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# SUMMARY REPORT ON IMPACT OF COVID-19 ON AGRIBUSINESSES IN GHANA

JUNE 2021

## Summary of Findings

- This survey assessed the impact of COVID-19 on agribusinesses in Ghana.
- The findings relate to periods that were before the emergence of the pandemic, as well as during and after the lockdown periods.
- The study focuses on the survival of firms measured from their operation status, the impact of the pandemic on wages and employment, demand and supply shocks arising from the pandemic, the effects of the pandemic on transportation of inputs and outputs, agriculture finance, and marketing.
- Also, the findings include internal measures adopted by the agribusinesses to mitigate the impact of the pandemic.
- The survey also enquired about firms' awareness of the African Continental Free Trade Area (AfCFTA) agreement.
- Evidence from the survey indicates that the effects that COVID-19 had on businesses globally have had a severe impact on agribusinesses in Ghana in several ways.
- The demand and supply shocks, as well as operational challenges that bedeviled agribusinesses in the country during the implementation of lockdown measures when the pandemic emerged, still linger even after the lockdown measures.
- These resulted in the laying-off of an estimated 78,412 and wage reduction of 267,211 agribusiness workers during the post-lockdown period (May 2020-January 2021).
- Mitigation measures adopted by agribusinesses include diversification of source of input supply to include more input within Ghana, increased adoption of digital technology to market their goods/services, and use of mobile money and courier services to facilitate business transactions.

## 1. Introduction

Agribusinesses play a critical role in the growth and development transitions of a developing country like Ghana. Typically, these comprise business activities that contribute to the food security and nutrition of the population. Activities of agribusinesses include the supply of agricultural inputs, the production and transformation of agricultural products, and their distribution to final consumers. Agribusinesses comprise firms in the agriculture sector and those in the industry and service sectors that contribute to the agriculture production value chain. Notwithstanding their importance, relatively very little is explicitly known on the pandemic's impact on agribusinesses, due to lack of data to address the challenges arising from the effects of the pandemic.

In this regard, the Ghana Statistical Service (GSS), funded by the German Ministry for Economic Cooperation and Development (BMZ) and implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in partnership with the United Nations Development Programme (UNDP), carried out a survey to assess the impact of the COVID-19 pandemic on agribusinesses. This report presents a summary of the findings from the study, which picked several questions from the previous COVID-19 business tracker surveys ([Wave 1](#) and [Wave 2](#)) to make data comparable over time. This way, the government of Ghana and other stakeholders can be advised more comprehensively.

## 1.1 Objectives

The objectives of the survey are to:

- examine the regional lockdown effect from the context of the disruption in global and regional economies on turnover, labor force, purchasing power, demand, and supply of products and services within the agribusiness channels.
- provide critical analysis of the response mechanism and strategies of agribusinesses and support received from local government authorities. These include but not limited to layoffs, social security, tax payments or renegotiations, the volume of bank/financial credit, input purchase, online sales, and markets.
- examine the contingency mechanisms and strategies that proved effective for agribusinesses during the pandemic and what would be done differently in the future.
- compare the relative impact of the pandemic on agribusinesses vis a vis other sectors of the economy.
- assess the impact of the pandemic at different times by comparing similar questions from the business tracker survey with this survey. This overtime comparison could advise government agencies and other stakeholders better on the impact of the pandemic.

The COVID-19 pandemic has affected several if not all sectors of the economy including agribusinesses which play an important role in the economy. It is indicative from the survey that the effects of the COVID-19 pandemic on businesses manifested in loss of jobs, decline in outputs, and shocks in demand and supply. Several measures were implemented to help curb the spread of the virus . These included a partial lockdown of some parts of Greater Accra and Greater Kumasi. Others included a shutdown of all ports to human traffic. Even though some regions did not experience a lockdown, the pass-through effects were dire for these other regions as well. The COVID-19 restriction measures though with a good intention had dire consequences on firms in the country including agribusinesses.

The agribusiness tracker survey therefore sought to understand and bring to the fore the extent to which the pandemic affected agribusiness firms in Ghana.

## 2. Methodology

The study used a one-stage stratified sampling method to categorize the establishments, using region, agribusiness firms and size as the stratifying variable, following the World Bank's recommendation on sampling for enterprise and indicator surveys (World Bank, 2009). With the use of telephone interviews, the study collected data from about 8,000 agribusinesses across the country on inputs and revenue by source, labor by sex and category of workers, social security and tax payments, labor layoffs, wages by category of workers, financial inflows, access to credit, and modes of access to markets. The study also collected retrospective data for the same period one year ago and this is to address the effects of COVID-19 while eliminating the seasonality effect in the data. Furthermore, data on the response mechanisms of these firms to COVID-19 were gathered including agribusinesses' knowledge of the African Continental Free Trade Area (AfCFTA) agreement. The scope of the survey includes all firms in the agriculture sector and those engaged in the manufacturing of food and beverages, agriculture inputs, tools, and equipment, as well as wholesale and retail trade of agriculture-related produce.

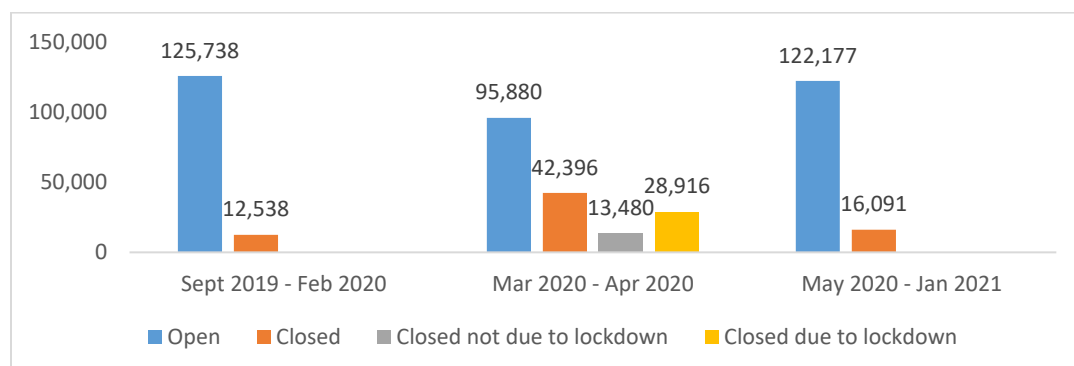
### 3. Findings

#### 3.1. Impact of COVID-19 on Survival of Agribusiness Firms

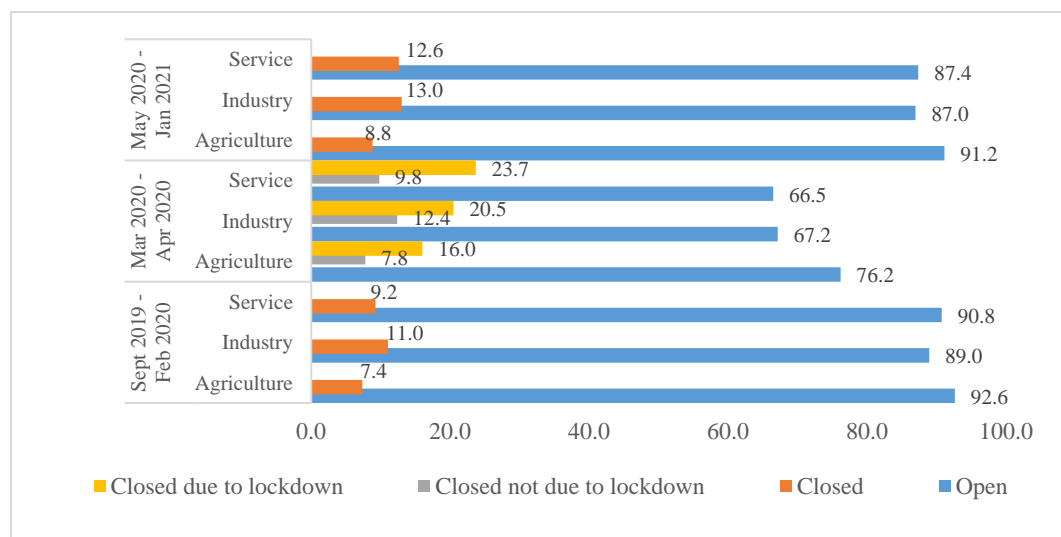
Before Ghana’s partial lockdown (Sept.2019 – Feb.2020), 9.1 percent of agribusinesses were reportedly closed. About 30.7 percent, an equivalent of about 42,396 agribusiness firms, were closed during the lockdown, out of which 20.9 percent is as a direct result of the lockdown. Also, an estimated 16,091 representing 11.6 percent of agribusinesses closed due to the lockdown still remain closed after the lifting of the lockdown measures (May 2020-Jan.2021) (See Figure 1). Relative to the agriculture sector, agribusiness firms in the service and industry sectors were most affected by the lockdown, considering firms that were closed as a result of the lockdown.

Subsequently, during the post lockdown periods, agribusiness firms in the service sector experienced faster recovery with the most reopened firms. Thus, while closed down agribusiness firms in the service sector reduced by 11 percentage points between the lockdown period and post-lock down period, barely about 7 percent of agribusiness firms in each of the other sectors (industry and agriculture sectors) opened after been closed due to lockdown.

**Figure 1. Operating status of agribusinesses**



**Figure 2. Operational status of agribusiness firms by sector (%)**



Three regions had more than one-fifth of agribusinesses closed as a result of the partial lockdown. These include, Ashanti (21.2%), Volta (26.9%), and Upper East (25.5%). In the Ashanti and

Greater Accra regions where the lockdown was directly implemented, agribusiness firms were relatively less affected in the Greater Accra region than their counterparts in the Ashanti region. Post lockdown periods on the other hand indicate that there are far more agribusiness firms that remain closed in the Greater Accra Region than in the Ashanti region (Table 1).

**Table 1: Operational status of agribusiness firms by region (%)**

	Sept 2019 - Feb 2020		Mar 2020 - Apr 2020			May 2020 - Jan 2021	
	Open	Closed	Open	Closed not due to lockdown	Closed due to lockdown	Open	Closed
<b>Western</b>	95.4	4.6	74.0	7.1	18.9	92.9	7.1
<b>Central</b>	98.5	1.5	92.4	5.7	1.9	92.5	7.5
<b>Greater Accra</b>	79.3	20.7	70.0	20.2	9.8	79.8	20.2
<b>Volta</b>	95.8	4.2	64.8	8.2	26.9	92.0	8.0
<b>Eastern</b>	96.6	3.4	78.3	3.4	18.3	96.6	3.4
<b>Ashanti</b>	93.1	6.9	71.3	7.5	21.2	96.4	3.6
<b>Western North</b>	97.6	2.4	77.3	5.2	17.5	95.7	4.3
<b>Ahafo</b>	100.0	0.0	97.9	2.1	0.0	97.9	2.1
<b>Bono</b>	100.0	0.0	100.0	0.0	0.0	100.0	0.0
<b>Bono East</b>	91.2	8.8	76.5	8.8	14.7	91.2	8.8
<b>Oti</b>	96.2	3.8	96.2	3.8	0.0	96.2	3.8
<b>Northern</b>	97.2	2.8	95.8	2.8	1.4	97.2	2.8
<b>Savanna</b>	100.0	0.0	91.3	0.0	8.7	99.2	0.8
<b>North East</b>	100.0	0.0	100.0	0.0	0.0	100.0	0.0
<b>Upper East</b>	75.0	25.0	75.0	0.0	25.0	100.0	0.0
<b>Upper West</b>	100.0	0.0	84.8	0.0	15.2	91.8	8.2
<b>Total</b>	97.0	3.0	88.2	3.8	8.1	95.0	5.0

### 3.2. Impact of COVID-19 on wages and employment of agribusiness firms

The effects of the lockdown affected not only the closure of firms engaged in agribusiness but the levels of employment as well. Overall, the estimated number of agribusiness workers that were laid off increased from 51,111 during the lockdown to 78,412 in the post-lockdown period. Workers with reduced wages increased from 175,255 during the lockdown to 267,211 in the post-lockdown period. Relatively, very few agribusiness workers (9,859) worked from home or have been teleworking post-lockdown.

Across sectors, about 44.7 percent of the total workforce in agribusiness in the industry sector were laid off by the firms as a result of the lockdown, translating into laid off of an estimated 22,873 workers and a wage reduction for 63,167 workers. Also, 48.6 percent of the total workforce, an equivalent of an estimated 124,364 workers in agribusiness in the industry sector had their working hours reduced. More than half (55.2%) of the total workforce in agribusiness in the agriculture sector, estimated to be 43,303 workers were laid off due to COVID-19 (Table 2 & Figure 3).

Whiles workers in the agriculture sector were the most affected in terms of layoffs post-lockdown, those in the industry sector experienced the highest levels of reduced wages and reduction of hours worked after the lifting of the lockdown.

**Table 2: Employment Response (%)**

Employment Indicator	Sept 2019 - Feb 2020	Mar 2020 - Apr 2020		May 2020 - Jan 2021	
	General	General	Lockdown	General	Covid-19
Laid-off workers					
<b>Agriculture</b>	44.3	13.0	20.1	16.4	55.2
<b>Industry</b>	29.3	54.3	44.7	30.3	23.1
<b>Service</b>	26.4	32.7	35.2	53.4	21.7
Reduced wages					
<b>Agriculture</b>		26.9	46.7	36.7	31.4
<b>Industry</b>		23.6	36.0	25.0	58.2
<b>Service</b>		49.5	17.3	38.2	10.4
Reduced hours					
<b>Agriculture</b>		22.4	33.9	32.8	35.4
<b>Industry</b>		37.4	48.6	32.0	52.6
<b>Service</b>		40.2	17.5	35.2	12.0
Working from home/teleworking					
<b>Agriculture</b>	19.6	36.1	46.4	11.7	30.2
<b>Industry</b>	64.0	21.9	17.4	14.7	11.0
<b>Service</b>	16.5	42.0	36.2	73.6	58.8

**Figure 3: Estimated number of agribusiness workers affected during and post lockdown**

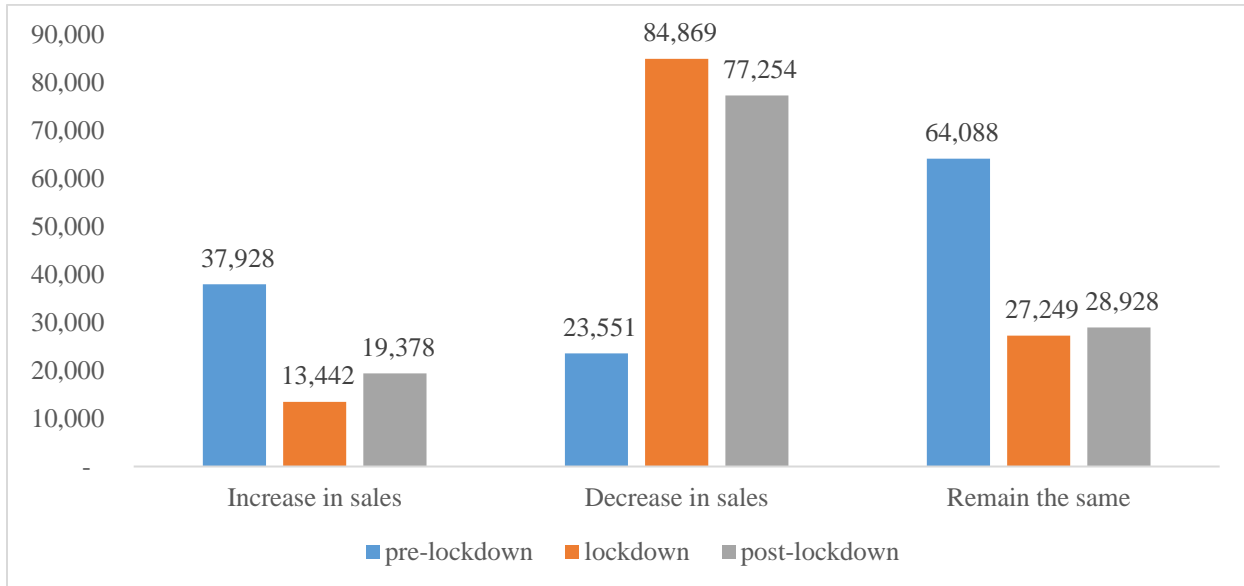


### 3.3. Demand-shocks of COVID-19 on agribusiness firms

This section highlights the noticeable intertemporal impact on demand experienced by agribusiness firms in the country. Before the lockdown period, only 18.8 percent indicated a decrease in sales of about 27.1 percent. During the lockdown period, more than two-thirds (67.6%) of agribusiness firms reported a decrease in average monthly sales by 48.8 percent. Post the lockdown, 61.5 percent of agribusiness firms still reported a decline of 41.2 percent in average

monthly sales. Generally, as many as 77,254 agribusiness firms still report a decline in sales after the lockdown period, compared to an estimated 84,869 agribusiness firms which reported a decline in sales during the lockdown (Figure 4).

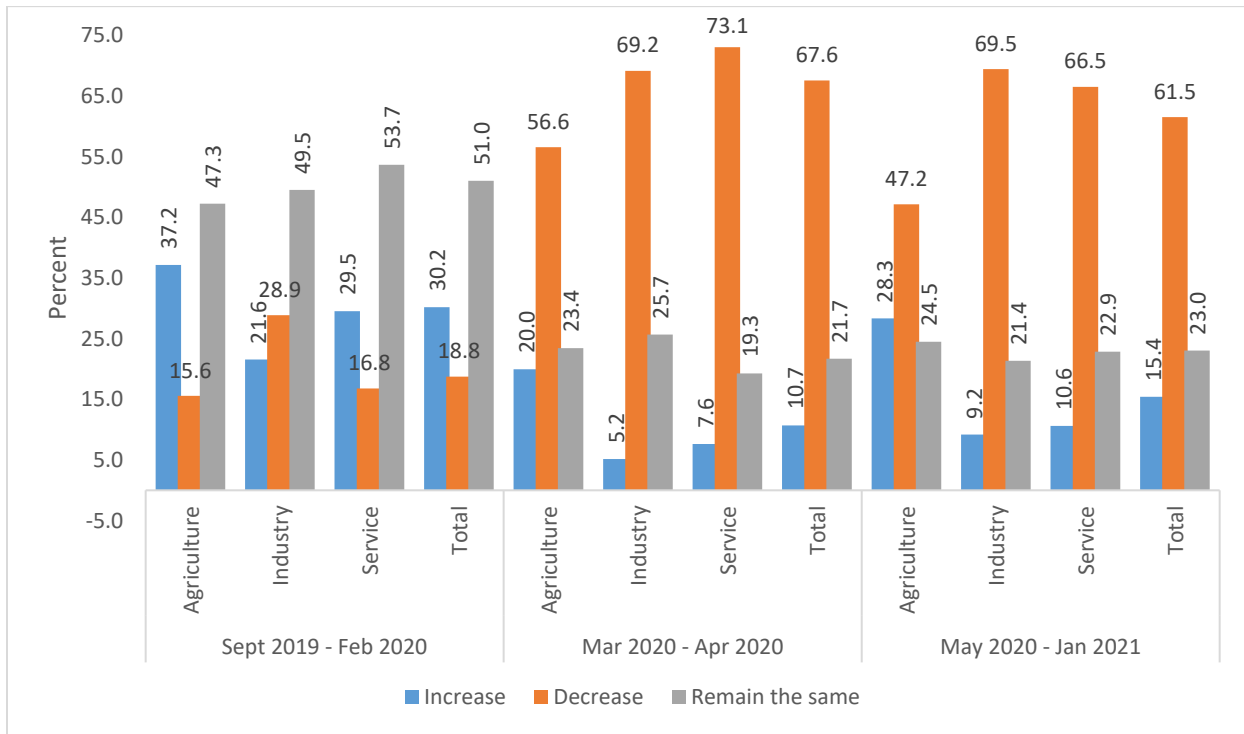
**Figure 4: Number of firms reporting a change in sales**



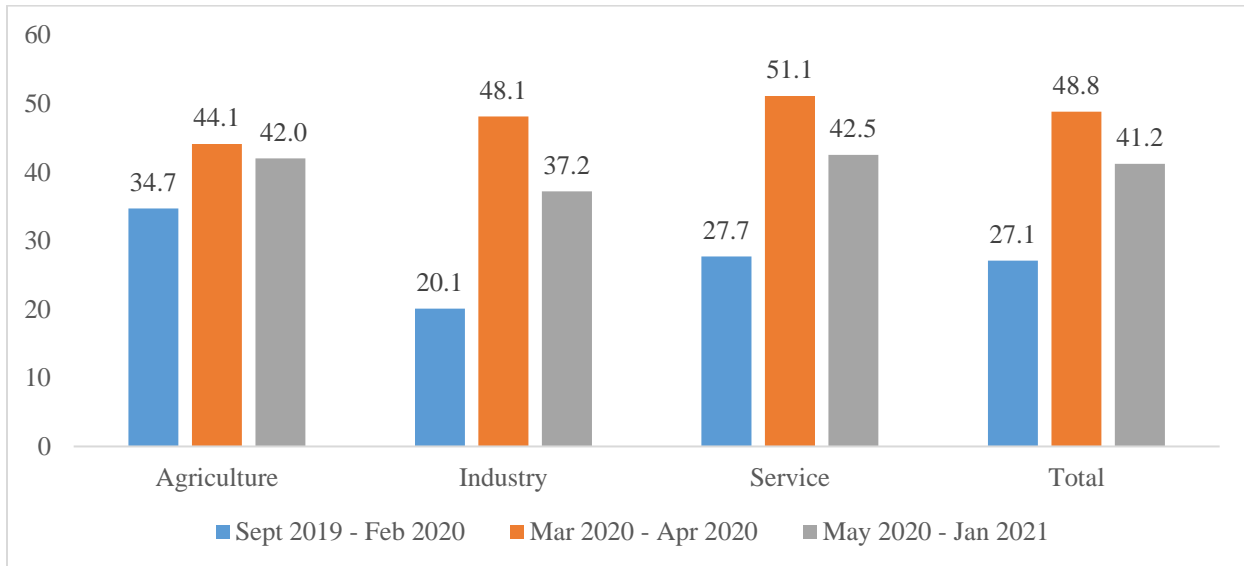
In terms of trends across the sectors, 15.6 percent of firms in the agriculture sector reported an average monthly decrease in sales of about 34.7 percent over the same period a year ago, compared to 56.6 percent of firms reporting an average of 44.1 percent average monthly decline in sales during the lockdown and after the lockdown, still 47.2 percent of agribusiness firms in the sector report that average monthly sales have declined by 42 percent. Generally, 17,015 firms in agribusiness activities in the agriculture sector experienced a decrease in sales. Agribusiness in the industry and services sectors also recorded a decline in sales across the entire period, with the proportion of firms in the two sectors reporting a decline in sales not significantly different between lockdown and post lockdown periods.

In the industry sector, while 69.5 percent of firms report that during the lockdown sales decline on average by 48.1 percent per month compared to the same period a year ago, post lockdown, a similar proportion of firms (69.2%) reported that sales have declined by 37.2 percent. In the service sector, during the lockdown, 73.1 percent of firms reported a 51.1 percent average monthly decrease in sales compared to the post lockdown where 66.5 percent of the firms in the sector still report that average monthly sales have declined by 42.2 percent compared to a year ago. (Figure 5 &6).

**Figure 5: Changes in demand for Agribusiness firms (%)**



**Figure 6: Percentage decline in sales over the same period a year ago**



Concerning the regional dynamics, for the pre-lockdown period, more than half (53.3%) and over a quarter (38.2%) of agribusiness firms recorded a decrease in sales in the Oti and Upper East regions constituting the highest decline within the period. However, between March 2020 and April 2020, the highest falls were registered in Ahafo (87.7%) and Ashanti (78.6%) regions. May 2020 to January 2021 also saw the firms in the Ashanti (67.6%) and Western (67.4%) Regions registering the highest decline in sales. The differences in the effect of COVID-19 across geographical areas for each specified period suggest that decreases in sales are not concentrated



just in the locked-down regions, given that each of the regions is somewhat affected. Table 3 provides further information on the impact on sales across regions.

Table 3: Effects of COVID-19 on sales across regions (%)

Region	Sept 2019 - Feb 2020			Mar 2020 - Apr 2020			May 2020 - Jan 2021		
	Increase	Decrease	unchanged	Increase	Decrease	unchanged	Increase	Decrease	unchanged
<b>Western</b>	34.5	16.6	48.9	9.7	73.5	16.8	14.6	67.4	17.9
<b>Central</b>	24.8	20.1	55.0	7.3	70.2	22.4	12.2	61.0	26.7
<b>Greater Accra</b>	25.6	18.6	55.7	9.3	70.0	20.7	13.1	66.7	20.2
<b>Volta</b>	37.8	24.0	38.2	15.4	59.3	25.3	22.7	52.1	25.2
<b>Eastern</b>	49.7	9.2	41.0	43.1	39.8	17.1	22.6	61.2	16.2
<b>Ashanti</b>	53.3	13.3	33.4	1.8	78.6	19.7	10.4	67.6	22.1
<b>Western North</b>	11.3	2.8	85.9	1.9	33.6	64.5	7.5	27.8	64.7
<b>Ahafo</b>	17.3	22.0	60.4	3.3	87.7	8.6	7.8	57.9	34.3
<b>Bono</b>	16.8	16.1	66.4	34.2	65.1	0.0	12.1	53.0	34.2
<b>Bono East</b>	11.9	11.4	76.7	18.0	61.7	20.3	22.1	35.1	42.9
<b>Oti</b>	20.8	53.3	26.0	13.9	61.1	25.1	19.8	57.2	23.0
<b>Northern</b>	1.7	3.9	94.3	1.7	43.2	55.0	7.1	38.7	54.4
<b>Savanna</b>	0.0	13.3	86.7	0.0	21.1	78.9	0.0	21.1	78.9
<b>North East</b>	75.0	0.0	25.0	75.0	0.0	25.0	75.0	25.0	0.0
<b>Upper East</b>	24.7	38.2	37.1	7.6	78.2	14.1	15.3	62.9	21.8
<b>Upper West</b>	17.4	0.5	82.1	26.8	65.8	7.4	34.1	59.3	6.6
<b>Total</b>	30.2	18.8	51.0	10.7	67.6	21.7	15.4	61.5	23.0

### 3.4. Supply shocks in agribusiness firms due to the Pandemic

The pandemic affected several parts of agribusiness firms including the supply of inputs to firms. A comparative analysis between the period and the same period a year ago shows that before the first cases of COVID-19 were reported in Ghana, only 11.7% of agriculture firms reported a decrease in the input supply. However, this increased to 53.9% of firms reporting a decrease in input supply during March and April 2020 and a fall to 45.9% between May 2020 and January 2021. Within the agribusiness firms that experienced a decrease in the supply of inputs, the service sector was the most affected maintaining an average of 57% between March and April 2020 and May 2020 to January 2021. The regional distributions show that among the firms that experienced a decrease in input supply, the Greater Accra region had the most of those firms throughout the three periods.

Input supply to firms in the agricultural sector decreased greatly during the first two months when the virus was announced in the country. Firms reported that as much as 52.4% of their input supply decreased during this period. This decreased to 44.2% between May 2020 and January 2021 although still greater than the pre-COVID-19 period in Ghana. Again, the service sector followed by the industry sectors were the most affected reporting a 55.6% and 51.3% fall in their input supply respectively during the lockdown. The regional distribution showed that firms in the Volta region followed by the Upper East region reported over 60% (66.3% and 61.8% respectively) fall in their inputs supply during the lockdown. However, the Upper East followed by Savannah had firms that reported 65.2% and 61.9% respectively between May 2020 and January 2021 (Table 4).

**Table 4: Percentage decrease in inputs for agribusiness firms by sector and region (%)**

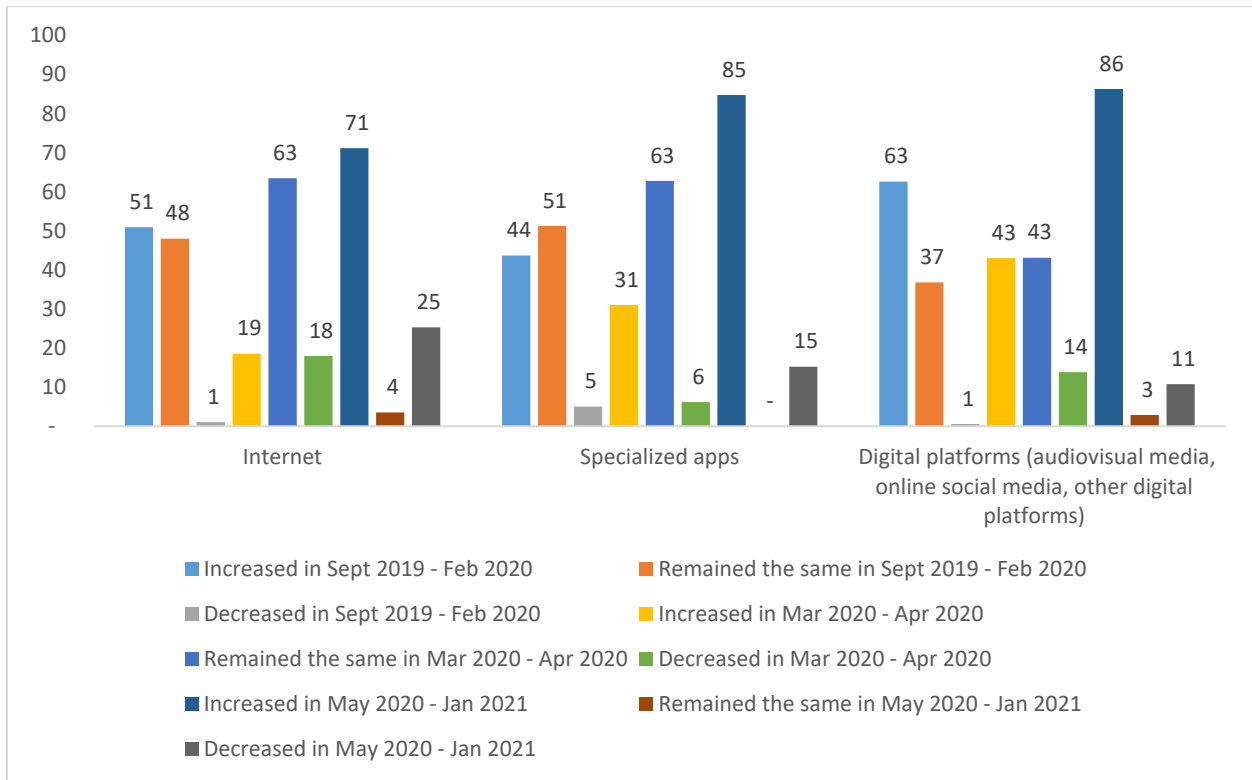
	Sept 2019 - Feb 2020	Mar 2020 - Apr 2020	May 2020 - Jan 2021
Sector			
<b>Agriculture</b>	28.2	45.6	42.7
<b>Industry</b>	30.7	51.3	45.8
<b>Service</b>	30.1	55.6	44.3
<b>Total</b>	29.6	52.4	44.2
Region			
<b>Western</b>	29.5	48.7	43.2
<b>Central</b>	30.2	46.6	39.9
<b>Greater Accra</b>	32.3	56.0	42.9
<b>Volta</b>	25.4	66.3	59.1
<b>Eastern</b>	39.2	40.2	34.4
<b>Ashanti</b>	26.5	43.8	52.4
<b>Western North</b>	16.9	53.7	40.9
<b>Ahafo</b>	19.7	38.2	28.7
<b>Bono</b>	42.8	45.2	37.0
<b>Bono East</b>	22.5	57.9	50.7
<b>Oti</b>	16.9	20.7	21.4
<b>Northern</b>	23.2	44.7	31.2
<b>Savanna</b>	46.9	47.2	61.9
<b>Upper East</b>	45.6	61.8	65.2
<b>Upper West</b>	5.8	47.6	41.0
<b>Total</b>	29.6	52.4	44.2

### 3.5. Effects of COVID-19 on agriculture finance, transportation and marketing of agriculture products

Agriculture finance, marketing, and transportation of agricultural products have also been badly affected by the presence of the pandemic.

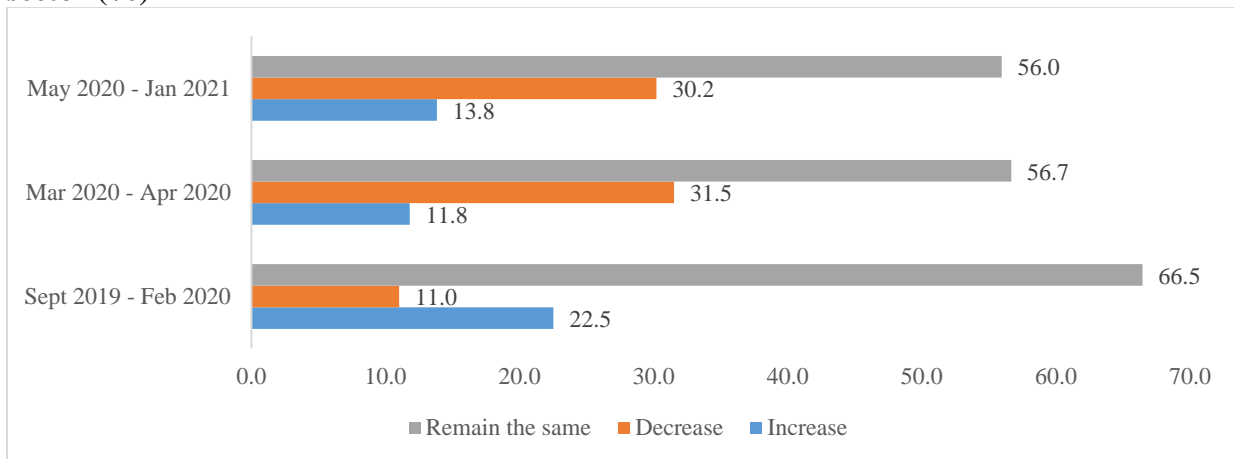
**Marketing of agriculture products:** Relative to other marketing technologies such as the internet and specialized applications, agribusiness firms in the country mostly used digital platforms such as the use of audiovisual media, online, social media, and other digital tools more intensely to market their produce in the wake of the pandemic. A comparative analysis across the three technologies indicates that many agribusiness firms intensified the use of all the technologies post lockdown period. For instance, out of the agribusiness firms that use the internet in the post lockdown era, 77 percent of them increased the use of the internet in marketing compared to the 19 percent who increased the use of the internet during the lockdown period. A similar surge in the use of marketing technologies is shown after the lockdown, and this includes specialized applications (85%), and digital platforms (86%) (Figure 7).

**Figure 7: Share of agribusinesses using digital technology for sales (%)**

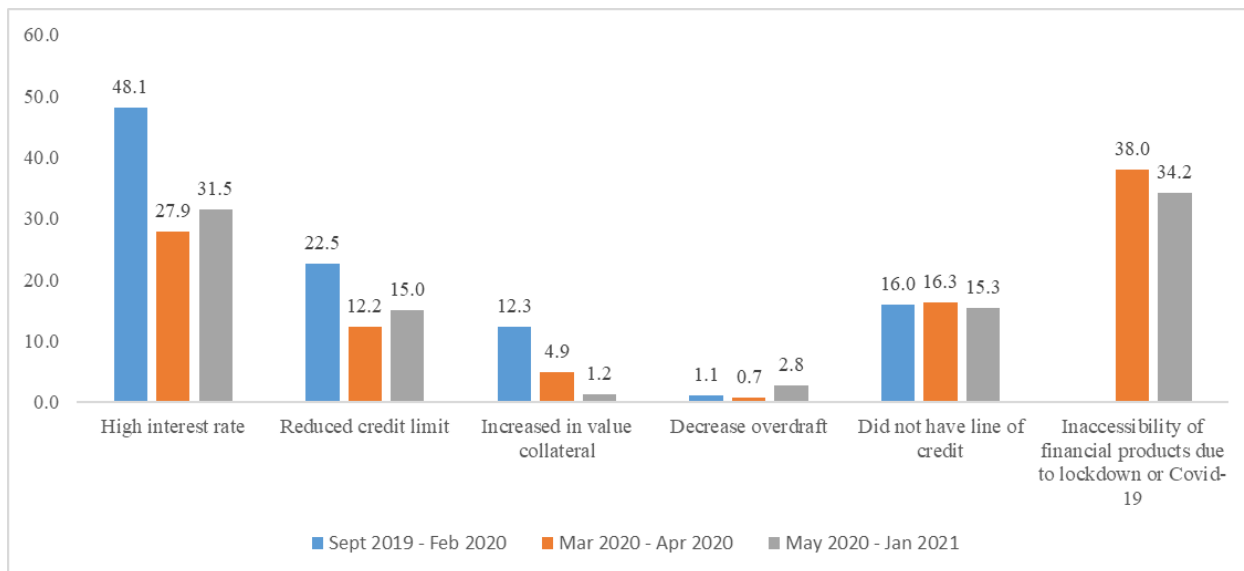


**Agriculture finance:** More than one in ten (11%) percent of agribusinesses in the agriculture sector reported a decrease in the supply of agriculture financing before the lockdown. About 31.5 percent of agribusinesses in the agriculture sector reported a decrease in the supply of agriculture financing during the lockdown and 30.2 percent after the lifting of the lockdown (Figure 8). The main reasons given for the decrease in the supply of agriculture financing were as a result of the high interest rate and inaccessibility of financial products due to lockdown or COVID-19 (Figures 9).

**Figure 8: Status of supply of agriculture financing available to firms in the agriculture sector (%)**

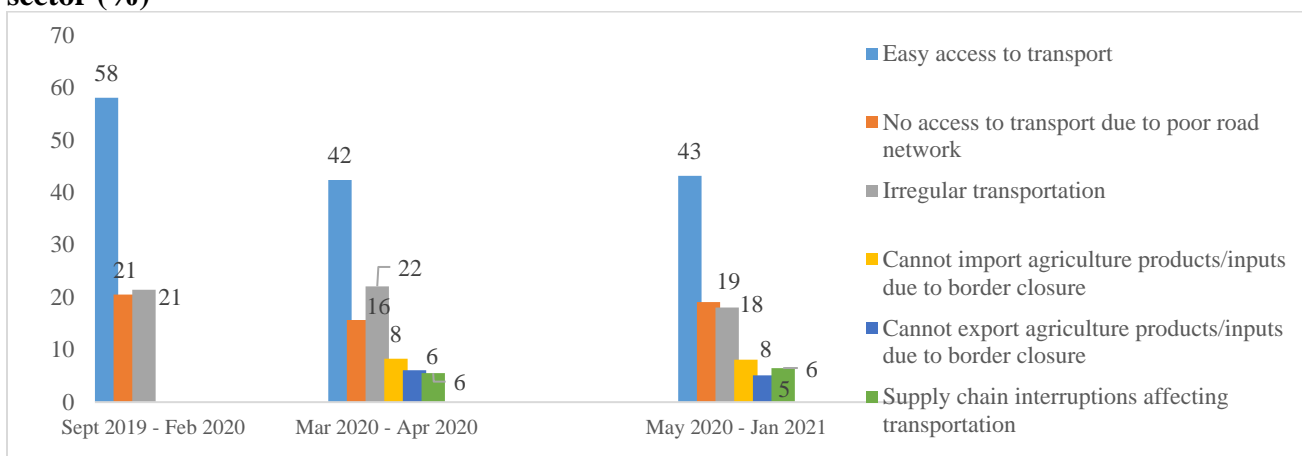


**Table 9: Reasons for the reduction in agriculture financing (%)**



**Transportation of agriculture products:** Inputs and outputs for agribusinesses need to be transported before the value chain could be completed. In the case of firms engaged in primary production, it is widely known that transportation has been a limiting factor to achieving higher value-added. Even before COVID-19, generally, only 58% of agribusiness firms had easy access to transport, with as much as 42% reporting poor road network and irregular transportation. The presence of the pandemic worsened the situation resulting in barely 4 out of 10 agribusiness firms having access to transport for agricultural produce. This low level of access to transport during the pandemic is attributed to supply chain disruptions and border closure since firms that import inputs and export their output can no longer do so (Figure 10).

**Figure 10: Status of transportation of agriculture products and inputs in the agriculture sector (%)**

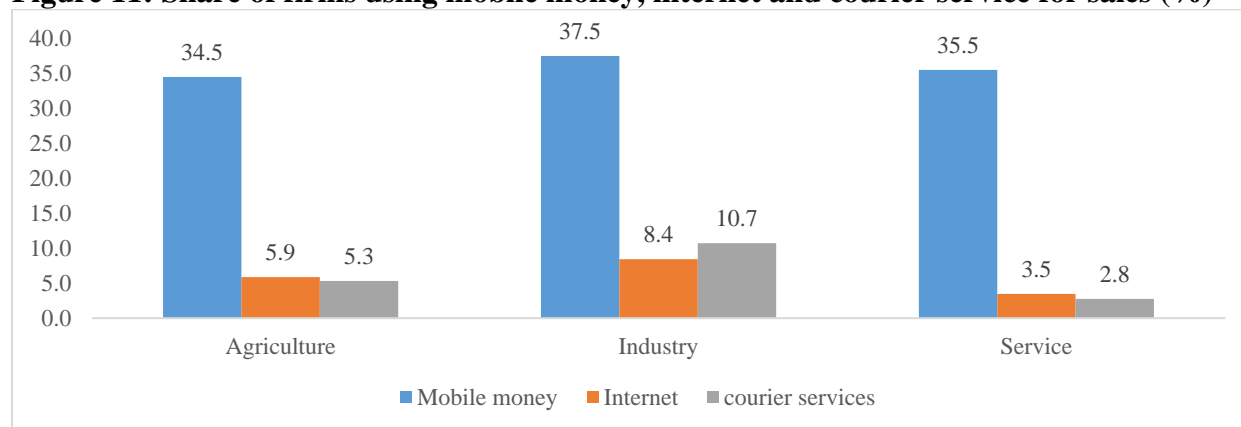


### 3.6. Operational response by agribusiness firms to the COVID-19 pandemic

It is revealing that about 5.1 percent of all agribusinesses either adopted or increased the use of the internet for their operations, and 36.5 percent used mobile money in business transactions. 4.8

percent of the agribusinesses started using or increased door-to-door delivery via courier services in response to the COVID-19 outbreak. Agribusinesses within the industry sector used fairly more digital solutions (internet, 8.7%; mobile money, 37.5%) and 10.7 percent door-to-door delivery via courier services business than other sectors (Figure 11).

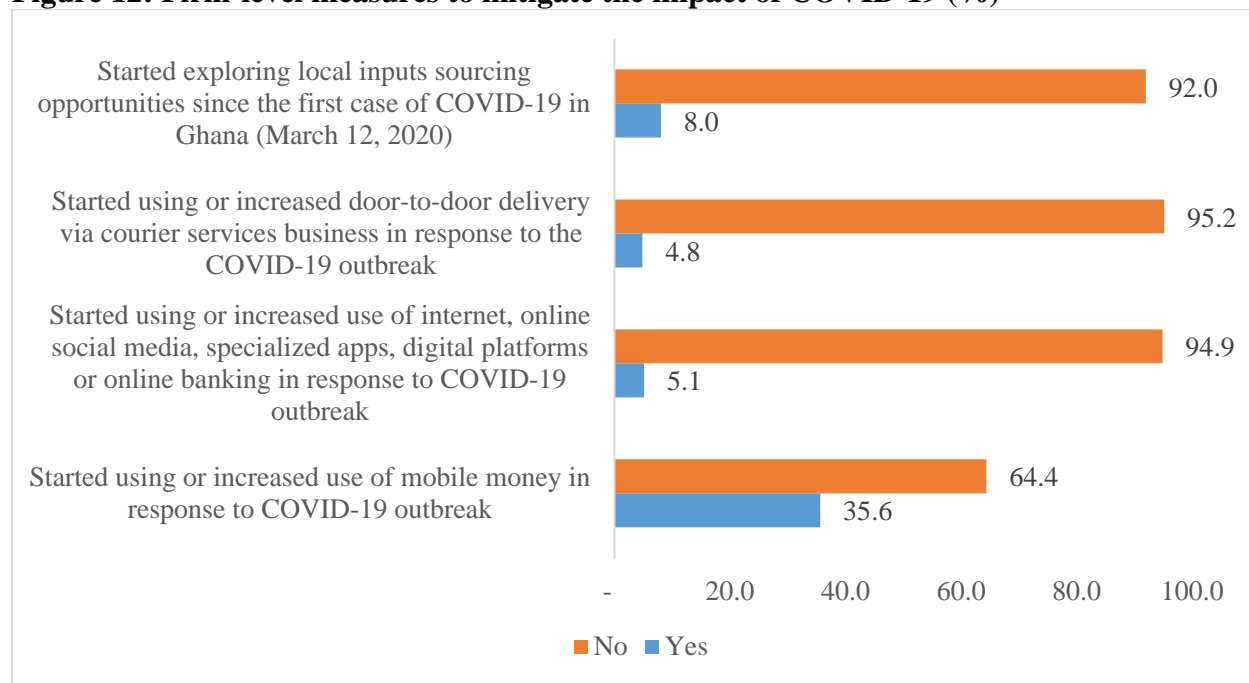
**Figure 11: Share of firms using mobile money, internet and courier service for sales (%)**



### 3.7. Mitigating measure of agribusiness firms during the pandemic

Internally, firms in agribusiness have explored alternative means to mitigate the impact of such pandemic and any other shocks that tend to affect the global value chain and interrupt the global supply chain. Even though the drift in policy is relatively slow, as much as 8% of firms have started sourcing from domestic sources, and 35.6 percent of the firms have started or increased the use of mobile money for their business transaction (Figure 12).

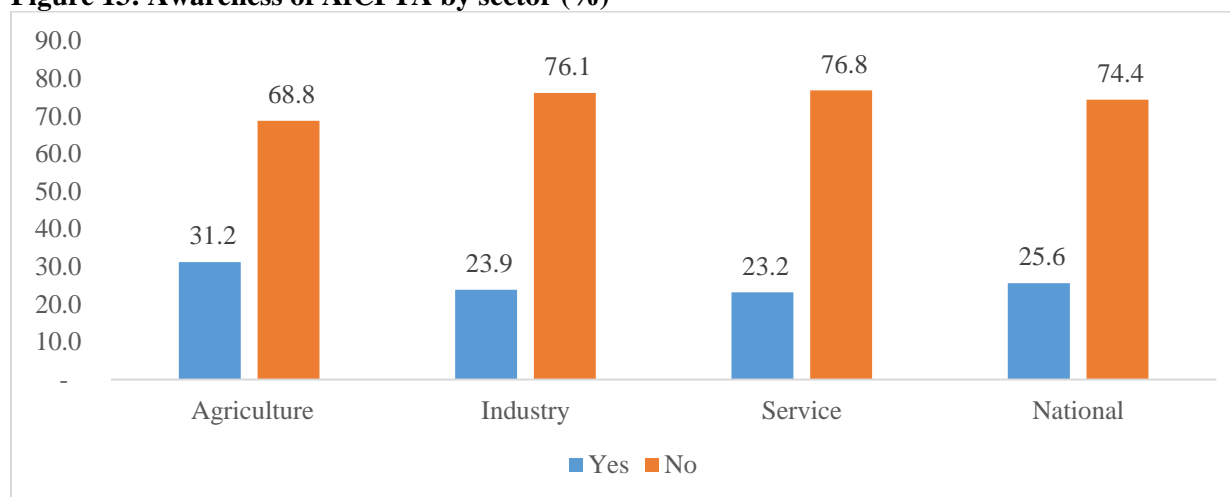
**Figure 12: Firm-level measures to mitigate the impact of COVID-19 (%)**



### 3.8. Awareness and leverage of AfCFTA by agribusiness firms

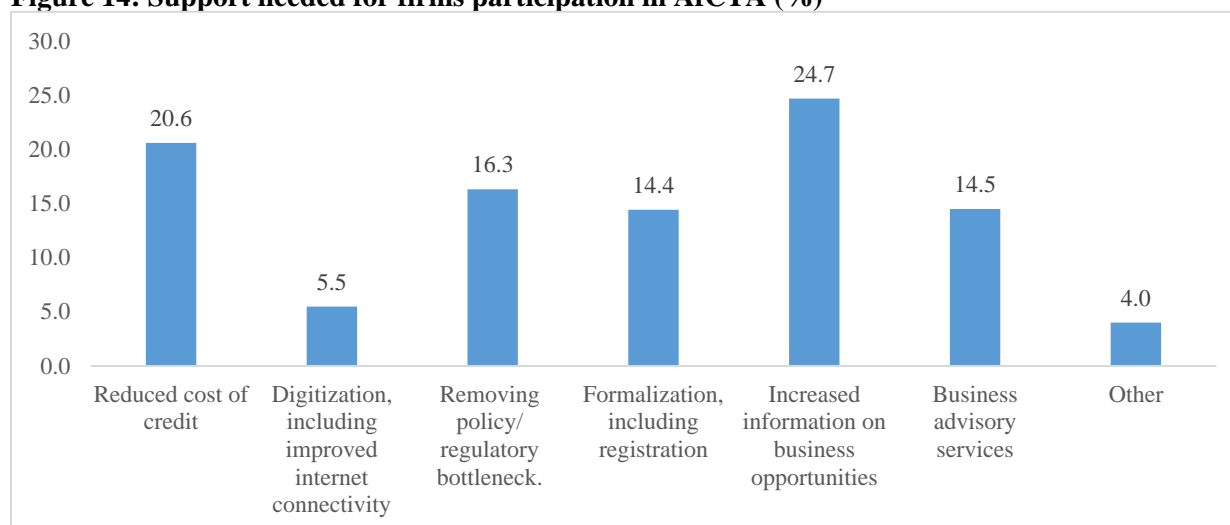
The African Continental Free Trade Area (AfCFTA) started trading on 1 January 2021. Firms were asked whether they are aware of the AfCFTA agreement. Only 25.6 percent of agribusiness firms across all sectors are aware of the AfCFTA. Relatively agribusiness firms in the agriculture sector are highest (31.2%) in terms of those not aware of the agreement, followed by those in the industry sector (23.9%), and the services sector with 23.2% percent (Figure 13).

**Figure 13: Awareness of AfCFTA by sector (%)**



Out of the six supports that firms expect from the AfCFTA, the top three supports needed by the agribusinesses are an increase in information on business opportunities (24.7%), reduction in the cost of credit (20.6%), and removing policy or regulatory bottlenecks (16.3%). The least support expected was digitization including improved internet connectivity of about 5.5 percent (Figure 14).

**Figure 14: Support needed for firms participation in AfCFTA (%)**



## 4. Summary and Conclusion

Overall, 20.9 percent of agribusiness firms were closed during the lockdown and 11.6% remain closed after the lifting of the lockdown, with the service-related firms (23.7%) being the most affected. The operational challenges emanating from the pandemic on agribusiness firms means management of these firms had to resort to internal policies to survive. These resulted in the laying-off of an estimated 78,412 workers and wage reduction of 267,211 agribusiness workers during the post-lockdown period.

COVID-19 resulted in demand and supply shocks for agribusiness firms in the country. About 67.6 percent of agribusiness firms reported a decrease in average monthly sales by 48.8 percent during the lockdown. Post the lockdown, as much as 61.5 percent of agribusiness firms still report that average monthly sales have declined by 41.2 percent relative to the same period a year ago. While only 11.7% of agriculture firms reported a decrease in input supply before COVID-19, as much as 53.9% of firms reported a decrease in input supply during the lockdown period, and 45.9% still report a decline in the supply of inputs post lockdown. Aside employment and wages management measures, agribusiness firms in the country internally implement measures to mitigate the impact of the pandemic. Key among these measures is diversification of source of input supply to include more input within Ghana, increased adoption of digital technology to market their goods/services, and use of mobile money and courier services.

In conclusion, COVID-19 has indeed affected agribusinesses. Some firms in the industry remain shut down even after the lifting of the lockdown and ease of some restrictions. Some workers were laid off and others had working hours and wages reduced. Sales have also decreased largely, with recovery being slow. Among issues relating to input supply, increment of cost of inputs remains the biggest challenge even before COVID-19. These are evidence of the rippling effect that the lockdown and some mitigating measures, both locally and globally, have had on agribusinesses although those measures were necessary evils. Some mitigating measures such as adoption of mobile money, digital technology, increase internet use, and use of courier services were implemented by the agribusiness firms to mitigate the impact.