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The impact of COVID-19 on industries without smokestacks in Uganda

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Abstract

In Uganda, the spread of COVID-19 and its economic impacts gained momentum in March 2020 when the country's first case was reported. By March 30, the government of Uganda had declared a nation-wide lockdown in addition to other critical measures to minimize its spread. The impacts of the virus itself together with government initiatives to control its spread have been felt in the political, social, and economic spheres of life of the country. Simply put, there have been losers and winners as the pandemic took its toll on the economy. This brief examines the potential economic impact of COVID-19 on Uganda's industries without smokestacks as a follow-up on the previous work undertaken in the same sectors prior to the pandemic. The aim is to ascertain whether the recommendations made prior to the pandemic are still relevant.

1. Economic outlook amid COVID-19

According to World Bank (2014), the impact of a pandemic on economic well-being operates through two distinct channels: through the direct and indirect effects of the pandemic, and through the behavioral effects resulting from the fear of contagion. COVID-19 pandemic has had significant and varying impacts on several sectors of the Ugandan economy. The impacts, both positive and negative, have been felt in the real, fiscal, external, and monetary sectors.

Box 1: Highlights of COVID-19 actions taken by government

In March 2020, there was suspension of public gatherings (places of worship, pubs, weddings, and concerts); public transport was suspended for 14 days; only private cars with not more than three occupants were allowed; and later a nationwide lockdown was declared with no private vehicles allowed to move unless authorization was granted. However, by June 2020, the government started easing lockdown restrictions in which public transport resumed and distribution of free masks and repatriation of “distressed” citizens commenced. By September 2020 airports and land borders reopened after 6 months of closure, and, on October 1, 2020, international flights resumed.

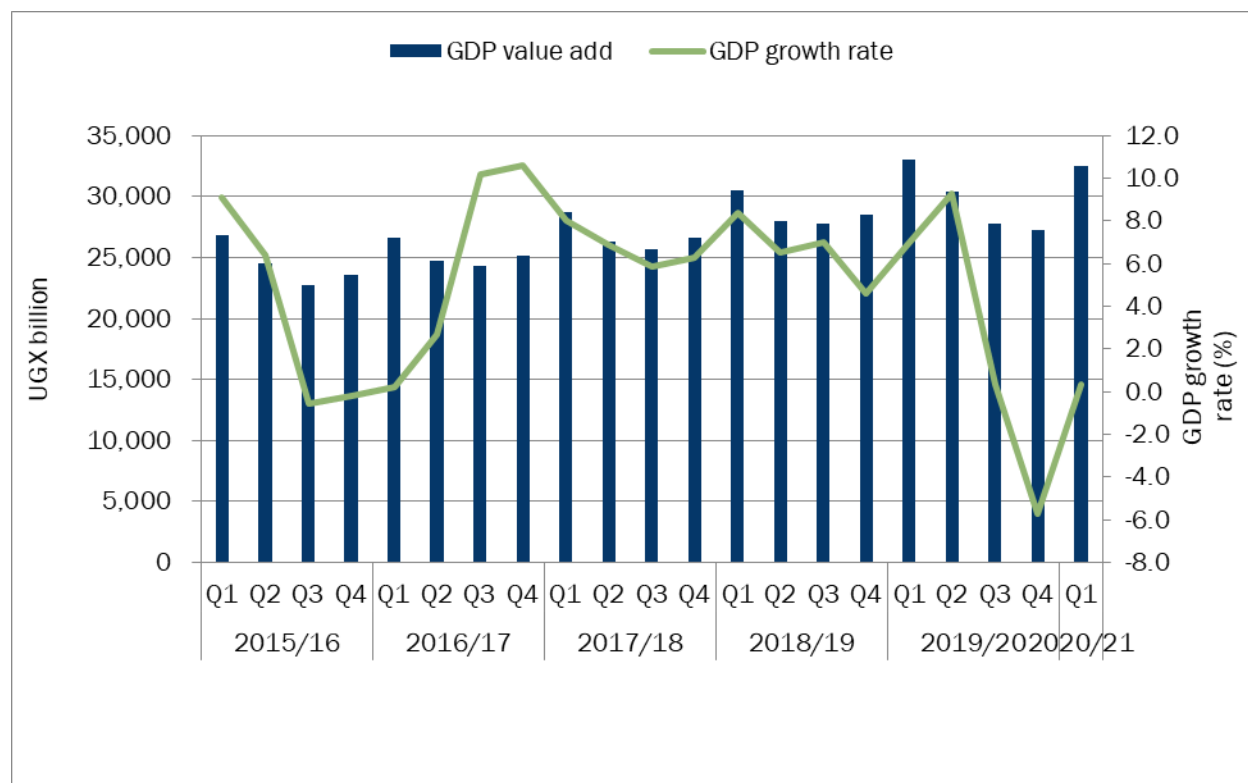
Source: Authors' compilation, 2021.

Uganda's GDP growth rate, which had averaged 5.2 percent over the previous five years, was negatively affected as a result of the COVID-19 (Figure 1). The far-reaching negative effects this pandemic had on production, taxation, financial flows, employment, money markets, and poverty, among others, has led to this negative growth, with further adverse impacts on employment. Looking at quarterly comparisons, while the growth rate prior to the pandemic in the third quarter of 2018/19 was at 7.0 percent, in the third quarter of 2019/20, it had declined to 0.3 percent. Then, while the fourth quarter 2018/19 growth rate was at 4.6 percent, it had declined to -5.7 percent during the same period in 2019/20. The slow and negative growth in the third and fourth quarters of 2019/20 reveal a clear impact of the pandemic on the economy. During this period, the pandemic effects were at their peak, consequently leading to an almost near stand-still of the real economy¹ during the nationwide lockdown. The negative growth corresponds to a decline in GDP value added at constant prices experienced from UGX 28.5 trillion (approx. \$7.7 billion)² in Q4 2018/19 to UGX 27.2 trillion (\$7.3 billion) in Q4 2019/20 representing a 4.6 percent decline. Nonetheless, sectors such as agricultural and transportation (trade in particular, both domestic and across borders) were more resilient as they continued to grow. In the first quarter of 2020/21, there was a slight recovery attributed to an ease in lockdown measures, which enabled resumption of the real sector and other activities in the economy.

1 In Uganda, there are four broad categories of sectors with specific economic activities. These are real, fiscal, external, and monetary sectors. Specifically, the real sector is referred to as real after adjusting for inflation. Real sector refers to real economic transactions of an economy. The quantification, description, and presentation of these transactions takes place within the framework of the National Social Accounting Matrix (SAM). The real economy refers to all real or non-financial elements of an economy. A barter economy is an example of an economy with no financial elements. All goods and services are purely represented in real terms.

2 Exchange rate as of June 30, 2020 was: \$1 = UGX 3,720.13.

Figure 1: Quarterly unadjusted GDP value added and growth rate at constant 2016/17 prices, UGX billion, 2015/16-2020/21



Notes: 1/3: GDP excludes adjustments (taxes on products).
 2/3: Q1 (July-Sept); Q2 (Oct-Dec); Q3 (Jan-March); Q4 (April-June).
 3/3: Exchange rate as of June 30, 2020 was \$1 = UGX 3,720.13.
 Source: Authors' calculations using Uganda Bureau of Statistics data, 2021.

The COVID-19 pandemic resulted in a slowdown in investment and in job losses. In fact, early in the pandemic, EPRC (2020) forecasted that a persistent pandemic could lead to about 3.8 million temporary job losses and 0.6 million (625,957) permanent job losses. The estimated job losses were greatest in the services sector where 2.9 million jobs were estimated to be lost temporarily and 0.475 million jobs were permanently lost. As of this writing, confirmed numbers on actual losses through early 2021 were not yet available. Indeed, companies during lockdown had tough decisions to make between making profit, operating at a loss, and maintaining labor productively. Subsequent joblessness led to ill health, deepened vulnerability, and poverty.

2. Performance of IWOSS sectors in pandemic times

2.1. Impact on output

With regard to the impact of the pandemic from an output (measured as GDP at constant market prices) perspective, a dire economic picture emerges in which COVID-19 had a large negative impact on real GDP, with more negative impacts observed in IWOSS sectors than non-IWOSS sectors. First, output generally declined during the pandemic in comparison to pre-COVID-19 period (see Table 1 Q3 and Q4 of 2019/20 and Q1 of 2020/21). Specifically, output in IWOSS sectors declined in Q3, 2019/20 relative to Q2 by UGX 1,148.3 billion representing 9.1 percent reduction. Conversely, output in non-IWOSS reduced by UGX 1,296.2 billion representing 8.6 percent reduction over the

same period. In the subsequent fourth quarter, the situation further deteriorated, especially in IWOSS sectors. Output in IWOSS sectors reduced by UGX 1,928.3 billion from Q2—a 15.2 percent decline. In short, IWOSS sectors have been slow to recover in comparison to non-IWOSS sectors and manufacturing—hence the need to rethink the resilience question of IWOSS sectors amid such shocks as postulated in the case study.

Second, GDP growth rates, consistent with the output measure, depict an unusual recovery narrative: In Q3 of 2019/2020, the pandemic first reversed the country's growth trends, especially for IWOSS and manufacturing sectors, which fell to -0.1 and -0.4 percent, respectively, and worsened in Q4 of 2019/20. Despite this trend, the recovery after the national lockdown varied across sectors, with more robust growth noted in the manufacturing and non-IWOSS sectors. More specifically, in Q1 of 2020/21, as lockdown measures were relaxed, manufacturing and non-IWOSS sectors experienced positive growth of 1.6 percent and 6.6 percent, respectively, while IWOSS sectors still recorded negative growth of 7.2 percent (Table 1).

When considering specific IWOSS sectors' performance when explaining the GDP value added (Figure 2) and growth narrative (Figure 3), we note that Uganda's exports declined on account of reduction in global demand, reduction in commodity prices (especially the fresh products of horticulture and floriculture), and reduction in tourist inflows. The Ministry of Finance, Planning and Economic Development (MoFPED, 2020) had predicted that tourism earnings would decrease by 90 percent in the remaining quarter of FY 2019/20. Figure 2 shows that the horticulture and export crops sector's GDP declined to UGX 776 billion in Q2 from UGX 1.1 trillion in Q1 and continued with this trend in Q3 and Q4 of 2019/20. Moreover, the tourism sector expected widespread losses throughout the sector, as accommodation (hotels/restaurants); travel and tour agencies; bars; and international conferences and summits lost massive amounts of travelers, and, thus, business. In fact, tourism enterprises registered losses due to cancellations between Q4 (April and June 2019/20) amounting to UGX 361 billion, much worse than the losses of UGX 119 billion recorded in Q3 (Jan-March 2019/20) (Figure 2). Tourism's losses in Q3 were due to the March 2020 lockdown as the pandemic was starting to take root as well as potential tourists' reluctance to travel. In agro-processing, the dependence of Ugandan manufacturers—including some agro-processors—on China and other countries for most of their raw materials and intermediate inputs led to shortfall in output which in turn led to negative growth of the agro-processing sector because of constraints in supply chains and disruptions in trade (Table 1). In fact, small and medium enterprises (SMEs), which constitute 13 percent of Uganda's economy, deal mostly with China.

Table 1: Quarterly GDP at constant market prices (UGX billion) and growth rate

	2017/18				2018/19				2019/20				2020/21
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<i>Panel A: GDP value added</i>													
Overall	28,770.5	26,273.9	25,723.2	26,645.1	30,545.3	27,949.2	27,777.0	28,530.0	33,035.9	30,419.2	27,750.9	27,221.3	32,478.6
Total IWOSS	11,355.4	11,040.6	10,861.4	11,098.8	11,996.1	11,553.8	11,591.3	11,826.5	13,175.1	12,671.8	11,523.5	10,743.5	12,604.1
Manufacturing	2,231.4	2,325.0	2,359.9	2,319.0	2,398.2	2,550.8	2,534.7	2,468.3	2,639.5	2,740.9	2,517.0	2,185.1	2,719.8
Total non-IWOSS	15,183.8	12,908.4	12,501.9	13,227.4	16,151.0	13,844.6	13,650.9	14,235.2	17,221.4	15,006.5	13,710.3	14,292.7	17,154.7
<i>Panel B: Growth rate</i>													
Overall	8.0	6.9	5.9	6.3	8.4	6.5	7.0	4.6	7.0	9.3	0.3	-5.7	0.3
Total IWOSS	10.1	12.0	7.9	4.7	5.9	2.4	4.3	4.9	10.2	10.3	-0.1	-8.6	-7.2
Manufacturing	2.8	2.4	0.8	3.8	3.9	5.1	3.9	3.4	5.3	3.9	-0.4	-6.0	1.6
Total non-IWOSS	11.3	6.1	8.9	10.5	15.3	12.1	12.8	5.5	5.5	13.6	1.4	-2.6	6.6

Notes: 1/4: We adjust categories of sectors as reported in the Uganda Statistical Abstracts into IWOSS and non-IWOSS sector categories. For where we could not group GDP at IWOSS level, we used shares of broader values as categorized in the Supply Use Tables (SUT) to breakdown the sectors. This was done as follows: Trade and repairs was broken it down into Maintenance and repairs, trade formal, and informal; manufacturing was broken down into agro-processing and manufacturing; Agriculture was broken down into Horticulture and exports, and Agriculture. Other categories were aggregated as follows: Tourism comprises of accommodation & food services plus arts, entertainment & recreation; ICT comprises of information & communication; Transport comprises of transport and storage; Finance, business and professional services comprises of finance & insurance, real estate activities plus professional, scientific and technical; Mining comprises of mining & quarrying; Utilities comprises of electricity & water; Domestic services and household comprises of activities of households; Government comprises of administrative & support services plus public administration; and Other services comprises of education, human health & social work plus other service activities.

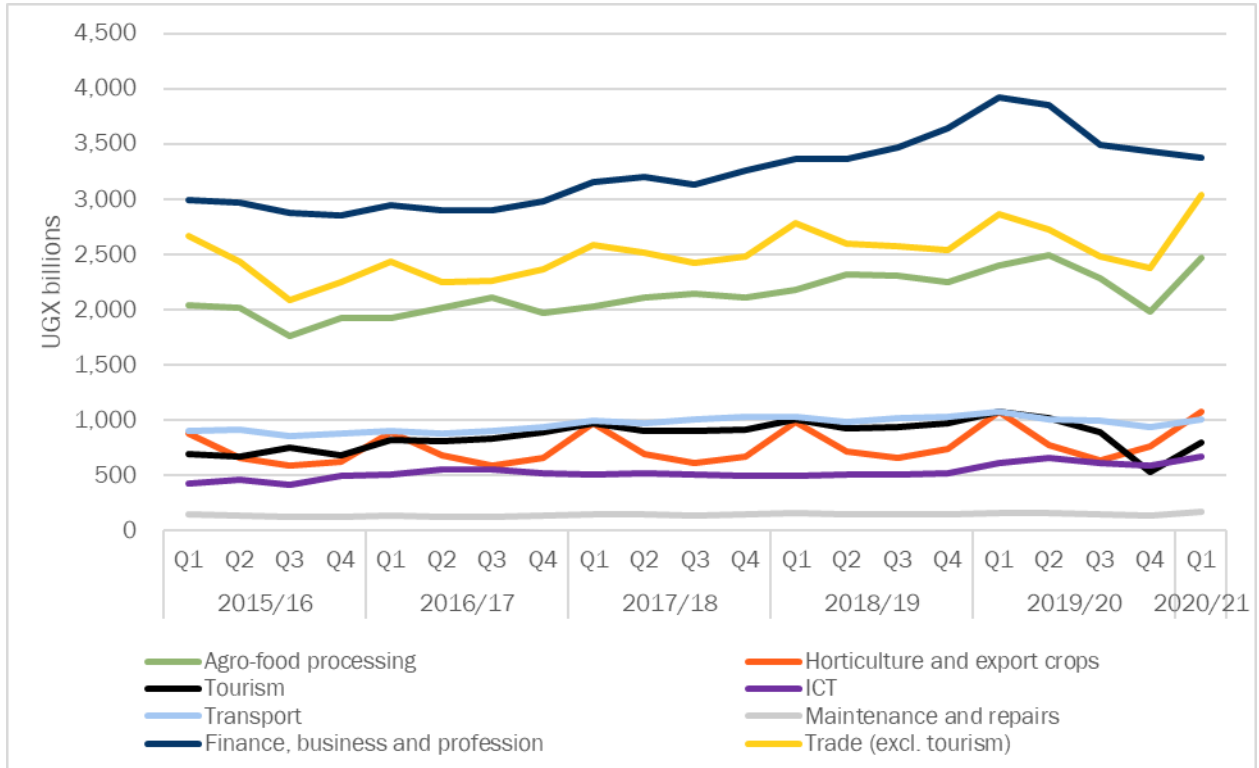
2/4: The overall GDP excludes adjustments (taxes on products).

3/4: Q1 (July-Sept); Q2 (Oct-Dec); Q3 (Jan-March); Q4 (April-June).

4/4: Exchange rate as of June 30, 2020 was \$1 = UGX 3,720.13

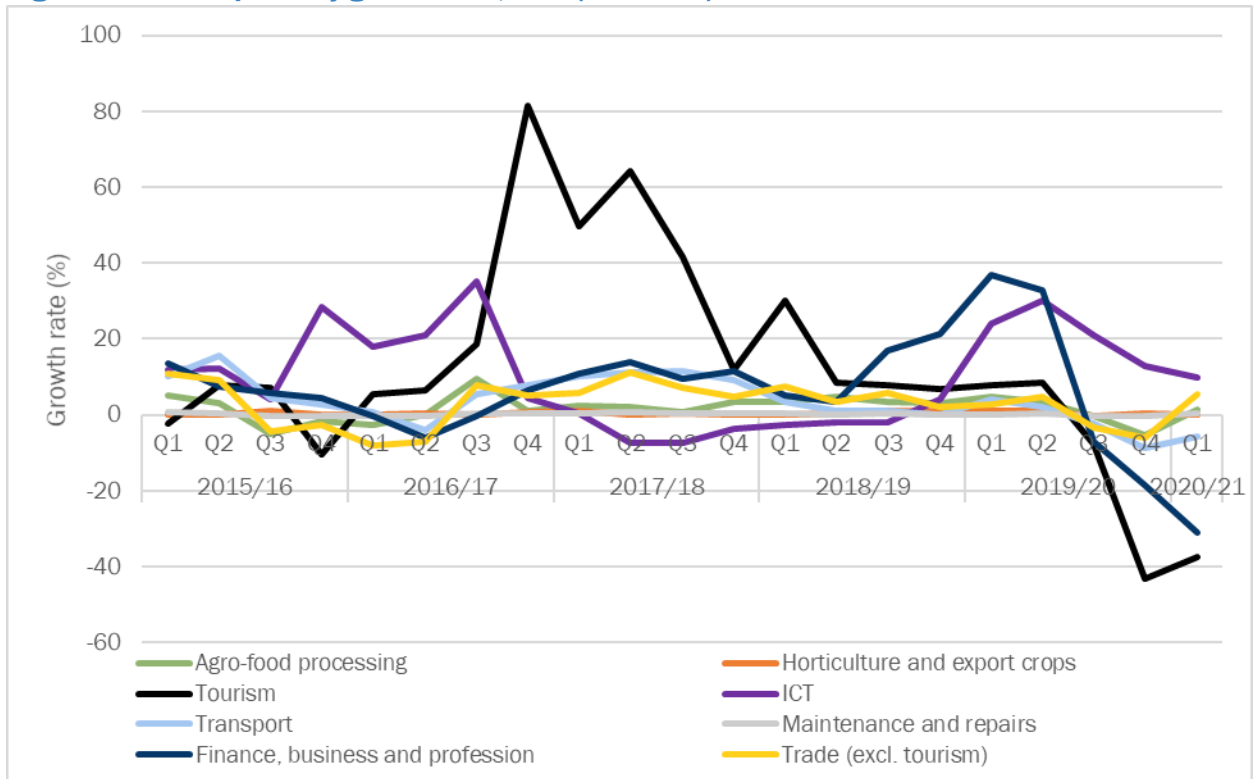
Source: Authors' calculations using Uganda Bureau of Statistics data, 2021.

Figure 2: IWOSS quarterly GDP performance at constant market prices (UGX billion), 2015/16-2020/21



Note: Q1 (July-Sept); Q2 (Oct-Dec); Q3 (Jan-March); Q4 (April-June)
 Source: Authors' calculations using Uganda Bureau of Statistics data, 2021.

Figure 3: IWOSS quarterly growth rate, 2015/16-2020/21



Note: Q1 (July-Sept); Q2 (Oct-Dec); Q3 (Jan-March); Q4 (April-June).
 Source: Authors' calculations using Uganda Bureau of Statistics data, 2021.

Moreover, all IWOSS sectors except ICT experienced negative growth during the first six months of COVID-19 (i.e., Q3 and Q4) in Uganda (Figure 3). The positive growth in ICT can be explained by seemingly positive knock-on economic effects, including improvements in e-commerce and other innovations, such as ordering and delivery of food and other essentials online; and improvements in mobile money platforms and e-banking, among others. Table 2 in the annex provides details on growth rates for IWOSS, manufacturing, and non-IWOSS sectors.

Overall, in Uganda, COVID-19 had and still has far greater negative impacts on IWOSS sectors compared to other sectors of the economy. The progress of the recovery within IWOSS and non-IWOSS sectors has not been uniform. For example, agro-processing sectors are showing a strong recovery, owing to the input-supply chains remaining open (agricultural production) amid constrained transport systems. Manufacturing rebounded quickly partly due to its ability to diversify, for example, by switching production to much-needed sanitizers. Whereas other sectors are exhibiting recovery, tourism has continued to register negative growth, which could signal a continuous and permanent loss of formal and informal jobs within the sector.

2.2. Effect on employment and related activities

Given that majority of IWOSS sectors could not operate fully during the national lockdown (e.g., tourism, horticulture, transport, and agro-processing) due to COVID, earnings from international trade dropped with a significant number of jobs lost. Data under the IWOSS categories is not readily available, however, we discuss the impact COVID-19 has had and is still having on employment by specific IWOSS sectors considered in the Uganda case study (horticulture, agro-processing, and tourism).

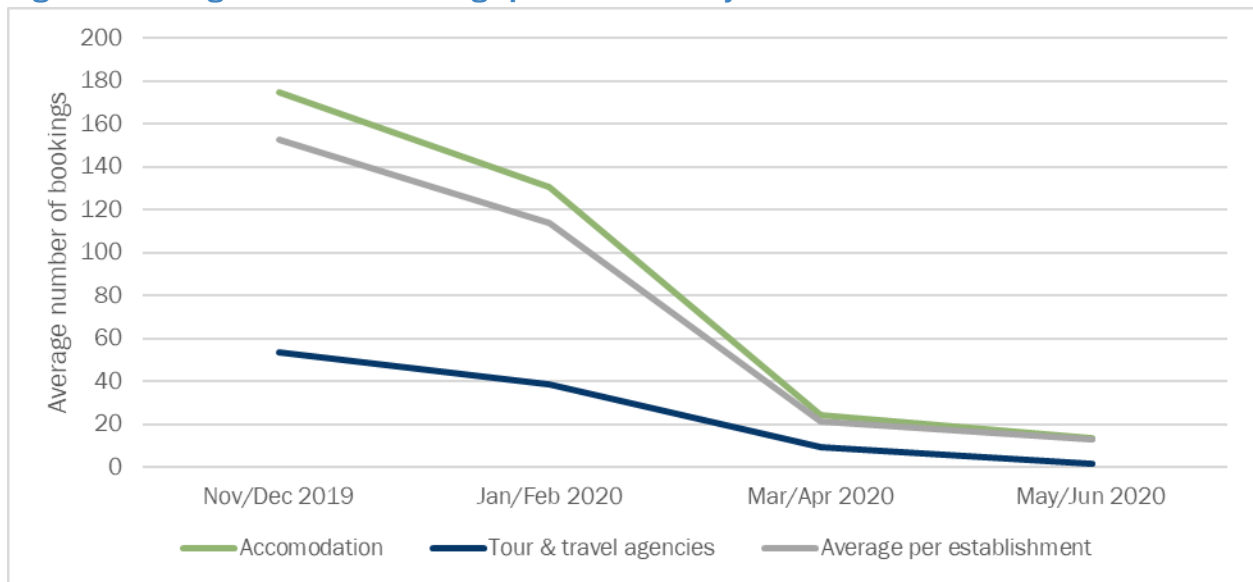
2.2.1. Tourism

Foreign tourist arrivals and domestic tourist movements are still very low due to heightened risk aversion; measures related to social distancing; and reduced demand of tourism services because of reduced disposable incomes. Due to the pandemic, over the past year the hospitality sub-sector faced low occupancy rates, which are expected to remain low. Even before any single case was reported, the top five hotels in the country³ had registered an estimated loss of \$2.09 million in cancelled bookings due to global travel restrictions and related anxieties (Devoghel et al., 2020). Between March and June 2020, the number of bookings per hotel establishment declined from about 175 prior to the pandemic (November/December 2019) to 14 in June 2020—a reduction of 92 percent (Figure 4). Consequently, a total of 448,996 hotel room bookings were cancelled between March and June, costing the hospitality subsector losses worth \$320.8 million (UGX 1.19 trillion).

Related, tour and travel businesses registered mass cancellations of bookings between March 2020 and June 2020 (Ministry of Tourism Wildlife and Antiquities (MTWA), 2020). The number of bookings per establishment declined from 54 in November/December 2019 to 2 in June 2020 (Figure 4), representing a 96.3 percent decline. These represented about \$30.4 million (UGX 0.11 trillion) in losses due to cancellations and the loss was projected to hit \$0.35 billion by December 2020 (ibid).

³ Serena Kampala Hotel, Sheraton Kampala, Kale Victoria Serena Golf resort and Spa, Pearl of Africa Hotel, Munyoyo Commonwealth Resort Hotel

Figure 4: Average number of bookings per tourism entity

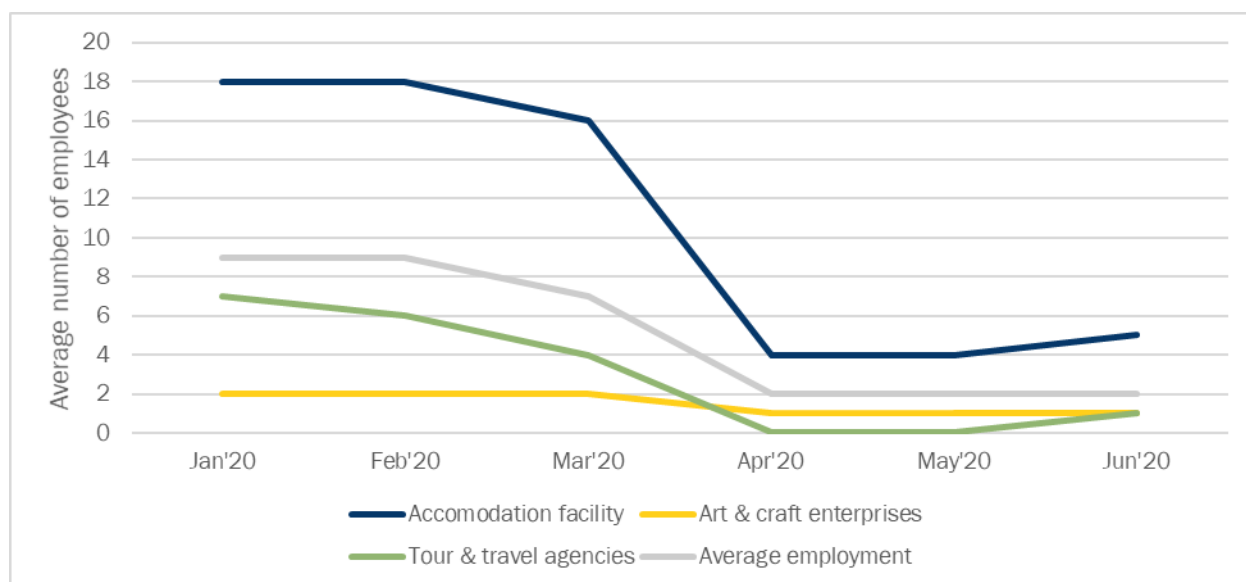


Note: The average shown in the figure includes both accommodation and travel agencies as well as tourism-related establishments outside of accommodation and travel agencies.
 Source: MTWA, 2020.

Furthermore, the tourism subsector of meetings, incentives, conventions, and exhibitions (MICE) also experienced massive losses. To minimize the import of COVID-19, the government of Uganda cancelled all international conferences that were to be hosted in Uganda—which included the U.N. G77 summit and the World Health Summit Regional meeting, both scheduled for April 2020. The two events were going to be held in Uganda for the very first time and would have been a big boost to the country’s international image and the tourism industry.

Job losses followed: In April 2020, at least 65 percent of tourism entities had temporarily laid off staff, and 30 percent of staff were terminated (United Nations in Uganda, 2020). Before the pandemic, tourism entities were employing an average of 9 workers per establishment (Figure 5). The hotel subsector alone was employing an average of 18 workers per establishment; tour and travel agencies were employing an average of 7; while art and craft enterprises were employing an average of 2. Since the outbreak in Uganda began, the tourism sector downsized significantly: About 2 workers per establishment had lost a job permanently by June 2020. Of all tourism subsectors, tour and travel agencies were hit hardest, experiencing an 85.7 percent reduction in employees between January and June 2020.

Figure 5: Number of employees per tourism establishment



Note: The average shown in the figure includes tourism-related establishments outside of accommodation, travel agencies, and art and craft enterprises.

Source: MTWA, 2020.

2.2.2. Horticulture and export crops

The horticulture sector in Uganda relies on foreign markets (whether flowers or fresh fruits and vegetables). According to the Executive Director of Uganda Flowers Export Association (UFEA), the flower industry had reached a near total collapse by end of March 2020, registering a drop of 90 percent in exports and 50 percent drop in prices.⁴ However, following the relaxation of COVID-19 restrictions in Uganda and globally, the flower industry has been on a recovery path since June and July 2020, with its export value peaking at \$6 million (UGX 22 billion).⁵ However, reduced demand induced by another lockdown in Europe—the main market for Ugandan flowers—led to a decline in earnings.

Concerning employment, a rapid assessment study conducted by Hivos East Africa (2020) among five flower farms in Kampala between April 29 and May 11, 2020 revealed that the farms had downsized their workforce by forcing them to go on leave without pay. About 1,360 out of 2,710 workers (50.2 percent) were sent home, of which, over 80 percent were women or youth. The few workers that were retained had to be accommodated at the farm premises, which increased operational costs. A manager at one of the flower farms reported that they spent an additional UGX 350,000 (about \$90) to maintain employees at the farm. The entire flower industry in Uganda employs more than 10,000 people, the majority (80 percent) of whom are women.⁶ According to UFEA, about 4,000 workers in the flower industry were sent home in April 2020. In another study conducted among 13 flower farms between May and October 2020,⁷ about 62 percent of the farms

4 Chopra, A. (2020). Uganda: Flower Exports drop by 90%, prices dip by half. Article in Daily Monitor published online dated Thursday March 26, 2020.

5 Kasemiire, C. (2020). Flower sales drop again after months of recovery. Article in Daily Monitor published online dated Monday December 14, 2020.

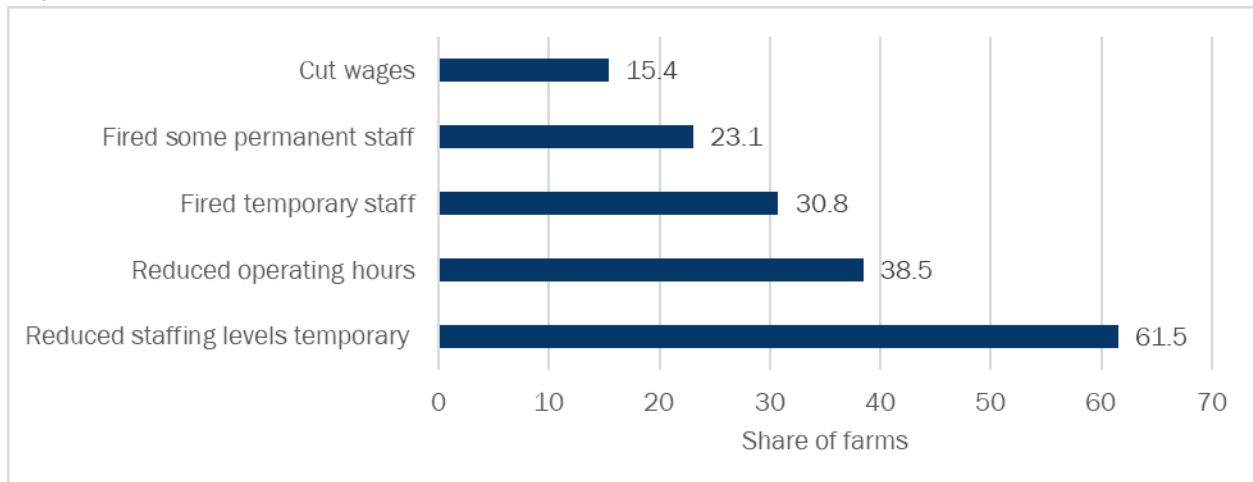
6 Daily Monitor. (2020). Flower exports recover, increase by 30 per cent. Article in Daily Monitor published online dated Wednesday August 19, 2020

7 Decent Work. (2020). Flowers-Data visual Uganda: Covid-19 impact. Accessed from <https://decentworkcheck.org/company-overviews/flower-farms-uganda/flowers-uganda-covid-19-impact> . Retrieved on March 30, 2020.

(eight farms) reported that they had to reduce the number of temporary staff while 23.1 percent of the farms (three farms) reported having fired some permanent staff (Figure 6). Other mitigation measures included cutting wages and reducing operating hours.

For fresh fruits and vegetables, the air freight services for the commodities were still 50 percent below normal operations by the end of August 2020 (Global Panel Opinion, 2020)⁸. Overall, the future of the horticulture industry is still uncertain for Uganda as lockdown measures persist in some European countries which are the leading importers of Uganda's horticultural products.

Figure 6: Employment-related response of flower farms to COVID-19 pandemic, May 11-October 22, 2020



Source: Decent Work, 2020.

2.2.3. Agro-processing

Because agriculture production activities continued during the lockdown, the extent of the impact of COVID-19 on the agro-processing industry was relatively moderate. Nonetheless, both local and foreign demand for agro-food products reduced due to diminished transportation and reduced incomes, leading to a fall in prices. As a result, food processing firms experienced revenue shortfalls and responded by cutting production levels. For instance, Kakira Sugar Works reduced sugar production by 60 percent because their large consumers (schools, hotels, restaurants, and religious and cultural ceremonies) were not operating (United Nations in Uganda, 2020). The dairy sector was severely hit by the drastic fall in prices due to reduced demand and revenue. Production capacity remained the same but consumption fell as consumers prioritized the purchase of necessities. The closure of schools, restaurants, and hotels reduced local demand for both fresh milk and other milk products. Moreover, trade with Kenya (the biggest market for Uganda's milk) was disrupted due to the lockdown and export restrictions. Meat processing also suffered as weekly cattle markets closed due to COVID-19 (Mukiza, 2020) and demand for processed meat products declined because most products are destined for the urban markets such as hotels, restaurants, and schools, which were closed during the lockdown.

⁸ Global Panel Opinion. (2020). OPED On Food Systems and Food Security Issues in Uganda. Business Ghana. Article published online on August 27, 2020

Like other sectors, food processing firms also laid off some workers and reduced salaries in response to COVID-19. Movement and COVID-related restrictions and individual behavior changes likely led to these outcomes.

3. Is the COVID-19 effect on Uganda’s IWOSS transitory or structural?

As earlier noted, COVID-19 led to a decline in Uganda’s GDP due to closure of business entities (both formal and informal), and a subsequent and significant decline in employment. Only firms leveraging digital platforms worked, but these instances were rare. As above, while not yet officially estimated, the pandemic effects on the tourism sector hit women far worse than men given their much higher participation in hospitality-related activities (e.g., hotels and restaurants). While the agriculture sector in Uganda was not heavily hit, agro-processing, an IWOSS sector heavily dependent on agriculture production for supply, suffered due to limited transportation of goods from production areas. Notably, most sectors resumed business when the total lockdown was lifted. A key informant in the agro-processing sector reported that the effect of the pandemic on the sector is transitory because most businesses/industries have not shifted from their line of businesses when they resumed operations. The KI further elaborated that the recovery is too high for it to have been a structural issue. Consistent with the KI, even Ministry of Finance, Planning and Economic Development and Bank of Uganda have reported that the economy is recovering steadily. The speed of the recovery hints that COVID-19 effects on overall employment are likely more transitory. However, in terms of sectors, the economy has seen transitions of labor from one sector to another, for example, from teaching in class or offices to burning charcoal, or to becoming boda boda rider, or to serving as a night watchmen, or to selling chapatti—all small businesses that are highly informal.

Regarding the future prospects of the tourism sector, a quicker recovery is expected in some sub-sectors than others. For instance, leisure visitors, who represent about 20 percent of all international visitors to Uganda, are not likely to return soon (MTWA, 2020), which will particularly impact entities such as tour operators and safari lodges that rely on the leisure market. As such, many tour operators, who have sound driving and interpersonal skills, have looked to alternative jobs. However, business travelers from within the East African Community, who constitute about 70 percent of all international visitors, are expected to resume faster (United Nations in Uganda, 2020); thus, cities where business visitors stay are also expected to recover faster.

The rise of technology during the pandemic will also have long-lasting effects: Indeed, during a launch of the e-commerce partnership between the United Nations Capital Development Fund (UNCDF) and Safeboda, the Ugandan Minister of Trade, Industry and Cooperatives reported that the pandemic has paved the way for e-commerce and this would never be reversed.⁹ During the launch, one of the first partnership market FFV vendors to embrace e-commerce mentioned that her daily sales were higher than they were before lockdown, and she attributed this to e-commerce, which also enables her to save for her children’s school fees on the e-wallet¹⁰.

Moreover, as a key informant noted, some jobs will never be recovered given the adoption of different working modalities (working online and from home). For example, during the lockdown,

9 NEWSABODE. (2020). New Normal-Uganda looks online for COVID crisis. Article published on line on August 15, 2020.

10 Ibid.

some agribusiness activities were compelled to go digital, which resulted in many cases with *more* profits than in the pre-COVID era—suggesting that such agribusinesses might be unlikely to look back. For instance, the online grocery platform Bringo Fresh¹¹ experienced a 150 percent increase in online orders immediately after the first COVID-19 case was reported in Uganda. The increase could have been triggered by increased demand for FFV, which are believed to enhance immunity. Consumers in the country are now discovering the link between healthy food and their well-being and switching to FFVs.¹² In this regard, the emergence of COVID-19 has increased local demand for FFV, which was minimal pre-COVID. Bringo’s public relations officer also reported that the firm is engaging and buying more from farmers using the digital platform. Such a move is likely to incentivize the youth, majority of whom are tech-savvy, to engage in production of FFV to meet the increased demand.

The COVID-19 pandemic also induced a structural change in employment. A substantial number of firms/organizations downsized to reduce operating expenses while others closed entirely. Such changes imply a further contraction of formal jobs, giving way to more informal employment or, worse, still increased unemployment.

4. Should remedies change or remain the same for transforming IWOSS?

The key high-level policy recommendations suggested in the case study report were:

- Intensify training for extension workers with a specialization in horticulture and irrigation technology;
- Skill workers especially on soft and digital skills for the tourism industry in particular;
- Address non-tariff measures/barriers (NTMs/NTBs) that hinder market access;
- Lower the investment floor to allow local investors (specially small and medium enterprises) to qualify for fiscal incentives (tax holidays);
- Provide avenues for continuous access of affordable finances/credit;
- Solve supply-side constraints prevalent in the special economic zones (SEZs) and industrial parks, including irregular power supply and high tariffs, the high cost of internet, poor physical infrastructure (e.g., roads); and
- Reduce the cost of trading through investing in physical and digital trade infrastructure.

COVID-19 has not only brought out the need to fast track these policy recommendations but also re-emphasized the need to prioritize structural impediments to transforming the IWOSS sectors. Given the heavy reliance on digitization during the pandemic, policymakers should **prioritize improving the soft and digital skills of workers** and **reducing the cost of trading through investing in physical and digital trade infrastructure**. Indeed, sectors that adopted ICT/digital technologies continued to survive within the measures that the government took to control the spread of COVID-19.

¹¹ Bringo Fresh operates an online platform that allows people to order fresh, organic fruits, vegetables, meat and groceries, and delivers them to their customers’ doorsteps.

¹² Mordor Intelligence. (2020). Uganda agriculture market - growth, trends, impact of covid-19, and forecasts (2021 - 2026). Accessed from <https://www.mordorintelligence.com/industry-reports/agriculture-in-uganda-industry#> . retrieved on March 30, 2021

As more organizations adopted to work remotely while staffing and business operations become digital, network bandwidth was overstretched, leading to disruptions in network connectivity (Muliika et al., 2020). Poor network connectivity has been worsened by limited staff availability to manage network-related services. This trend underlines the heightened need to skill workers, especially the youth, with digital skills to manage and utilize technology, including mobile devices, landlines with several switch board buttons, and remote access controls such as surveillance cameras (ibid). Given COVID-19, UNDP is now supporting the government in its development of an e-commerce strategy which has seen new laws being passed, whose aim is to improve people's trust in online transactions. The U.N. has identified e-commerce as a powerful way to drive growth, to boost trade, and to create jobs.¹³ Enhancing digital skills must be a priority going forward.

Providing fiscal tax holidays may be feasible in the short-term to boost SME recovery as the economy looks to bounce back. Nonetheless, the need for the government to continuously collect revenue to stimulate the economy complicates its implementation. To stimulate a quick recovery, businesses, through umbrella organizations, had proposed value-added tax relief for a minimum of 12 months; deferral of corporate tax payment for 2019 to December 2020 instead of June 2020; and a waiver of Pay-As-You-Earn (PAYE) for a minimum of 12 months. . As of February 15, 2021, liquidity provided through the Bank of Uganda as temporary relief to financially distressed businesses involved postponing tax payments and restructuring of their loans with commercial banks. These policies ensured that financially distressed businesses did not lay off workers. Businesses significantly impacted by the coronavirus outbreak have been exempted from paying import and excise duties and the value-added tax. The businesses have also been provided with access to affordable credit to continue running their operations and paying their employees. According to the World Bank (2021) businesses in tourism, manufacturing, horticulture, and floriculture with turnover of less than UGX 500 million (\$136,300) will have been exempted at least UGX 6.5 billion of VAT and corporate tax by close of the Uganda Development Policy Operation reform program in response to the COVID-19 pandemic.

Policymakers should continue to increase access to affordable financing. As a result of the pandemic, the government is planning to recapitalize the Uganda Development Bank (UDB), the Uganda Development Corporation (UDC) and the Micro Finance Support Centre (MFSC) by UGX 1.277 trillion (\$353,667,115) in order to offer affordable credit and facilitate the COVID-19 economic recovery.¹⁴ About 82 percent of the funds will be channeled through UDB, which focuses on funding large export-oriented firms. Given that agro-based products dominate Uganda's exports, agro-processing firms are very likely to benefit from the recapitalization initiatives. Such a program is an opportunity for agro-processing firms to acquire long-awaited financing, which historically has been one of their most difficult operating constraints.

Other small and medium IWOSS enterprises will be able to access recovery funds through UDC and Micro Finance Support Centers (MFSC). However, accessibility requires the operationalization of the Movable Property Act (2019), which allows MSMEs to use movable assets such as machinery, equipment, or receivables as opposed to fixed assets such as land or buildings, as collateral for

13 NEWSABODE. (2020). New Normal-Uganda looks online for COVID crisis. Article published online on August 15, 2020.

14 FSD Uganda. (2021). COVID-19 and access to agricultural finance in Uganda. Financial Sector Deepening, Blog posted on February 01, 2021.

loans. For long, financial institutions have been relying on land titles as collateral, which excludes many creditworthy small-scale borrowers.

Overall, we find that the impact of the pandemic on IWOSS sectors has not been uniform. The analysis indicates that, while agro-processing, ICT, and transportation have been more resilient to the effects of the pandemic at the country level, tourism has not. Partly, such trends demonstrate that sectors with a heavy reliance on foreign performance are less resilient to global shocks while those aimed at the local economy growth with established supply- and demand-side chains are likely to be more resilient. For instance, the tourism sector registered a 65 percent loss of jobs by end of April 2020. The second-most affected IWOSS sector was horticulture, as the floriculture sub-sector alone reported a 50.2 percent loss in employment by end of May 2020, of which 80 percent were women and youth. These have a much higher reliance on international demand. However, the agro-processing sector, which was hit relatively less hard given that agricultural activities in the country were largely not affected by the lockdown, recovered much faster, albeit slowly. On the upside, the emergence of the pandemic provides an opportunity for embracing digital technologies, which are not only critical for enhancing operations but also building resilience especially for jobs. As recommended, the need to skill and re-skill workers in the IWOSS sectors to ensure future resilience is critical.

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Annex: Tables

Table 1: Overall quarterly GDP value added (UGX billion) in IWOSS and non-IWOSS sectors, 2016/17-2020/21

Year	2016/17				2017/18				2018/19				2019/20				2020/21
Period	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Overall	26,641	24,783	24,355	25,108	28,770	26,274	25,723	26,645	30,545	27,949	27,777	28,530	33,036	30,419	27,751	27,221	32,479
Total IWOSS	10,561	10,205	10,264	10,444	11,355	11,041	10,861	11,099	11,996	11,554	11,591	11,826	13,175	12,672	11,524	10,744	12,604
Agro-food processing	1,924	2,018	2,111	1,965	2,027	2,112	2,144	2,107	2,179	2,317	2,303	2,242	2,398	2,490	2,286	1,985	2,471
Horticulture and export crops	885	675	592	661	972	686	607	672	986	711	657	740	1,076	776	633	759	1,074
Tourism	825	804	829	885	971	900	902	916	1,008	928	931	972	1,074	1,013	894	533	794
ICT	505	556	550	519	506	515	510	499	493	505	500	520	610	657	604	588	670
Transport	902	874	904	940	995	971	1,007	1,026	1,027	980	1,019	1,026	1,069	1,000	995	937	1,007
Maintenance and repairs	138	127	128	134	146	142	137	141	158	147	146	144	162	154	141	135	172
Finance, business and profession	2,944	2,902	2,893	2,978	3,154	3,203	3,133	3,255	3,362	3,367	3,465	3,640	3,917	3,856	3,487	3,429	3,380
Trade (excl. Tourism)	2,439	2,249	2,256	2,362	2,584	2,512	2,422	2,483	2,784	2,599	2,571	2,541	2,868	2,726	2,483	2,378	3,037
Manufacturing	2,118	2,221	2,324	2,164	2,231	2,325	2,360	2,319	2,398	2,551	2,535	2,468	2,639	2,741	2,517	2,185	2,720
Total non-IWOSS	13,962	12,357	11,767	12,500	15,184	12,908	12,502	13,227	16,151	13,845	13,651	14,235	17,221	15,007	13,710	14,293	17,155
Agriculture	7,125	5,434	4,767	5,318	7,823	5,520	4,883	5,411	7,938	5,720	5,291	5,958	8,662	6,248	5,098	6,107	8,642
Mining	273	268	374	422	371	303	477	594	625	434	701	568	640	680	614	397	993
Utilities	964	979	1,008	1,006	1,027	1,031	1,040	1,038	1,061	1,065	1,080	1,093	1,118	1,125	1,146	1,095	1,163
Construction	1,477	1,609	1,486	1,536	1,543	1,609	1,649	1,772	1,764	1,884	1,878	1,979	1,863	1,979	1,994	1,953	1,684
Domestic services and household	220	222	224	225	227	228	230	231	233	235	236	238	240	241	243	244	246
Government	1,094	1,130	1,146	1,208	1,236	1,240	1,221	1,236	1,338	1,335	1,344	1,359	1,522	1,541	1,465	1,512	1,522
Other services	2,808	2,715	2,763	2,785	2,957	2,977	3,002	2,944	3,192	3,171	3,121	3,041	3,176	3,192	3,151	2,985	2,905

Notes: 1/3: We adjust categories of sectors as reported in the Uganda Statistical Abstracts into IWOSS and non-IWOSS sector categories. For where we could not group GDP at IWOSS level, we used shares of broader values as categorized in the Supply Use Tables (SUT) to breakdown the sectors. This was done as follows: Trade and repairs was broken it down into Maintenance and repairs, trade formal, and informal; manufacturing was broken down into agro-processing and manufacturing; Agriculture was broken down into Horticulture and exports, and Agriculture. Other categories were aggregated as follows: Tourism comprises of accommodation & food services plus arts, entertainment & recreation; ICT comprises of information & communication; Transport comprises of transport and storage; Finance, business and professional services comprises of finance & insurance, real estate activities plus professional, scientific and technical; Mining comprises of mining & quarrying; Utilities comprises of electricity & water; Domestic services and household comprises of activities of households; Government comprises of administrative & support services plus public administration; and Other services comprises of education, human health & social work plus other service activities.

2/3: The overall GDP excludes adjustments (taxes on products).

3/3- Q1 (July-Sept); Q2 (Oct-Dec); Q3 (Jan-March); Q4 (April-June).

Source: Authors' calculations using data from the Uganda Bureau of Statistics, 2021.

Table 2: Overall quarterly growth rate in IWOSS and non-IWOSS sectors, 2016/17-2020/21

Year Period	2016/17				2017/18				2018/19				2019/20				2020/21
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Overall	0.2	2.7	10.2	10.7	8.0	6.9	5.9	6.3	8.4	6.5	7.0	4.6	7.0	9.3	0.3	(5.7)	0.3
Total IWOSS	1.6	1.3	9.6	13.4	10.1	12.0	7.9	4.7	5.9	2.4	4.3	4.9	10.2	10.3	(0.1)	(8.6)	(7.2)
Agro-food processing	(2.7)	(0.1)	9.4	1.2	2.6	2.2	0.7	3.4	3.6	4.6	3.5	3.1	4.8	3.5	(0.3)	(5.5)	1.4
Horticulture and export crops	0.1	0.3	0.1	0.7	1.1	0.2	0.3	0.2	0.2	0.4	0.9	1.1	1.0	1.0	(0.4)	0.3	(0.0)
Tourism	5.3	6.4	18.5	81.6	49.6	64.2	41.6	11.7	30.1	8.3	8.0	7.0	7.7	8.5	(7.9)	(43.1)	(37.5)
ICT	18.0	21.1	35.2	4.6	0.3	(7.4)	(7.3)	(3.8)	(2.6)	(2.0)	(2.0)	4.2	23.9	30.1	20.9	13.0	9.8
Transport	0.6	(4.1)	5.5	7.7	10.3	11.0	11.4	9.1	3.2	1.0	1.2	0.0	4.1	2.0	(2.4)	(8.7)	(5.8)
Maintenance and repairs	(0.5)	(0.4)	0.4	0.3	0.3	0.6	0.4	0.3	0.4	0.2	0.3	0.1	0.2	0.3	(0.2)	(0.3)	0.3
Finance, business, and professional services	(0.5)	(6.0)	(0.3)	6.3	10.8	14.0	9.4	11.4	5.0	3.3	16.8	21.4	36.7	32.7	(7.1)	(18.4)	(31.1)
Trade (excl. Tourism)	(8.0)	(7.1)	7.7	5.1	5.6	11.1	7.0	4.9	7.3	3.3	5.9	2.2	2.9	4.6	(3.3)	(6.1)	5.6
Manufacturing	(3.0)	(0.1)	10.4	1.3	2.8	2.4	0.8	3.8	3.9	5.1	3.9	3.4	5.3	3.9	(0.4)	(6.0)	1.6
Total non-IWOSS	2.1	6.9	10.8	17.3	11.3	6.1	8.9	10.5	15.3	12.1	12.8	5.5	5.5	13.6	1.4	(2.6)	6.6
Agriculture	1.0	2.8	0.9	5.6	8.7	1.4	2.2	1.6	1.3	3.2	7.4	9.0	8.1	8.2	(3.3)	2.2	(0.2)
Mining	(5.4)	22.4	42.4	78.0	35.8	13.2	27.6	40.6	68.6	43.1	46.9	(4.4)	2.4	56.7	(12.4)	(30.1)	55.1
Utilities	5.7	7.4	9.6	7.0	7.4	5.8	2.9	3.0	2.8	2.7	3.4	5.5	5.9	6.4	6.9	(1.5)	3.9
Construction	11.4	13.5	6.9	15.2	4.4	(0.0)	11.0	15.4	14.4	17.2	13.9	11.7	5.6	5.0	6.2	(1.3)	(9.6)
Domestic services and household	2.7	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
Government	3.6	4.5	14.8	11.4	11.9	8.7	6.1	3.5	9.3	9.6	11.6	10.9	14.2	15.4	8.2	10.2	(0.5)
Other services	(4.1)	(4.9)	(2.2)	1.4	7.7	11.1	10.0	6.4	8.0	6.1	3.7	3.0	(0.3)	0.9	1.5	(0.5)	(5.3)

Notes: 1/2 We adjust categories of sectors as reported in the Uganda Statistical Abstracts into IWOSS and non-IWOSS sector categories. For where we could not group GDP at IWOSS level, we used shares of broader values as categorized in the Supply Use Tables (SUT) to breakdown the sectors. This was done as follows: Trade and repairs was broken it down into Maintenance and repairs, trade formal, and informal; manufacturing was broken down into agro-processing and manufacturing; Agriculture was broken down into Horticulture and exports, and Agriculture. Other categories were aggregated as follows: Tourism comprises of accommodation & food services plus arts, entertainment & recreation; ICT comprises of information & communication; Transport comprises of transport and storage; Finance, business and professional services comprises of finance & insurance, real estate activities plus professional, scientific and technical; Mining comprises of mining & quarrying; Utilities comprises of electricity & water; Domestic services and household comprises of activities of households; Government comprises of administrative & support services plus public administration; and Other services comprises of education, human health & social work plus other service activities.

2/2: Q1 (July-Sept); Q2 (Oct-Dec); Q3 (Jan-March); Q4 (April-June).

Source: Authors' calculations using data from the Uganda Bureau of Statistics, 2021.