelled as function of control variables and pandemic related shocks, summarized in the equation below:

$$W_{id} = SH'_i \beta + X_{id}'\alpha + u_{id}$$

Where $W_{id}$ is an indicator of welfare of a household in location $d$ or a variable that enters into households' utility function, $SH_i$ are health related shocks/disease control measures, $X_i$ are control variables and $u_i$ is the stochastic disturbance term. The estimation strategy closely follows Alejandro de la Fuente et al. (2019) approach which involved the study of the impacts Ebola epidemic on agricultural production and household welfare.

## Annex 1 Table 1: The effect of unemployment shocks on wages

| VARIABLES | ALL | EPIDEMICS | UNEMPLOYMENT | DISASTERS | PRICE | BASE |
|---|---|---|---|---|---|---|
| Diseases | -0.23 | -0.32 | | | | |
| | (0.28) | (0.26) | | | | |
| Unemployment | -0.33** | | -0.27* | | | |
| | (0.15) | | (0.15) | | | |
| Natural disasters | -0.20 | | | -0.16 | | |
| | (0.20) | | | (0.20) | | |
| High Prices | 0.18 | | | | 0.17 | |
| | (0.16) | | | | (0.16) | |
| Some primary | 0.87*** | 0.90*** | 0.91*** | 0.92*** | 0.89*** | 0.32 |
| | (0.22) | (0.26) | (0.26) | (0.28) | (0.29) | (0.21) |
| Completed primary | 0.78*** | 0.73** | 0.82*** | 0.78** | 0.77** | 0.44* |
| | (0.25) | (0.30) | (0.29) | (0.31) | (0.32) | (0.23) |
| Some secondary | 1.78*** | 1.80*** | 1.82*** | 1.86*** | 1.81*** | 0.89*** |
| | (0.27) | (0.31) | (0.31) | (0.33) | (0.33) | (0.22) |
| Lower secondary | 0.94*** | 0.92*** | 0.99*** | 0.98*** | 0.93*** | 0.47** |
| | (0.31) | (0.34) | (0.32) | (0.35) | (0.36) | (0.24) |
| Higher secondary | 0.69 | 0.94 | 0.82 | 0.92 | 0.95 | 0.96** |
| | (0.61) | (0.62) | (0.63) | (0.64) | (0.64) | (0.43) |
| Diploma | 2.02*** | 1.97*** | 2.11*** | 1.99*** | 1.98*** | 1.18*** |
| | (0.34) | (0.36) | (0.34) | (0.36) | (0.37) | (0.25) |
| Degree | 1.68*** | 2.13*** | 1.89*** | 1.96*** | 2.00*** | 2.28*** |
| | (0.46) | (0.43) | (0.42) | (0.44) | (0.45) | (0.49) |
| Construction sector | 0.57** | 0.39* | 0.44* | 0.46* | 0.43* | 0.26 |
| | (0.26) | (0.21) | (0.24) | (0.27) | (0.24) | (0.17) |
| Trade & Services | 1.16*** | 1.18*** | 1.17*** | 1.15*** | 1.17*** | 0.54** |
| | (0.33) | (0.35) | (0.34) | (0.36) | (0.35) | (0.21) |
| Transport and Storage | 0.97*** | 0.95*** | 0.91*** | 0.94*** | 0.92*** | 0.59*** |
| | (0.20) | (0.20) | (0.19) | (0.20) | (0.19) | (0.20) |
| Hotels & restaurant | -0.04 | -0.01 | -0.13 | -0.03 | -0.10 | -0.05 |
| | (0.53) | (0.47) | (0.44) | (0.35) | (0.45) | (0.44) |
| ICT | 0.57* | 0.29 | 0.47* | 0.30 | 0.39 | 1.02* |
| | (0.30) | (0.27) | (0.28) | (0.28) | (0.27) | (0.61) |
| Finance & Insurance | 1.70*** | 1.48*** | 1.63*** | 1.63*** | 1.56*** | 0.74* |
| | (0.29) | (0.30) | (0.28) | (0.30) | (0.29) | (0.44) |
| Observations | 2130 | 2130 | 2130 | 2130 | 2130 | 5711 |
| R-squared | 0.57 | 0.55 | 0.55 | 0.54 | 0.54 | 0.28 |

*Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

*Notes: The analysis is based on UNHS 2016/17 data set. The dependent variable is the natural logarithm of monthly wages. Other explanatory variables include age, gender, marital status. Location and year fixed effects were also included.*

## Annex 1 Table 2: The effect of shocks on welfare

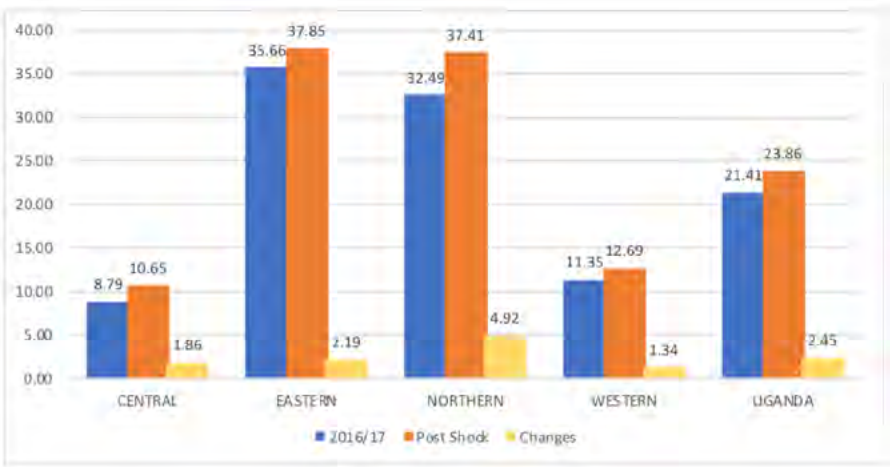
| VARIABLES | ALL | DISEASES | UNEMPLOYMENT | DISASTERS | PRICE |
|---|---|---|---|---|---|
| Diseases | 0.01 | 0.00 | | | |
| | (0.02) | (0.02) | | | |
| Unemployment | -0.18*** | | -0.18*** | | |
| | (0.02) | | (0.02) | | |
| High prices of consumer goods | -0.11*** | | | | -0.12*** |
| | (0.02) | | | | (0.02) |
| Natural disasters/famine | -0.02 | | | -0.01 | |
| | (0.02) | | | (0.02) | |
| (sum) hsize | -0.07*** | -0.07*** | -0.07*** | -0.07*** | -0.07*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Age in completed years | 0.00*** | 0.00*** | 0.00*** | 0.00*** | 0.00*** |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Male | -0.04* | -0.03 | -0.04 | -0.03 | -0.04 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Some primary | 0.17*** | 0.16*** | 0.16*** | 0.16*** | 0.16*** |
| | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| Completed primary | 0.38*** | 0.38*** | 0.37*** | 0.38*** | 0.38*** |
| | (0.04) | (0.05) | (0.05) | (0.05) | (0.04) |
| Some secondary | 0.47*** | 0.45*** | 0.46*** | 0.45*** | 0.46*** |
| | (0.04) | (0.05) | (0.04) | (0.05) | (0.04) |
| Lower secondary | 0.54*** | 0.53*** | 0.53*** | 0.53*** | 0.54*** |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| Higher secondary | 0.63*** | 0.63*** | 0.62*** | 0.63*** | 0.63*** |
| | (0.07) | (0.07) | (0.07) | (0.07) | (0.07) |
| Diploma | 0.89*** | 0.87*** | 0.89*** | 0.87*** | 0.87*** |
| | (0.08) | (0.07) | (0.08) | (0.08) | (0.08) |
| Degree | 1.36*** | 1.35*** | 1.35*** | 1.34*** | 1.36*** |
| | (0.10) | (0.09) | (0.10) | (0.10) | (0.10) |
| Livestock farming (Small scale) | 0.31*** | 0.34*** | 0.32*** | 0.34*** | 0.34*** |
| | (0.09) | (0.09) | (0.09) | (0.09) | (0.09) |
| Commercial farming | 0.20*** | 0.24*** | 0.21*** | 0.23*** | 0.22*** |
| | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| Wage employment | -0.63*** | -0.62*** | -0.63*** | -0.62*** | -0.63*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Non-agricultural enterprises | 0.24*** | 0.23*** | 0.24*** | 0.23*** | 0.23*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Property income | 0.53*** | 0.53*** | 0.53*** | 0.52*** | 0.52*** |
| | (0.07) | (0.08) | (0.07) | (0.08) | (0.08) |
| Transfers(Pension, allowances etc.) | 0.16 | 0.12 | 0.15 | 0.12 | 0.13 |
| | (0.17) | (0.14) | (0.16) | (0.14) | (0.15) |
| Remittances | 0.14** | 0.14** | 0.14** | 0.14** | 0.14** |
| | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| Organizational support | -0.24*** | -0.38*** | -0.29*** | -0.37*** | -0.32*** |
| | (0.06) | (0.05) | (0.05) | (0.05) | (0.05) |

| | | | | | |
|---|---|---|---|---|---|
| Others | 0.29** | 0.29* | 0.29** | 0.29* | 0.29** |
| | (0.14) | (0.15) | (0.14) | (0.15) | (0.15) |
| Year fixed effect | -0.11*** | -0.17*** | -0.14*** | -0.17*** | -0.13*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Urban/Rural Identifier | 0.31*** | 0.28*** | 0.30*** | 0.27*** | 0.30*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Constant | 11.18*** | 11.08*** | 11.15*** | 11.08*** | 11.12*** |
| | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| Observations | 6,415 | 6,415 | 6,415 | 6,415 | 6,415 |
| R-squared | 0.39 | 0.37 | 0.39 | 0.37 | 0.38 |

*Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1*
*Unemployment and price changes as separate shocks*

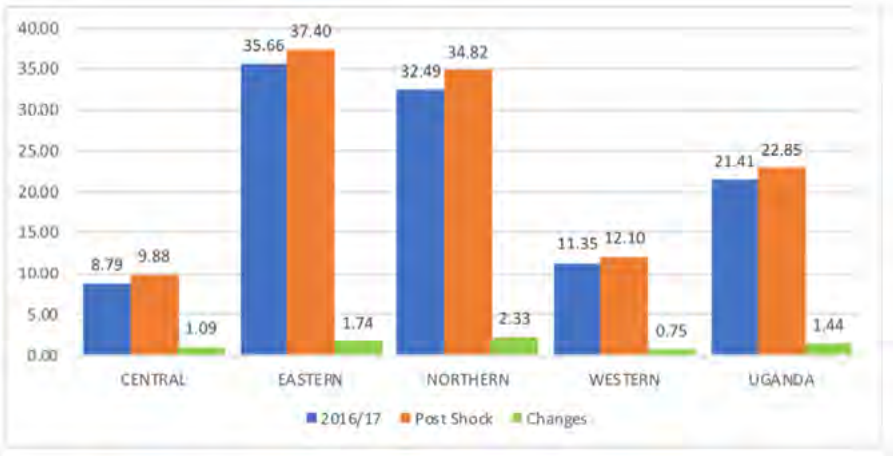
The increase in unemployment alone as a result of COVID-19 will increase the national poverty rate from 21.41 percent to 23.86 percent, the largest increase experienced in Eastern and Northern regions. A similar but separate calibration of the effect of price shocks on welfare is associated with a 1.44 percent increase in the national poverty rate. Northern and Eastern regions are likely to bear the largest increase in poverty rate due to price shocks. This could be due to long distance from Kampala, the hub for manufacturing and trade. Restrictions on movement of people have slowed down the movement of goods, hence leading to localized scarcity and price increases.

**Annex I Figure 1. Loss of jobs and poverty.**




*Source: Authors' computations based on UNHS 2016/17 data*

**Annex 1 Figure 2. Increases in poverty rate for full sample resulting from price shocks.**




*Source: Authors' computations based on UNHS 2016/2017.*

However, while Annex I Figures 1 and Annex I Figure 2 assume that the unemployment and price shocks are experienced separately, the current social distancing measures are impacting both jobs and prices simultaneously. Hence the inclusion of the combined scenario in Chapter 6.

## ASSUMPTIONS FOR DURATION OF LOCKDOWN ANALYSIS

### Annex I Table 3. Categorization of COVID-19 impact on types of employment, based on UNHS/UBoS categories.

| Type of employment | COVID-19 Impact Category | Freq. | Percent |
|---|---|---|---|
| Paid employee (not casual labourer in agric.) | See Table 10 | 6,721,902 | 17.93 |
| Paid employee (casual labourer in agric.) | Low-Medium *Losing 25% of income for lockdown duration | 1,848,205 | 4.93 |
| | | 10,644,749 | 28.39 |
| Subsistence farmer only | | 14,660,827 | 39.10 |
| Self employed | Medium-high *Losing 75% of income for lockdown duration | | |
| Contributing family workers | | 201,100 | 0.54 |
| Others | | 54,008 | 0.14 |
| Unemployed | | 781,514 | 2.08 |
| Not working | | 2,586,467 | 6.90 |
| **Total** | | **37,498,772** | **100.00** |

*Categorizations based on ILO (2020).*
**Actual percentages of income lost is speculative for the purposes of the scenario analysis, and while it is based first on the status or type of employment, it does not necessarily reflect perfectly those with formal contracts, who may not lose any income.*
*Data source: UNHS 2016/17.*
*Note: Unemployed (freq. 781,514, 2.08 percent), and not working (freq. 2,586,467, 6.90 percent) are not included in loss.*

## Annex I, Table 4. Categorization of COVID-19 impact on sectors of primary employment of household head, for the 17.9 percent of Ugandans indicated in Annex I Table 3 as paid employees not in casual labour in agriculture.

| Household head's primary employment | COVID-19 impact category | Frequency | Percentage |
|---|---|---|---|
| **Services including utilities** | Low *Losing 25% of income for lockdown duration | 332,612 | 4.95 |
| **Information and Communication** | | 44,457 | 0.66 |
| **Professional, Scientific, and Technical** | | 434,855 | 6.47 |
| **Public Administration and Defence** | | 340,183 | 5.06 |
| **Education** | | 931,693 | 13.87 |
| **Human Health and Social Work Activities** | | 207,186 | 3.08 |
| **Activities of Extraterritorial Organ** | | 22,453 | 0.33 |
| **Agriculture, Forestry, and Fishing** | Low-Medium *Losing 25% of income for lockdown duration | 183,304 | 2.73 |
| **Mining and Quarrying** | Medium *Losing 50% of income for lockdown duration | (under other categories in Table 3) | |
| **Construction** | | 1,238,086 | 18.43 |
| **Financial and Insurance Activities** | | 114,386 | 1.70 |
| **Other Service Activities** | | 185,304 | 2.76 |
| **Activities of Households as Employer** | | 39,557 | 0.59 |
| **Transportation and Storage** | Medium-high *Losing 75% of income for lockdown duration | 1,068,919 | 15.91 |
| **Arts, Entertainment, and Recreation** | | (under other categories in Table 3) | |
| **Manufacturing** | High *Losing 90% of income for lockdown duration | 449,648 | 6.69 |
| **Trade, including Wholesale and Retail, Repair** | | 552,086 | 8.22 |
| **Accommodation and Food Service** | | 177,530 | 2.64 |
| **Real Estate Activities** | | (under other categories in Table 3) | |
| **Administrative and Support Service** | | 397,259 | 5.91 |
| **Total** | | **6,719,520** | **100.00** |

*Categorizations based on ILO (2020).*

**Actual percentages of income lost is speculative for the purposes of the scenario analysis, and while it is based first on the status or type of employment, it does not necessarily reflect perfectly those with formal contracts, who may not lose any income.*

*Data source: UNHS 2016/17.*

## FINDINGS FOR FOUR-WEEK LOCKDOWN ANALYSIS

This supplementary scenario corresponds to the eight-week and twelve-week scenarios presented in the main report section 6.1 "TEMPORAL EFFECT OF LOCKDOWN DURATION ON POVERTY RATES." As a result of a four-week lockdown, it is possible that the poverty rate could increase as much as 2.3 percentage points, meaning that 866,465 additional Ugandans become poor due to the 4-week loss of income. The movement in terms of worsening poverty status due to the 4-week lockdown is presented in Annex1, Table 6; there were no non-poor that became poor, but there was a significant impact in terms of non-poor becoming insecure and insecure becoming poor. However, with Government support for essential needs, particularly support that is more widespread than only Kampala, this could be cut to an increase in poverty of approximately 0.34 percentage points. If Government support is only to Kampala and Wakiso, the increase in poverty rate is not reduced at all, but it does help to reduce the increase in insecurity (non-poor becoming insecure) by a small margin of 0.5 percentage points (Annex 1, Table 5). Further, the nationwide Government support is an equalizer that brings the poverty rates closer to original trend levels.

**Annex I Table 5. Results of Scenario 1 analysis.**

| Poverty Category | Base *Population* | *Freq.* | 4 Week Lockdown *Population* | *Freq.* | GoU support Kampala *Population* | *Freq.* | GoU support all Population | *Freq.* |
|---|---|---|---|---|---|---|---|---|
| Poor | 8,032,202 | **21.42** | 8,898,667 | **23.73** | 8,898,667 | 23.73 | 8,161,153 | **21.76** |
| Non-poor insecure | 15,347,787 | 40.93 | 15,458,636 | 41.22 | 15,438,719 | 41.17 | 15,446,338 | 41.19 |
| Non-poor | 14,118,784 | 37.65 | 13,141,470 | 35.05 | 13,161,387 | 35.10 | 13,891,282 | 37.04 |
| **Total** | **37,498,773** | **100.00** | **37,498,773** | **100.00** | **37,498,773** | **100.00** | **37,498,773** | **100.00** |

*Data source: Author's calculations from UNHS 2016/17.*

**Annex I Table 6. Movement from base poverty status to new poverty status following four-week lockdown scenario; overall percentages of movement presented below.**

| Base category | Poor after 4-week lockdown | Non-poor insecure after 4-week lockdown | Non-poor after 4-week lockdown | Total |
|---|---|---|---|---|
| Poor | 8,032,202 | 0 | 0 | 8,032,202 |
| % | 100.00 | 0.00 | 0.00 | 100.00 |
| Non-poor insecure | 866,465 | 14,481,322 | 0 | 15,347,787 |
| % | 5.65 | 94.35 | 0.00 | 100.00 |
| Non-poor | 0 | 977,314 | 13,141,470 | 14,118,784 |
| % | 0.00 | 6.92 | 93.08 | 100.00 |
| Total | 8,898,667 | 15,458,636 | 13,141,470 | 37,498,773 |
| % | 23.73 | 41.22 | 35.05 | 100.00 |

*Data source: Author's calculations from UNHS 2016/17.*

**Annex I Table 7. Worsening in poverty status as a result of 4-week lockdown, by region and urban/rural.**

| Region | Non-poor became insecure | Insecure became poor | Total |
|---|---|---|---|
| Central rural | 216,936 | 100,762 | 5,524,714 |
| % | 22.20 | 11.63 | 14.73 |
| Central urban | 138,519 | 37,867 | 4,783,156 |
| % | 14.17 | 4.37 | 12.76 |
| East rural | 95,333 | 271,652 | 8,501,132 |
| % | 9.75 | 31.35 | 22.67 |
| East urban | 31,588 | 36,223 | 1,310,639 |
| % | 3.23 | 4.18 | 3.50 |
| North rural | 166,825 | 221,903 | 6,604,132 |
| % | 17.07 | 25.61 | 17.61 |
| North urban | 43,268 | 32,088 | 1,212,695 |
| % | 4.43 | 3.70 | 3.23 |
| West rural | 216,100 | 143,149 | 7,748,920 |
| % | 22.11 | 16.52 | 20.66 |
| West urban | 68,745 | 22,822 | 1,813,384 |
| % | 7.03 | 2.63 | 4.84 |
| Total | 977,314 | 866,465 | 37,498,773 |
| % | 100.00 | 100.00 | 100.00 |

*Data source: Author's calculations from UNHS 2016/17.*

These findings provide evidence to support expansion of Government food, income, and essential needs distributions to those outside of Kampala and Wakiso. Although the urban poor and those employed in the highest impact sectors will be greatly negatively impacted, the lockdown impacts many households in rural areas far from Kampala.

## ASSUMPTIONS FOR SOCIAL PROTECTION MITIGATION SCENARIOS

The SIR modelling includes assumptions regarding the impact of loss of employment on expenditure (Annex I Box 1), and also the basic reproduction rate of the virus. In the scenarios and micro- simulations run, not only can greater loss of income increase the poverty rates associated with the COVID-19 crises but also the higher viral reproduction rate. This report presents the findings only of the micro-simulation results assuming the most conservative basic reproduction rate of 2. Figures illustrating the additional variations, 2.5 and 3, are also presented below but the full results are available in UNICEF and EPRI (2020); or UNICEF, UBoS, Cardiff University, Bristol Poverty Institute (2020).

## Annex I Table 8. Assumptions for SIR modelling

| GENERAL ASSUMPTIONS | | |
|---|---|---|
| **Birth rate (daily)**[115] | 0.000043 | |
| **Basic reproductive ratio**[116] | 2.5 | |
| | **CHILDREN UNDER 1** | **REMAINING POPULATION** |
| **Total population**[117] | 1,559,208 | 44,181,792 |
| **Death rate (daily)** | 0.0000562024 | 0.000042 |
| **Recovery rate (daily)** | 0.07 = 1/14 days[118] | 0.07 = 1/14 days |
| | **CHILDREN UNDER 5** | **REMAINING POPULATION** |
| **Total population** | 7,795,039 | 37,944,961 |
| **Death rate (daily)** | 0.0000150385 | 0.000048 |
| **Recovery rate (daily)** | 0.07 = 1/14 days | 0.07 = 1/14 days |
| | **ELDERLY 60+** | **REMAINING POPULATION** |
| **Total population** | 1,476,010 | 44,264,990 |
| **Death rate (daily)** | 0.0000528851 | 0.000042 |
| **Recovery rate (daily)** | 0.04 = 1/28 days | 0.07=1/14 days |
| | **ELDERLY 80+** | **REMAINING POPULATION** |
| **Total population** | 89,687 | 45,651,313 |
| **Death rate (daily)** | 0.0002228114 | 0.000042 |
| **Recovery rate (daily)** | 0.04 = 1/28 days | 0.07=1/14 days |
| | **URBAN POPULATION** | **REMAINING POPULATION** |
| **Total population** | 10,886,358 | 34,854,642 |
| **Death rate (daily)** | 0.0000072872[119] | 0.000054 |
| **Recovery rate (daily)** | 0.07 = 1/14 days | 0.07 = 1/14 days |
| | **REFUGEE POPULATION** | **REMAINING POPULATION** |
| **Total population**[120] | 1,423,377 | 44,317,623 |
| **Death rate (daily)** | 0.0000004760 | 0.000044 |
| **Recovery rate (daily)** | 0.07 = 1/14 days | 0.07 = 1/14 days |

115 Based on UNDESA World Population Prospects 2019. This is also the case for all death rates except that of refugees – which is based on https://data2.unhcr.org/en/documents/download/70081
116 Based on the middle of WHO recommendations, which state that the basic reproductive ratio of COVID-19 is between 2 and 3.
117 These numbers were retrieved from the UNDESA World Population Prospects 2019.
118 These refer to the days that it takes an individual to recover from COVID 19 – excluding the incubation period.
119 This needs to be verified.
120 The refugee population was obtained from https://data2.unhcr.org/en/country/uga

**Annex 1: Box 1. Assumptions on the impact of loss of employment on expenditure**

SCENARIO 1:

1. Expenditure remains the same for individuals that are working in industries not affected by the lockdown and that have not been sick.
2. Expenditure reduced by 20% where employee has been fired, an MSME went bankrupt or an individual was unemployed.
3. Expenditure reduced by 5% for individual that was own account worker or a subsistence farmer and did not get affected by COVID-19.
4. Expenditure reduced by 10% for individual that was own account worker or a subsistence farmer and got affected by COVID-19.

SCENARIO 2:

1. Expenditure remains the same for individuals that are working in industries not affected by the lockdown and that have not been sick.
2. Expenditure reduced by 40% where employee has been fired, an MSME went bankrupt or an individual was unemployed.
3. Expenditure reduced by 10% for individual that was own account worker or a subsistence farmer and did not get affected by COVID-19.
4. Expenditure reduced by 15% for individual that was own account worker or a subsistence farmer and got affected by COVID-19.

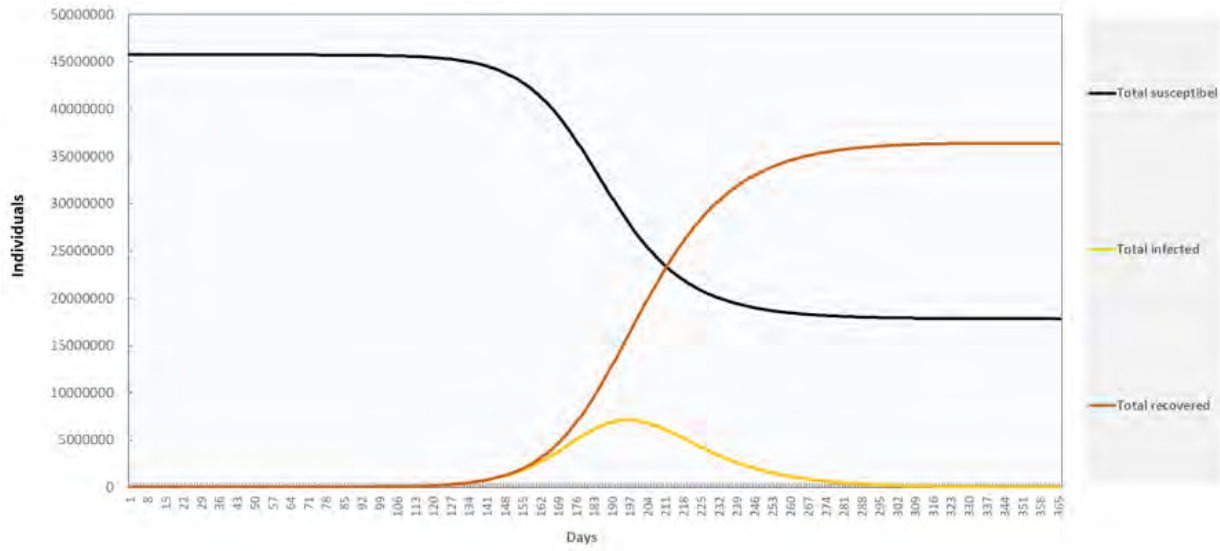
SCENARIO 3:

1. Expenditure remains the same for individuals that are working in industries not affected by the lockdown and that have not been sick.
2. Expenditure reduced by 60% where employee has been fired, an MSME went bankrupt or an individual was unemployed.
3. Expenditure reduced by 15% for individual that was own account worker or a subsistence farmer and did not get affected by COVID-19.
4. Expenditure reduced by 20% for individual that was own account worker or a subsistence farmer and got affected by COVID-19.

### BASIC REPRODUCTION RATIO OF 2

The peak number of infections will occur on day 196 after the start of the pandemic. At this point, just over half of the population will have been affected (including both infected and recovered) by COVID-19 in both the rural and urban areas of Uganda. This includes 5,576,913 individuals in the urban areas and 17,913,221 individuals residing in rural areas. With regards to poverty, prior to the COVID-19 outbreak, the poverty rate of Uganda was 21.4 percent. In urban areas this equated to 12.9 percent and in rural areas to 24.1 percent. Considering the unmitigated impact of the virus, six months into the pandemic, the poverty rates will increase (the magnitude of which will depend on the micro-simulation scenario considered - see Box 1 for assumptions).

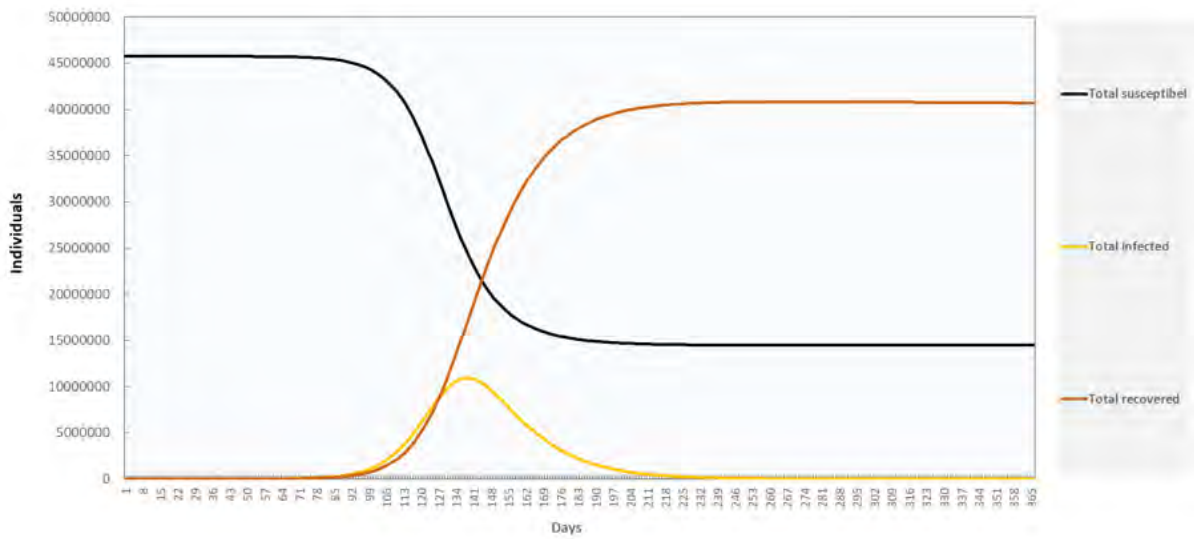
Annex I Figure 3. The results of the SIR model for Uganda given a basic reproduction ratio of 2




**BASIC REPRODUCTION RATIO OF 2.5**

The peak number of infections will occur on day 138 after the start of the pandemic. At this point, just over 62 percent of the population will have been affected (including both infected and recovered) by COVID-19 in both the rural and urban areas of Uganda. This includes 6,749,424 individuals in the urban areas and 21,655,046 individuals residing in rural areas.

**Annex- I Figure 4. The results of the SIR model for Uganda given a basic reproduction ratio of 2.5**



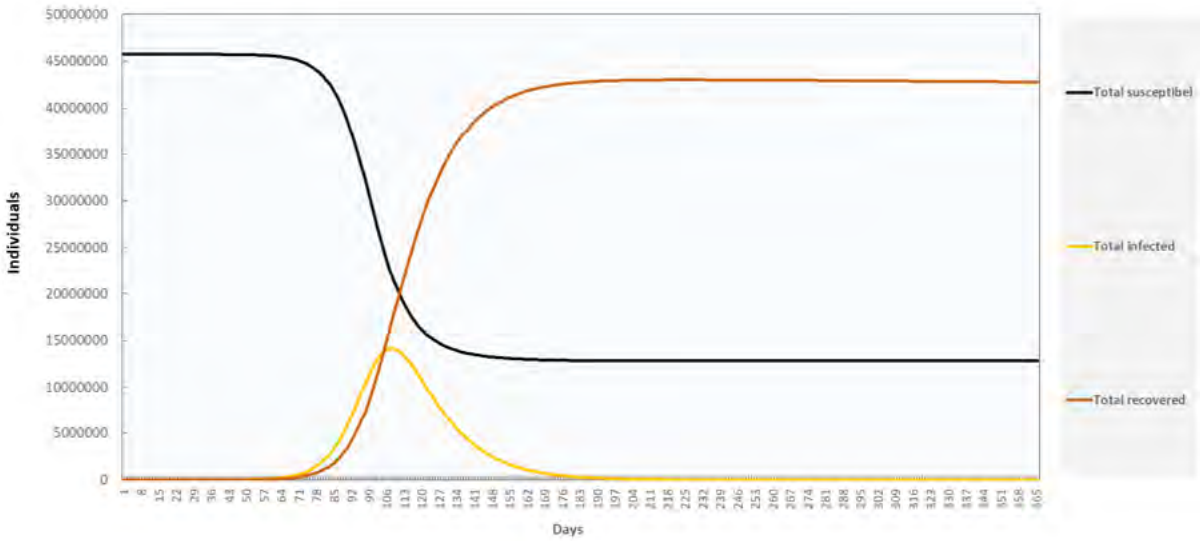

**Annex- I Table 9. Unmitigated poverty impacts for basic reproduction ratio of 2.5**

| | | Poverty impacts | | | | | |
|---|---|---|---|---|---|---|---|
| Pre COVID-19 | | 21.4% (0.06) 8,870,047.05 | | | | | |
| | | **Scenario 1** | | **Scenario 2** | | **Scenario 3** | |
| Post COVID-19 | Unmitigated | **Total** | | **Total** | | **Total** | |
| | | 25.3% (0.07) | | 28.2% (0.08) | | 31.0% (0.10) | |
| | | 10,493,183 | | 11,679,448 | | 12,837,942 | |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 15.6% (0.04) | 28.6% (0.09) | 18.3% (0.05) | 31.5% (0.09) | 21.5% (0.06) | 34.2% (0.11) |
| | | 1,618,938 | 8,874,166 | 1,902,283 | 9,777,013 | 2,232,853 | 10,605,036 |

## BASIC REPRODUCTION RATIO OF 3

The peak number of infections will occur on day 108 after the start of the pandemic. At this point, just below 70 percent of the population will have been affected (including both infected and recovered) by COVID-19 in both the rural and urban areas of Uganda. This includes 7,615,378 individuals in the urban areas and 24,420,108 individuals residing in rural areas.

### Annex- I Figure 5. The results of the SIR model for Uganda given a basic reproduction ratio of 3




### Annex- I Table 10. Unmitigated poverty impacts for basic reproduction ratio of 3

| POVERTY IMPACTS | | | | | | |
|---|---|---|---|---|---|---|
| **Pre-COVID-19** | | **21.4%** (0.06) 8,870,047 | | | | |
| | | **SCENARIO 1** | | **SCENARIO 2** | | **SCENARIO 3** |
| **Post COVID-19** | **Unmitigated** | **Total** | | **Total** | | **Total** |
| | | 25.4% (0.07) | | 28.4% (0.08) | | 31.2% (0.10) |
| | | 10,525,513 | | 11,759,444 | | 12,917,110 |
| | | **Urban** | **Rural** | **Urban** | **Rural** | **Urban** | **Rural** |
| | | 15.7% (0.04) | 28.6% (0.09) | 18.5% (0.05) | 31.7% (0.10) | 21.6% (0.06) | 34.4% (0.11) |
| | | 1,631,316 | 8,894,346 | 1,922,567 | 9,836,933 | 2,246,687 | 10,670,546 |

# Annex II: iSDG Model Methodology Detail

**The following description of the iSDG model, which is presented in Chapter 7, is adapted from MI (2020).** The integrated-SDG (iSDG)-Uganda model is structured to analyse medium-term and long-term development issues at the national level. The model integrates the economic, social, and environmental aspects of development and applies the systems dynamics methodology (Sterman, 2000). Originally designed to inform interventions selected for NDPIII programmes, the model is comprehensive, and its level of aggregation make it an appropriate tool to analyse different Government strategies (Allen et al, 2016; UNEP, 2014). The analysis itself is not intended to provide a forecast, but to highlight complex inter-sectoral connections, thereby enabling policymakers to approach the of design public policies from a holistic perspective.

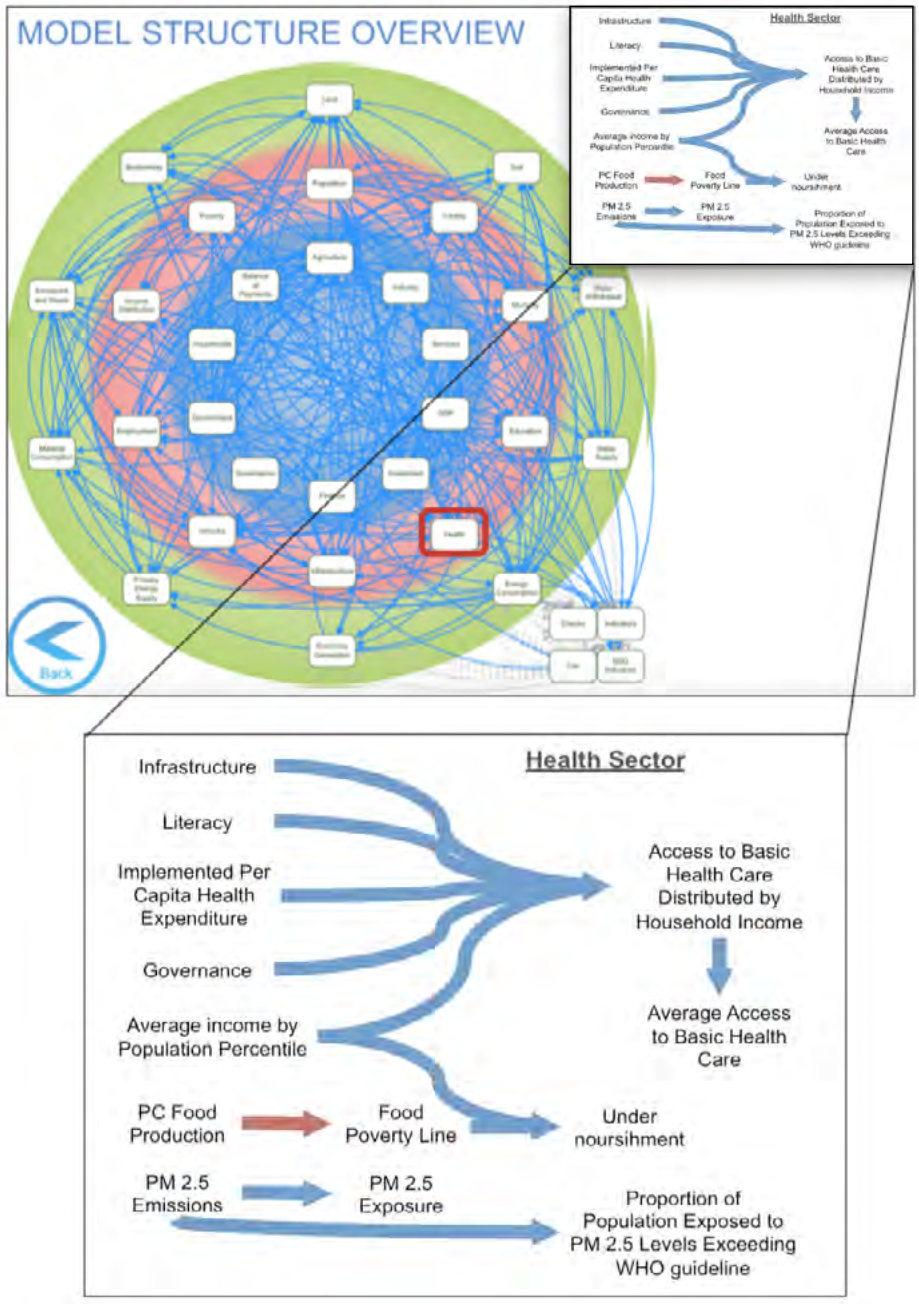
**This model is comprised of 30 interacting modules (Annex II Figure I).** The 30 modules are divided into economic (blue), social (red) and environmental (green). Each individual module could be considered as a separate model, which links to other modules and calculates certain outcome variables based on inputs from other modules and historical data. However, linking the modules together allows the analysis of dynamic interactions across modules. The dynamic interactions capture feedback loops, non-linearity and delays, all of which are fundamental elements of complex social/economic/environmental systems including those critical in development. Economic activities take place within society, from which social resources are drawn to generate economic value, limited and feeding back into the carrying capacity of the natural environment.

**The model was subjected to extensive validation.** The structure of iSDG-Uganda model and models it is based on was validated primarily through peer-reviewed research by the modelling team. iSDG-Uganda has been customized to the conditions of Uganda through a specific calibration process, relying on historical data from 1995 until the present moment. Data has been collected from both international and national data sources. National data sources were prioritized, with international data filling gaps where national data was unavailable or local data did not exist for specific indicators. Collection and analysis of data took place in close coordination with NPA and UNDP-Uganda technical experts, and external experts when existing data was insufficient. Where data was still missing, assumptions were made in order to fill in the gap. All of the historical data, parameters and assumptions were discussed with and ultimately confirmed by the partners from NPA and UNDP. For further detail on the calibration of modules, data sources, and limitations of the model and approach, see the Millennium Institute's final report on the iSDG-Uganda.[121]

**Importantly, due to the rapidly changing nature of the COVID-19 crisis the scenario analysis presented for this report is limited in scope and was highly simplified.** This analysis should be interpreted cautiously, in general terms.

121 Dynamic analysis of SDGs in the context of Uganda's Third National Development Plan. Millennium Institute, February 2020.

## Appendix II Figure I. Structure of the iSDG model and the Health Sector in particular.



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