

2022

## Regional Agro-Business and Agro-Tourism Assessment in Central Alabama



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## I. Introduction

The Central Alabama Regional Planning and Development Commission (CARPDC) was awarded funds from the U.S. Economic Development Administration’s CARES Act Recovery Assistance program to assist in relieving the economic effects of the coronavirus in Central Alabama.

The Central Alabama 2018 Comprehensive Economic Development Strategies (CEDS) address the importance of agriculture-based businesses to the region under its **Goal 5: Expand the availability and promotion of healthy food**, Strategies:

- Develop and equip healthy food retail and wholesale markets within the Central Alabama region.
- Support further development of the agro-business and agro-tourism economic sector.<sup>1</sup>

Meanwhile, state and local leaders are expressing the need to better understand the economic impact that the coronavirus has had on the region’s agriculture sector. It has been noted that “with COVID-19, many of agro-businesses and agro-tourism entities ceased their operations; find new outlets for their products, or changed their business models.”<sup>2</sup> As part of their economic goals for Central Alabama, CARPDC contracted with Southeast Research, Inc. to conduct an evaluation of the region’s agricultural industry to assess how it has been affected by the coronavirus pandemic to include the following:

- The industry’s current economic condition.
- The industry’s current capabilities.
- The industry’s weaknesses created by the pandemic.
- The industry’s future development potential.

It is against this backdrop that this assessment was conducted.

### PURPOSE OF THIS STUDY

The purpose of this study was to conduct an analysis of the state of agriculture in Central Alabama (Autauga, Elmore, and Montgomery counties). The report identifies and discusses key agricultural trends, and examines major challenges facing Central Alabama’s agro-business and agro-tourism industries due to the coronavirus pandemic.

While this report examines a wide range of agricultural products including fruits and vegetables, dairy, pork, chicken, and beef, it does not address the seafood, forestry, or horticulture for landscaping industries. Though these are important industries in the state, they are not the focus of this report.

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<sup>1</sup> CARPDC EDA 20ATL3070089

<sup>2</sup> CARPDC EDA 20ATL3070089

## **METHODOLOGY**

Southeast Research performed the following tasks as part of this assessment:

- Conducted work meetings with project Director at Central Alabama Planning and Development Commission.
- Reviewed studies pertaining to area demographics including population, income, and unemployment.
- Reviewed studies pertaining to regional agricultural patterns.
- Conducted surveys with sixteen (16) agro-tourism facilities in the Central Alabama area. Agro-tourism facilities were interviewed by telephone from a list generate by Southeast Research. All surveys were completed between December 2021 and January 2022.
- Conducted surveys with seventy-three (73) farms/farmers in the Central Alabama area. Farmers were interviewed by telephone from a list generate by Southeast Research and Data Axle. All surveys were completed between December 2021 and February 2022.
- Conducted surveys with sixteen (16) stakeholders in the Central Alabama area. Stakeholders were interviewed by telephone from a list generate by Southeast Research. All surveys were completed between January and February 2022.

## **LIMITATIONS**

When reviewing the findings and recommendations of this report, the following limitations should be considered:

- Some of the pre-COVID agricultural trends referenced in this report may or may not continue due to the potential impact of the pandemic.
- All surveys based on samples have the potential for sampling and non-sampling error. This can be an issue even when sound survey research procedures are adhered to.
- While Southeast Research relied on information and secondary data sources considered reliable, we assume no responsibility for accuracy of individual items.

In some instances, this analysis contains forecasts and forward-thinking information, including possible or assumed future performance, costs, sales levels or rates, valuations and industry growth and other trends. Actual results and developments may differ materially from those implied or expressed by statements herein and are dependent on a variety of factors.

The preferred source of data to analyze county level agricultural statistics is the U.S. Census of Agriculture produced every five (5) years by the U.S. Department of Agriculture. However, the latest county data were collected pre-COVID in 2017. This means a study of this nature relies heavily on conducting survey research with entities

potentially impacted by COVID-19. Impact data for this report were obtained by conducting surveys with agriculture producers, agro-tourism owners, and agricultural industry stakeholders in Central Alabama. At the same time, a review of historical trend data pertaining to Central Alabama's agricultural industry has been conducted to demonstrate that a number of significant trends were in progress pre-COVID-19. Also, while current county level data is not available, the USDA released their U.S. 2021 and 2022 farm data income forecast on February 4, 2022 and these data are included in the analysis. The authors of this report do not suggest there is a parallel relationship between U.S. farm income forecasted through 2022 and the current or future income of agriculture in Central Alabama.

## **ACKNOWLEDGEMENTS**

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Doug Singleton, Montgomery County Commission (Alabama)

Mayor Curtis Stoudemire, Town of Autaugaville (Alabama)

## II. Central Alabama Landscape

The Central Alabama Regional Planning and Development Commission’s geographical service area includes the counties of Autauga, Elmore, and Montgomery (see Figure 1). Collectively these three central Alabama counties represent a population of over 375,000. Montgomery is the largest of the three counties representing approximately 61% of the region’s population (see Figure 2). (U.S. Census, 2020)

Central Alabama’s three counties contain over 140,000 (140,632) households with an average household size of 2.6 persons. While Montgomery is the largest of the three counties, its median household income is ranked third in the region. (U.S. Census American Community Survey, 2019)

**Figure 1:  
Central Alabama Area**



**Figure 2  
Demographic Profile of the Central Alabama Area**

	Population <sup>1</sup>	Households <sup>2</sup>	Median Household Income <sup>2</sup>
<b>Central Alabama Area</b>	<b>375,736</b>	<b>140,632</b>	<b>\$53,704<sup>3</sup></b>
Autauga	58,805	21,397	\$58,731
Elmore	87,977	29,708	\$60,891
Montgomery	228,954	89,527	\$50,124

<sup>1</sup> (U.S. Census, 2020)

<sup>2</sup> (U.S. Census American Community Survey, 2019)

<sup>3</sup> Estimated by Southeast Research, Inc

## III. Highlights of Study

### ***EFFECTS OF COVID-19 ON AGRO-BUSINESS AND AGRO-TOURISM IN CENTRAL ALABAMA***

Separating the economic impact of the COVID-19 pandemic on Central Alabama’s agro-business and agro-tourism industries from the impact of other causal factors is challenging for several reasons. First, there is insufficient published statistical data to conduct an analysis of the pandemic’s effect on agriculture at the county level for the years 2020-2022. Second, and complicating the assessment issue is that there were

already indications that the agricultural industry was experiencing stressful economic conditions prior to the pandemic (Johansson, October 12, 2020). The USDA reported that COVID-19 exacerbated the challenges that were already affecting our nation's farmers (Johansson, October 12, 2020).

Given the above-described dynamics and the lack of current published data at the county level, this study relied more on obtaining data by conducting surveys with three principal groups: agro-businesses/farmers; agro-tourism businesses; and a variety of industry stakeholders including agriculture extension agents working out of Auburn University.

### ***EFFECTS OF COVID-19 ON AGRICULTURE IN CENTRAL ALABAMA***

The effects of COVID-19 on Central Alabama farming have been grouped into three principal areas based on survey responses received from farmers and stakeholder groups. While these issues are discussed separately, it is acknowledged that supply chain issues, revenue, and cost issues are nevertheless interrelated and have potentially, intertwining cause and effect relationships.

- Supply Chain Issues
- Loss of Revenue
- Higher Input Costs

#### **SUPPLY CHAIN ISSUES**

As a direct result of issues associated with the COVID-19 pandemic, more than one-third of Central Alabama farmers have experienced supply chain issues that are affecting the availability of needed farm supplies. Items affected most by supply chain issues to-date include equipment and implement parts, fertilizer, fuel, and feed. Going forward, more than one-half of Central Alabama farmers feel that supply chain issues will have an effect on the availability of supplies they will need in 2022.

#### **LOSS OF REVENUE**

One out of three Central Alabama farmers reported their farming business is worse off today as a direct result of the coronavirus outbreak. In 2019, 45% of the region's farmers operated above break even, this dropped to 38% in 2020, and declined further to 30% in 2021. Among farmers experiencing a decrease in revenue in 2020, two-thirds feel COVID-19 was partly responsible. And among farmers experiencing a reduction in their revenue in 2021 compared to 2020, three-fourths feel this was due to a combination of COVID-19 and other factors.

## **HIGHER INPUT COSTS**

One-third of the farmers in Central Alabama reported that the biggest problem they have had to deal with as a direct result of the COVID-19 pandemic was higher input costs. Two-thirds of Central Alabama farmers anticipate that operating costs in 2022 will be higher, and one-third feel their costs will be much higher. The costs that farmers are most concerned about in 2022 are fertilizer (35%), fuel (35%) and feed (24%).

## ***EFFECTS OF COVID-19 ON AGRO-TOURISM BUSINESSES IN CENTRAL ALABAMA***

Based on the information obtained by surveying agro-tourism businesses, the issues they are most concerned about are:

- Supply Chain Issues
- Having to Temporarily Shut Down
- Revenue
- Labor

## **SUPPLY CHAIN ISSUES**

One-half of the agro-tourism facilities in Central Alabama have experienced issues obtaining operating supplies or inventories as a direct result of issues associated with the coronavirus pandemic. These issues interfered with the ability of the agro-tourism facilities to remain open and serve customers. The biggest problem that Central Alabama agro-tourism businesses have had to deal with as a direct result of the COVID-19 pandemic has been supply chain disruptions.

## **HAVING TO TEMPORARILY SHUT DOWN**

One-third of the agro-tourism facilities in Central Alabama have had to shut down, at least temporarily, as a result of issues associated with the pandemic. More than one-third of the agro-tourism businesses reported that one of the biggest problems they had to deal with as a direct result of the pandemic was following guidelines/operating restrictions. One out of five of these businesses reported that the biggest issue caused by COVID-19 was having to shut down their business. One out of four agro-tourism businesses said the biggest problem they had to deal with as a direct result of COVID-19 was that customers were afraid to shop in public because of the virus.

## **REVENUE**

One out of three (31%) of the agro-tourism businesses in Central Alabama experienced a decline in their revenue in 2020 compared to the revenue they earned in 2019. Eighty percent (80%) attributed their revenue decline mainly to COVID-19, while 20% said their revenue was caused by COVID-19 and other factors. During this same time period (2019



to 2020), one out of four (25%) of the agro-tourism facilities recorded an increase in their revenue, while forty-four percent (44%) said their revenue did not change in 2020 compared to 2019.

The revenue of agro-tourism businesses in Central Alabama improved in 2021 over 2020 with only 13% reporting their revenue had declined over that time period. One out of three (31%) of the facilities reported their income increased from 2020 to 2021, while one-half (50%) said their revenue remained about the same in 2021 compared to 2020.

During the two-year period (2020 and 2021), several COVID-19 related issues had an adverse impact on the revenue of Central Alabama agro-tourism facilities:

- Lack of Employees
- Customers scared of COVID/not shopping
- Having to shut down their business
- Supply Chain Disruptions

Overall one-half of the agro-tourism businesses said they were worse off as a direct result the coronavirus outbreak.

## **LABOR**

Close to one-third (31%) of the agro-tourism businesses listed lack of employees as one of the biggest problems they had to deal with as a direct result of COVID-19. And, when attempting to hire new workers, close to four out of ten (38%) said their biggest challenge was finding people who wanted to work.

## ***STAKEHOLDERS' OPINION OF COVID-19'S IMPACT ON AGRICULTURAL PRODUCERS IN CENTRAL ALABAMA***

- All of the agricultural stakeholders surveyed as part of this study generally feel that COVID-19 has, to some degree, adversely impacted the Central Alabama farming businesses.
- The majority of the stakeholders feel the most significant impact on the farming industry in Central Alabama has come in the form of increased input costs, supply chain issues, labor costs, and labor availability. Rising costs, they feel, have affected practically all input items.
- Labor from the local area is in short supply and farmers are using workers from the H-2A program, though some small farmers haven't used the program.
- Some stakeholders feel that the high cost of farming inputs may be long-term. Others point out that while commodity prices have been good recently, farmers are likely not making money due to the high input costs they are facing.
- Stakeholder groups do not feel farming in Central Alabama has reached its growth potential.

- Stakeholders, including agricultural extension agents, point to a good climate and quality farmers as strengths of the agriculture industry in Central Alabama.
- Several weaknesses of Central Alabama’s agriculture industry were identified by stakeholders including a lack of local processing facilities and commodity markets; the region is losing good farmland to developers; and farmers are retiring due to aging.

#### **SUGGESTED GROWTH OPPORTUNITIES FOR AGRICULTURE IN CENTRAL ALABAMA**

- Growing new types of crops, such as Hemp
- Improving farming efficiency, especially in animal production

#### **CURRENT THREATS TO AGRICULTURE IN CENTRAL ALABAMA IDENTIFIED BY STAKEHOLDER GROUPS**

- Rising input cost
- Labor shortages
- Supply chain issues

The survey of Central Alabama farmers, agro-tourism businesses and agricultural stakeholder groups revealed that, though the pandemic created some hard times for all of us, our farmers and agro-tourism people are resilient. Based on a review of the survey data, an estimated one-third of Central Alabama’s farmers and agro-tourism operators took a bigger hit from the pandemic than the others. But, with the help of government payments and resiliency, Central Alabama farmers are getting through this pandemic. Perhaps the great American humorist Will Rogers described the plight of our farmers best:

***“The farmer has to be optimistic, or he wouldn’t still be a farmer.”***

## **IV. Estimated Current Economic Condition of Agro-Businesses in Central Alabama**

#### **SELECTED HISTORICAL TRENDS 2007-2017**

- The market value of agriculture products sold in Central Alabama increased 31% from 2007 to 2017 (from \$73.1 million to \$95.9 million).
- Net cash income increased by 147.3% from 2007 to 2017 (from \$8.9 million to \$22.1 million).

## SELECTED IMPACTS OF COVID-19 ON AGRO-BUSINESSES IN CENTRAL ALABAMA

- More than one-third (36%) of agro-businesses have experienced supply chain issues due to COVID-19 resulting in reductions of operational effectiveness, layoffs, and temporary shutdowns.

### REVENUE IMPACT DUE TO COVID-19

- One-third (33%) of the agro-businesses in Central Alabama experienced a decrease in their income from 2019-2020. Twenty-one percent said the reduction in income was mainly due to COVID-19, while two-thirds (67%) said the decrease was due to a combination of COVID-19 and other factors.
- Less than one-fifth (18%) of the agro-businesses experienced a decrease in their income from 2020 to 2021. More than three-fourths (77%) stated the reductions in income over this time period was due to a combination of COVID-19 and other factors.
- Thirty-two percent (32%) of the agro-business facilities in Central Alabama said they are worse off as a direct result of the coronavirus outbreak.
- The proportion of agro-businesses operating above break even has declined since 2019.

**Figure 3**

Year	Operating Above Break Even
2019	45%
2020	38%
2021	30%

Source: Southeast Research Inc.

From a profit standpoint, agro-businesses in Central Alabama have not shown improvement since 2019. However, since 2017 only two farms in the three-county area have filed for Chapter 12 bankruptcy. In fact, nationally Chapter 12 farm bankruptcies in 2021 were down by 52% from their recent peak recorded in 2019 (U.S. County Statistics and Reports, 2017, 2018, 2019, 2020, 2021). Farmers were helped a great deal by the government payments they received during 2020 that were associated with COVID-19. Additionally, USDA temporarily suspended debt collections, foreclosures, and other activities on farm loans for several thousand borrowers due to COVID-19 in early 2021 (Farm Service Agency, January 27, 2021). While Central Alabama agro-businesses appear to be facing profitability issues, they nevertheless are currently focused on production as indicated by their concern for available supplies, rising costs, and the availability of labor. A survey of stakeholders that included agricultural extension agents from Auburn University revealed that the biggest economic issue currently facing Central Alabama agro-businesses is the high price they are paying for inputs.

Several of the extension agents interviewed for this study describe Central Alabama's farmers as resilient and the relatively small number of Chapter 12 bankruptcies filed in the region since 2017 suggest this as well. Two of the stakeholders interviewed for the study were representatives of agricultural lending institutions and both describe the farmers they knew in Central Alabama as credit worthy.

## **V. Current Capabilities of the Agro-Business Industry in Central Alabama**

The current capabilities of Central Alabama agro-businesses appear to be somewhat restricted due to a number of factors caused by COVID-19:

### **1. Supply Chain Issues**

Supply chain Issues are affecting the availability of needed supplies. More than one third (31%) of the Central Alabama farmers surveyed experienced supply chain issues as a direct result of COVID-19. Further, almost one out of five farm producers indicated that the availability of essential supplies was the biggest problem they had to deal with as a direct result the coronavirus pandemic.

### **2. Operational Efficiency of Farming Businesses**

Among farms that experienced supply chain issues, six out of ten (62%) reported that supply chain issues affected the operational efficiency of their farming operations.

### **3. Costs Issues**

One out of three (32%) agricultural producers in Central Alabama reported that the biggest problem they had to deal with as a direct result of COVID-19 was higher costs of fuel, fertilizer, feed, and labor being their biggest concerns. Auburn University extension agents indicated that though commodity prices are up, farms may not make money because their costs are also up.

### **4. Other Issues Affecting the Capability of Central Alabama Agricultural Producers**

- Only 55% of the farmers in Central Alabama would have funds to replace a major piece of farm equipment should there be a need to do so.
- Close to one-third (32%) of the area farmers said they are worse off as a direct result of COVID-19.
- One of the extension agents interviewed for this study pointed out some of the strengths of the agricultural industry in Central Alabama that included warm weather, abundant water supply, long growing season, and knowledgeable farmers.

- Two-thirds of the stakeholders and non-farm entities surveyed for this study do not feel that the agro-business industry has reached its potential in Central Alabama.
- On balance, the agriculture industry in Central Alabama has been dealt a blow by the coronavirus outbreak. Additionally, some of the effects of COVID-19 are still impacting the region's agriculture industries' capabilities. However, at the same time, there are some positives affecting capabilities.

## **VI. Weaknesses of the Agro-Business Industry as a Result of the Coronavirus**

### **WEAKNESSES CREATED BY COVID-19 NOTED BY EXTENSION AGENTS AND OTHER STAKEHOLDERS**

Currently, agro-businesses in Central Alabama are in a weaker position versus pre-COVID because of supply chain issues and high input costs. Some stakeholders feel these issues could be long-term.

- Farmers are finding it harder and more expensive to get their livestock and crops to market.
- Labor is in short supply.
- When fertilizer is in short supply and costs are higher, farmers have two options for their crops: plant fewer acres or use less fertilizer on the same number of acres. Both of these options will serve to reduce crop production.
- Almost one-third (32%) of the agro-businesses said they were worse off as a result of COVID-19.

## **VII. Future Development Potential for Central Alabama's Agro-Business Industry**

Interviews with Central Alabama agricultural extension agents representing a variety of crop and animal specialties provided some insight into the future development potential farming in Central Alabama.

- Two-thirds of the extension agents and other stakeholders believe the agricultural industry in Central Alabama has not reached its growth potential.
- Future growth may be in the form of improved efficiency.
- Farm expansion is a potential option for growing the region's agricultural industry.

There are some historical trends that could affect agriculture's development potential:

- Though the number of farms in Central Alabama is declining, the average acreage size has been getting larger increasing the chance that more advanced technology and farming methods will become more feasible.
- Net cash farm income increased by 147% over the 10-year period from 2007 to 2017, suggesting that agriculture is both a stable and attractive industry for the Central Alabama region.

## **VIII. Estimated Current Economic Condition of Agro-Tourism Facilities in Central Alabama**

### **SELECTED IMPACTS OF COVID-19 ON AGRO-TOURISM FACILITIES IN CENTRAL ALABAMA**

One out of three (31%) agro-tourism facilities in Central Alabama experienced a decrease in their revenue from 2019 to 2020. However, during the same time period one out of four (25%) of agro-tourism facilities said their revenue increased. Among those who experienced a decline in their income, eight out of ten said their decrease was due to COVID-19.

From a revenue standpoint, things improved for agro-tourism facilities in Central Alabama in 2021. While one out of three of these facilities saw an increase in their revenue from 2020 to 2021, just 13% saw their revenue decline during this period. Agro-tourism operations are more agile in their operations when compared to cattle farming or cotton farming. Agro-tourism facilities were, at times, required to shut down due to COVID-19, and during the shutdown their revenue stops. This may explain why one-half of the facilities reported they were worse off as a direct result of the coronavirus outbreak.

Based upon the U.S. Census of Agriculture, agro-tourism facilities operated by Central Alabama farmers do not appear to be growing. From 2012 to 2017 the number of facilities increased from 23 facilities to 24 in Central Alabama.

## **IX. Current Capabilities of the Agro-Tourism Industry in Alabama**

It is estimated that today there are 25-30 agro-tourism facilities currently operating in Central Alabama. This means that a very small percentage of the farming operations are using agro-tourism as a source of income. The available data suggest that agro-tourism is a relatively underdeveloped industry in Central Alabama but, with the capacity to grow.

One-half of the agro-tourism facilities in Central Alabama reported being worse off as a direct result of the coronavirus outbreak. While this could potentially impact the

industries short run capability, the relative quick turn-a-around observed in their revenue recovery from 2020 to 2021 suggest agro-tourism operators are resilient.

## **X. Weaknesses of the Agro-Tourism Industry as a Result of COVID-19**

- One-half of the agro-tourism businesses in Central Alabama say they are worse off as a direct result of the coronavirus outbreak.
- One-third of the agro-tourism businesses stated the biggest problem they had to deal with due to COVID was not having enough employees.
- Finding people who want to work is the biggest challenge agro-tourism businesses in Central Alabama face when hiring new employees.
- When compared to pre-COVID, the average number of people employed by agro-tourism businesses has declined by 37%.
- COVID-19 appears to have significantly disrupted the availability of labor of agro-tourism businesses.
- One-half of the agro-tourism businesses in Central Alabama reported they experience issues obtaining supplies or inventories as a direct result of the issues associated with the coronavirus pandemic.

## **XI. Future Development Potential for Central Alabama Agro-Tourism**

Each state seems to have their own definition of agro-tourism. The National AG Law Center (NALC) notes that agro-tourism can be defined as “a form of commercial enterprise that links agricultural production and/or processing with tourism in order to attract visitors onto a farm, ranch, or other agricultural business for the purpose of entertaining and/or educating the visitors and generating income for the farm, ranch or business owners” (The National Agriculture Law Center Glossary, 2022). According to the National Agricultural Statistics Service (NASS) Central Alabama’s three county area had 23 agro-tourism operations in 2012 and 24 in 2017. Nationally, agro-tourism revenue was almost \$950 million in 2012<sup>3</sup> an increase of 35% over the \$704 million recorded in 2012. However, as a percentage of gross cash farm income, the revenue from agro-tourism operations is not impressive. The table below (see *Figure 4*) shows the percentage of gross cash farm income that is represented by agro-tourism businesses in selected areas for 2017.

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<sup>3</sup> The 2017 data excluded wineries, although they were included in the 2012 data.

**Figure 4**  
**Agro-Tourism Income Represented as a Percent of**  
**Gross Cash Farm Income For 2017- Selected Areas**

Area	Gross Cash Farm Income (\$100)	Income from Agro-Tourism (\$100)	Agro-Tourism Income as a Percent of Gross Cash Farm Income (%)
<b>United States</b>	413,165,009	949,323	0.23
<b>Alabama</b>	6,412,704	6,793	0.11
<b>Georgia</b>	10,467,453	28,058	0.27
<b>Mississippi</b>	6,529,805	6,564	0.10
<b>Tennessee</b>	4,041,376	14,519	0.36
<b>Louisiana</b>	3,576,327	2,567	0.07
<b>Texas</b>	25,834,711	162,567	0.63
<b>Arkansas</b>	10,614,059	4,705	0.04
<b>Central Alabama</b>	108,035	339	0.31

(National Agriculture Statistics Service, 2007, 2012, 2017)

Calculations by Southeast Research

As the above table indicates (see *Figure 4*), income generated from agro-tourism operations at Central Alabama farms represented about three-tenths (0.31%) of one percent of the region’s gross cash income in 2017. This proportion compares favorably to the state of Alabama’s proportion of just 0.11%. Since agro-tourism revenue generated from wineries were not included in the 2017 Census of Agriculture, these data cannot be compared to the 2012 Census data when attempting to identify trends for the industry.

The future development potential for the agro-tourism industry in Central Alabama looks favorable due to several factors:

- The agro-tourism businesses actually recovered well from a revenue standpoint after being temporarily closed during of the pandemic.
- Year-round good weather for customers to visit.
- A large proportion (77%) of Central Alabama agro-businesses had sales of under \$25,000 in 2017. Marginal income of \$2,000 to \$5,000 annually would likely mean more to smaller farmers vs. larger ones.



## XII. U.S. Farm Income Forecast – 2021 and 2022

### FROM 2019-2020

As shown in *Figure 5* below, farm cash receipts remained relatively unchanged in the U.S. from 2019 to 2020, while cash expenses increased by almost 3% during this period. Cash receipts for crops increased by about 4%, while receipts for animals (and their products) declined by nearly 6%. Government payments to farmers of \$45.7 billion in 2020 stand out as probably the most significant item in *Figure 3* especially when compared to government payments received by farmers in 2019 and forecasted payments in 2021 and 2022. Government payments to farmers increased from 22.4 billion to 45.7 billion from 2019-2020 an increase of 104%. Government payments to farmers in 2020 represented 10.3% of total U.S. gross farm income. In contrast, government payments to farmers in 2019 represented 5.3% of gross farm income.

**Figure 5**  
**U.S. Cash Farm Income Statement in Central Alabama - Trends<sup>b</sup>**

	2019 \$B	2020 \$B	2021 \$B	2022 \$B	Change 2019- 20 %	Change 2020- 21% <sup>a</sup>	Change 2021- 22% <sup>a</sup>
<b>Cash Receipts</b>	367.0	363.8	432.6	461.9	-1.0%	18.9%	6.8%
Crops	191.6	198.8	236.6	248.6	3.8%	19.0%	5.1%
Livestock	175.4	165.0	195.9	213.3	-5.9%	18.8%	8.9%
<b>Government Payments</b>	22.4	45.7	27.1	11.7	104.0%	-40.6%	-57.0%
Cash Farm Related Income	34.7	34.3	32.7	38.9	-1.2%	-4.5%	18.8%
Gross Cash Farm Income	424.2	443.8	492.4	512.5	4.6%	11.0%	4.1%
Cash Expenses	317.4	326.5	358.3	376.4	2.9%	9.7%	5.1%
Net Cash Farm Income	106.9	117.2	134.2	136.1	9.6%	14.5%	1.4%

(Economic Research Service, February 4, 2022)

<sup>a</sup> Note: the data for 2021 and 2022 represent forecasts made by the U.S. Department of Agriculture Economic Research Service. The forecasted data for 2021 and 2022 are expressed in nominal dollars, i.e., not adjusted for inflation.

<sup>b</sup> USDA uses two principal measures of farm income – net cash income and net farm income and both are valid measures of profit. USDA's net cash income is primarily a financial measure that conforms rather closely to standard cash reporting procedures. Net farm income represents an accrual value of all goods and services produced on farms during the year. Crop production is recorded as the value at harvest. Net farm income also accounts for the imputed rental value of farm dwellings and depreciation of farm equipment – neither of which are included in net cash farm income (Congressional Research Service, September 29, 2021).

#### **FROM 2020-2021<sup>4</sup>**

Cash receipts from crops and animals are expected to increase about 19% from 2020, to forecasted 2021 (from \$363.8 billion to \$432.6 billion) an increase of almost \$69 billion.

During the same time period, government payments to U.S. farmers are forecasted to decline by \$18.6 billion (from 45.7 billion to \$27.1 billion). Overall, gross cash farm income is forecasted to increase by 11% from 2020 to forecasted 2021. The ERS forecast that cash expenses will increase by almost 10% (9.7%) and forecast that net cash farm income in the US will increase by a healthy 14.5%, from \$117.2 billion in 2020 to \$134.2 billion in 2021. From a different view, government payments to farmers are forecasted to be \$18.6 billion less in 2021 than the amount paid to farmers in 2020.

#### **FROM 2021-2022<sup>5</sup>**

The Economic Research Service forecast that net cash farm income in the US will grow just a little over one percent (1.4%) from 2021 to 2022 (from \$134.2 billion to \$136.1 billion). During the same time period cash receipts from the sale of farm products is anticipated to grow by close to seven percent (6.8%). Meanwhile government payments to farmers in 2022 are forecasted to decrease by 57% to 11.7 billion (a decrease of over \$15 billion). This amount of government payments to farmers in 2022 will be the lowest since 2017.

### **XIII. Historical Trends in Central Alabama's Farming Industry Pre-COVID**

#### **DECLINING NUMBER OF CENTRAL ALABAMA FARMS**

A review of the last three U.S. Census of Agriculture reveals that a number of established farming trends were taking shape in Central Alabama before the pandemic. As indicated in *Figure 6* below the number of farms in Central Alabama declined by 177 from 2007 to 2017 representing a decline of 10.7%. This percentage decline over the 10-year period does however compares favorably to the 16.7% decline in the number of farms statewide.

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<sup>4</sup> Forecasted by Economic Research Service, February 4th, 2022.

<sup>5</sup> Forecasted by Economic Research Service, February 4th, 2022.

**Figure 6**  
**Trends in the Number of Farms in Central Alabama**

Area	2007	2012	2017	Percent Change 2007-2017
State Total	48,753	43,223	40,592	-16.7%
Autauga County	415	389	371	-10.6 %
Elmore County	626	552	538	-14.1 %
Montgomery County	620	603	575	-7.3%
Total Central Alabama	1,661	1,544	1,484	-10.7%

(National Agriculture Statistics Service, 2007, 2012, 2017)

**STABILITY IN THE NUMBER OF ACRES IN FARMS IN CENTRAL ALABAMA**

**Figure 7**  
**Trends in the Amount of Land in Farms**

Area	2007 Acres	2012 Acres	2017 Acres	Percent Change 2007-2017
State Total	9,035,357	8,902,654	8,580,940	-5.0%
Autauga County	110,464	111,504	113,236	+2.5%
Elmore County	102,816	90,346	93,703	-16.3%
Montgomery County	223,079	222,066	233,046	+4.5%
Total Central Alabama	436,359	423,916	439,985	+0.8%

(National Agriculture Statistics Service, 2007, 2012, 2017)

While the number of farms in Central Alabama has been declining for the past ten years, the number of acres in farming has remained relatively unchanged over the same 10-year period (from 2007 to 2017). In 2007 the number of acres in farms in Central Alabama was 436,359 and this number increased slightly in 2017 to 439,985 (see *Figure 7* above).

**THE AVERAGE ACREAGE SIZE OF CENTRAL ALABAMA FARMS IS TRENDING LARGER**

**Figure 8**  
**Trends in the Average Size of Farms**

Area	2007 Acres	2012 Acres	2017 Acres	Percent Change 2007-2017
State Total	185	206	211	+14.0%
Autauga County	266	287	305	+14.7%
Elmore County	164	164	174	+6.0%
Montgomery County	360	365	405	+12.5%
Average Central Alabama	263	274	296	+12.5%

(National Agriculture Statistics Service, 2007, 2012, 2017)

As shown in *Figure 8* above, the average farm size in acres among central Alabama farmers increased 12.5% from 2007 to 2017, an increase for the average farm of about 33 acres. This increase is consistent with the statewide growth in the average farm size of 14%. In 2017 the average size farm in Central Alabama was just under 300 acres while the average size in 2007 was 263 acres.

#### **FEWER ACRES ARE BEING USED TO GROW CROPS IN CENTRAL ALABAMA**

There were almost 17,000 fewer acres used for growing crops in Central Alabama in 2017 compared to 2007 (see *Figure 9* below). This represents a decline of over 11%, and is in agreement with the statewide trend.

**Figure 9**  
**Trends in the Total Number of Acres Used in Growing Crops**

Area	2007 Acres	2012 Acres	2017 Acres	Percent Change 2007-2017
State Total	3,142,958	2,758,521	2,818,783	-10.3%
Autauga County	42,349	41,293	36,890	-12.9%
Elmore County	43,406	30,244	34,857	-19.7%
Montgomery County	59,779	61,164	56,953	4.7%
Total Central Alabama	145,534	132,701	128,700	-11.6%

(National Agriculture Statistics Service, 2007, 2012, 2017)

#### **FEWER FARMS ARE GROWING COPS IN CENTRAL ALABAMA**

As revealed in *Figure 10* below, fewer farms were growing crops in 2017 compared to 2007 in Alabama. In Central Alabama alone, there were 140 fewer farms growing crops in 2017 compared to 2007. Even though there were fewer farms growing crops in Alabama from 2007-2017, and fewer acres devoted to crop production, the total market value of crop products sold by Alabama farmers increased by almost 476% during the ten-year period.

**Figure 10**  
**Trends in the Total Number of Farms that are Raising Crops**

Area	2007	2012	2017	Percent Change 2007-2017
State Total	31,773	26,707	24,665	-22.4%
Autauga County	280	258	215	-23.2%
Elmore County	370	309	295	-20.3%
Montgomery County	352	341	352	NC
Total Central Alabama	1,002	908	862	-14.0%

(National Agriculture Statistics Service, 2007, 2012, 2017)

## THE MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD PER FARM IN CENTRAL ALABAMA INCREASED SIGNIFICANTLY FROM 2007 TO 2017

As shown in *Figure 11* below, the market value of all agricultural products sold by the typical farm in Central Alabama increased by nearly 47% over the 10-year period 2007 to 2017. In 2007 the average market value of agricultural products sold per farm in Central Alabama was about \$44,000, but increased to over \$64,000 in 2017.

**Figure 11**  
**Trends in the Market Value of Agricultural Products Sold Per Farm**

Area	2007 \$	2012 \$	2017 \$	Percent Change 2007-2017
State Total	90,570	128,894	147,334	62.7%
Autauga County	40,405	50,929	57,844	43.2%
Elmore County	23,901	47,985	47,985	100.0%
Montgomery County	67,185	128,422	81,496	21.3%
Total Central Alabama	44,039	80,141	64,592	46.7%

(National Agriculture Statistics Service, 2007, 2012, 2017)

## THE TOTAL MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD IN CENTRAL ALABAMA RECORDED AN INCREASE OF 31% FROM 2007 TO 2017

**Figure 12**  
**Trends in the Market Value of Agricultural Products Sold in Central Alabama**

Area	2007 \$1000	2012 \$1000	2017 \$1000	Percent Change 2007-2017
State Total	4,415,550	5,571,173	5,980,595	35.4%
Autauga County	16,768	19,811	21,460	28.0%
Elmore County	14,962	26,488	27,534	84.0%
Montgomery County	41,455	77,438	46,860	12.5%
Total Central Alabama	73,149	123,737	95,854	31.0%

(National Agriculture Statistics Service, 2007, 2012, 2017)

As shown in *Figure 12* above, the percentage increase in the market value of agricultural products sold by farm producers in Central Alabama is just slightly lower than the increase recorded statewide for the same time period (2007-2017). In 2007 Central Alabama farmers sold agricultural products valued at \$73,149,000. This volume increased to \$95,854,000 in 2017.

## AGRICULTURAL COMMODITIES PRODUCED BY CENTRAL ALABAMA FARMERS REPRESENT A RELATIVELY BALANCED MIX BETWEEN CROPS AND ANIMALS

As shown in *Figure 13* below, 46% of the agricultural products sold by farmers in Central Alabama were crop products in 2017, while 54% were animal and animal related

products. These proportional breakdowns differ significantly when compared to the state as a whole where just 20% of Alabama’s agricultural products in 2017 was represented by crop products, while 80% was represented by animal and animal products sales.

**Figure 13**  
**Source of Cash Receipts for Agricultural Products Sold**  
**U.S., State of Alabama, and Central Alabama 2017**

<b>Commodity Type</b>	<b>% U.S.</b>	<b>% State of Alabama</b>	<b>% Central Alabama</b>
Crops	53.0%	20.0%	46.0%
Animals	47.0%	80.0%	54.0%
Total	100.0%	100.0%	100.0%

(National Agriculture Statistics Service, 2007, 2012, 2017)

**GOVERNMENT PAYMENTS TO CENTRAL ALABAMA FARMERS INCREASED MODERATELY FROM 2007 TO 2017**

**Figure 14**  
**Trends in the Amount of Government Payments to Central Alabama Farmers**

<b>Area</b>	<b>2007 \$</b>	<b>2012 \$</b>	<b>2017 \$</b>	<b>Percent Change 2007-2017</b>
Autauga County	1,357,000	1,245,000	1,069,000	-21.2%
Elmore County	1,526,000	959,000	855,000	-44.0%
Montgomery County	1,251,000	927,000	2,808,000	124.5%
Total Central Alabama	4,134,000	3,131,000	4,732,000	14.6%

(National Agriculture Statistics Service, 2007, 2012, 2017)

As shown in *Figure 14* above, government payments to Central Alabama farmers increased moderately (14.6%) over the 10-year period 2007 to 2017. In 2017, government payments to Central Alabama farmers were over \$4.7 million. The increase in government payment from 2007 to 2017 was due to the increased amount received by farmers in Montgomery County, as payments to farmers in the Autauga and Elmore County declined over the 10-year period.

**NET CASH INCOME AMONG FARMERS IN CENTRAL ALABAMA RECORDED AN INCREASED BY OVER \$13 MILLION FROM 2007 TO 2017**

*Figure 15* below reveals that total net cash income among Central Alabama farmers increased by 147.3% from 2007 to 2017. This represents an increase over the 10-year period of slightly more than \$13 million.

This rather large percentage increase in net cash farm income is due, in part, to the region underperforming in 2007.

**Figure 15**  
**Net Cash Farm Income Statement for Central Alabama-2017**

<b>Cash Receipts</b>	<b>2007 (\$1000)</b>	<b>2012 (\$1000)</b>	<b>2017 (\$1000)</b>	<b>Percent Change 2007-2017</b>
Total Crops and Animals Receipts	73,385	123,737	95,914	30.7%
<b>Government Payments</b>	4,134	3,131	4,732	14.5%
Cash Farm Related Income	5,602	5,292	7,389	31.9%
Gross Cash Farm Income	83,121	132,327	108,035	30.0%
Cash Expenses	74,180	113,327	85,927	15.9%
Net Cash Income	8,941	18,833	22,108	147.3%

(National Agriculture Statistics Service, 2007, 2012, 2017)

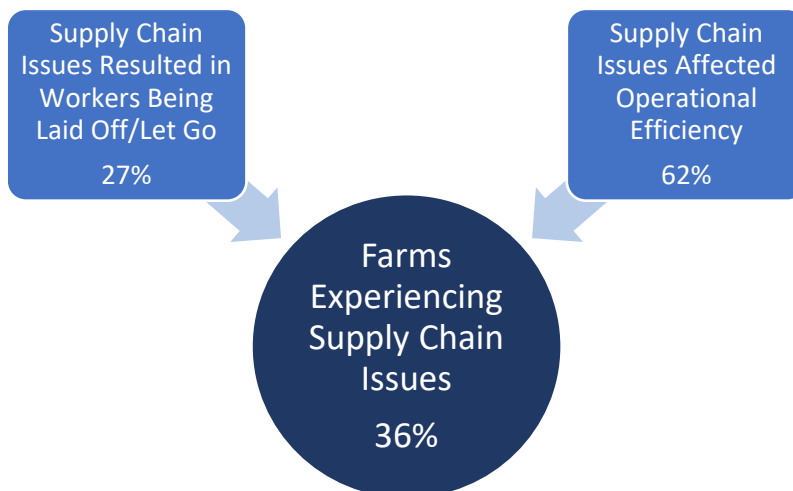
## **XIV. Discussion of Survey Findings**

### **A. Impact of COVID-19 on Farm/Farmers in Central Alabama**

As a part of the process of assessing the impact of COVID-19 on the farming industry in Central Alabama, surveys were conducted with 73 farmers. These farms represented producers of tree nuts, berries, row crops, hay, grain, livestock, poultry, and milk production. For a copy of the survey instrument used in this assessment, see *Appendix A*.

#### **SUPPLY CHAIN ISSUES**

Among the seventy-three farmers surveyed, more than one-third (36%) reported experiencing issues obtaining operating supplies or equipment as a direct result of issues associated with the coronavirus pandemic. Six out of ten (62%) farmers that experienced supply chain issues indicated the supply chain issues affected the operational efficiency of their farming operations. And, more than one-fourth (27%) indicated that their supply chain issues resulted in some of their workers being temporarily laid off or let go.



## IMPACT OF COVID-19 ON OPERATIONS

Since the COVID-19 pandemic started, one-fifth (21%) of the farmers reported they have had to shut down or reduce operations because an owner or employee contracted COVID-19. In addition, 3% of farmers reported that their farming operation was required to temporarily shut down by a government agency as a direct result of the coronavirus pandemic. All totaled, close to one-fourth (23%) of Central Alabama farmers reported having to shut down or reduce operations (at least temporarily) due to COVID-19 (see *Figure 16*).

**Figure 16**  
**Operational Issues Experienced by Central Alabama Farmers as a Direct Result of the COVID-19 Pandemic**

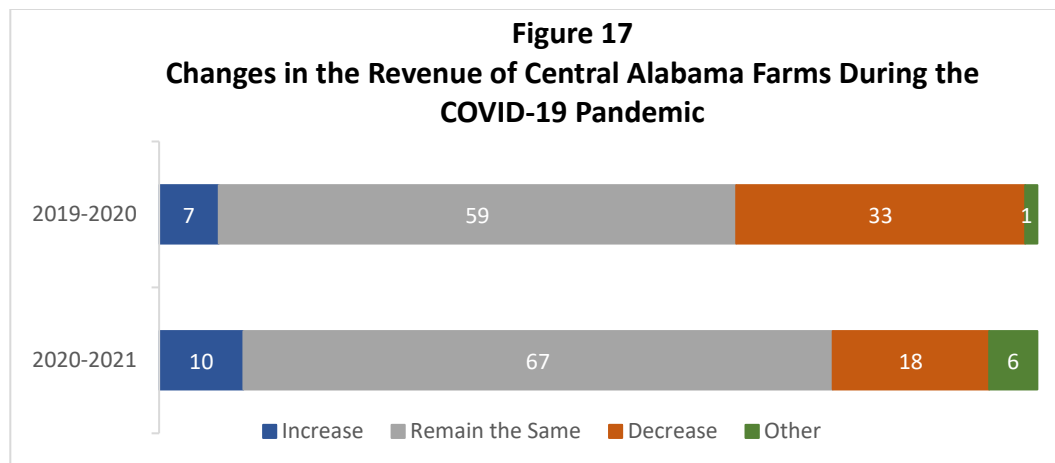
<b>Total proportion of farming operations that had to shut down or reduce operations (at least temporarily) due to the coronavirus pandemic</b>	23%
<b>Farms that had to shut down or reduce operations as a direct result of the coronavirus pandemic among their own employees</b>	21%
<b>Farms that were required to shut down by any government or agency as a direct result of the coronavirus pandemic</b>	3%

## IMPACT OF COVID-19 ON FARMERS' REVENUE

From 2019 to 2020, one-third (33%) of Central Alabama farmers experienced a decrease in their farm's revenues (see *Figure 17*). One-fifth (21%) of farmers felt their revenue decrease was due mainly to COVID-19, while two-thirds (67%) reported the decrease was due to a combination of COVID-19 and other factors. At the same time, four out of ten (42%) farmers who reported a decrease in revenue indicated they received assistance payments from a government agency in 2020. However, even with these assistance payments, none of the farmers reported their total revenues for 2020 to be greater than 2019.

From 2020 to 2021, 18% of Central Alabama farmers experienced a decrease in revenue. More than three out of four farmers (77%) attributed their revenue decrease to a combination of COVID-19 and other factors. About one-fourth (23%) of the farmers who reported a decrease in revenues in 2021 received assistance payments from a government agency that year. The farmers that received assistance payments indicated that their total revenues for 2021 were still less than their 2020 revenues.





### IMPACT OF COVID-19 ON FARM EMPLOYMENT

As shown in *Figure 18*, the average number of people employed by farming operations in Central Alabama remained relatively unchanged from pre-COVID to the time of this survey (February 2022).

**Figure 18**  
**Impact of the COVID-19 Pandemic on the Number of People Employed by Central Alabama Farming Operations**

Average number employed before the COVID-19 pandemic	2.8
Average number currently employed	2.2

More than eight out of ten (81%) Central Alabama farming operations indicated they had sufficient internet service to communicate with their customers, suppliers, and workers during the pandemic. At the same time one out of five indicated they do not have sufficient Internet service.

### CONDITION OF EQUIPMENT ON CENTRAL ALABAMA FARMS

Most (63%) Central Alabama farmers reported that the overall condition of their farm equipment is either excellent or good. However, just over one-half (55%) of the farmers said they would have access to funds if they needed to replace a major piece of their farm equipment.

### CENTRAL ALABAMA FARMERS ANTICIPATE THEIR COSTS WILL BE HIGHER IN 2022 COMPARED TO 2021

Close to three-fourths (74%) of Central Alabama farmers anticipate their operating costs in 2022 will be higher compared to 2021, with 48% indicating their costs will be “much higher” (see *Figure 19*).

The farming costs Central Alabama farmers are most concerned about for the 2022 farming season include fertilizer (35%), fuel (35%), feed (24%), and labor (9%). For a complete list of costs mentioned by farmers, see Table 22 in *Appendix B - Tabular Data* of this report.

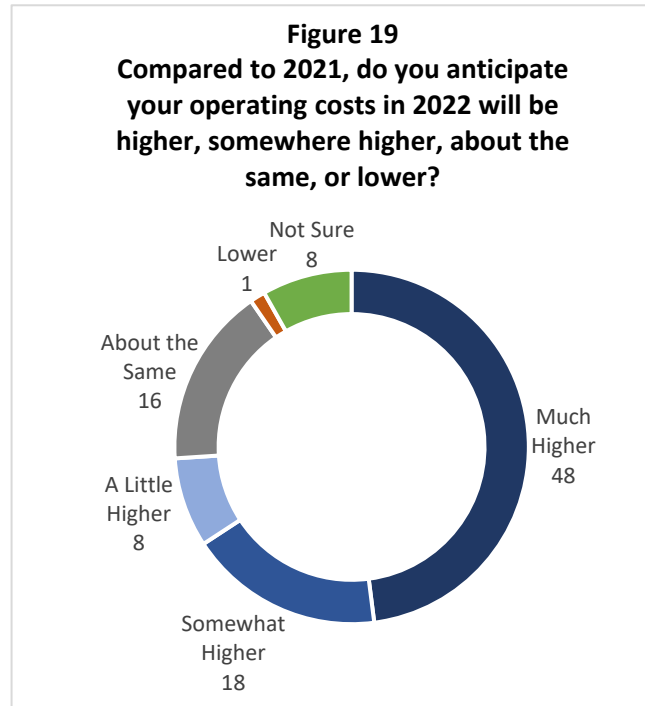
**CENTRAL ALABAMA FARMERS ARE EXPERIENCING SUPPLY CHAIN ISSUES WITH CRUCIAL FARM SUPPLIES/EQUIPMENT**

Over one-half (56%) of area farmers feel that supply chain issues will have either moderate effect or a large effect on the availability of supplies they will need in 2022.

When asked which farm supplies or equipment they are experiencing supply chain issues with, items mentioned most by farmers include equipment/implement parts (22%), fertilizer (16%), feed (8%), and fuel (7%). Four out of ten (44%) farmers indicated they are not currently experiencing any supply chain issues.

**THE BIGGEST PROBLEMS CENTRAL ALABAMA FARMERS HAVE HAD TO DEAL WITH AS A RESULT OF THE PANDEMIC**

The biggest problems Central Alabama farmers have had to deal with as a direct result of the COVID-19 pandemic include higher costs, the availability of essential supplies and labor. While farmers have looked for ways to overcome these issues, in some cases they have had to reduce operations or shut down (see *Figure 20*).

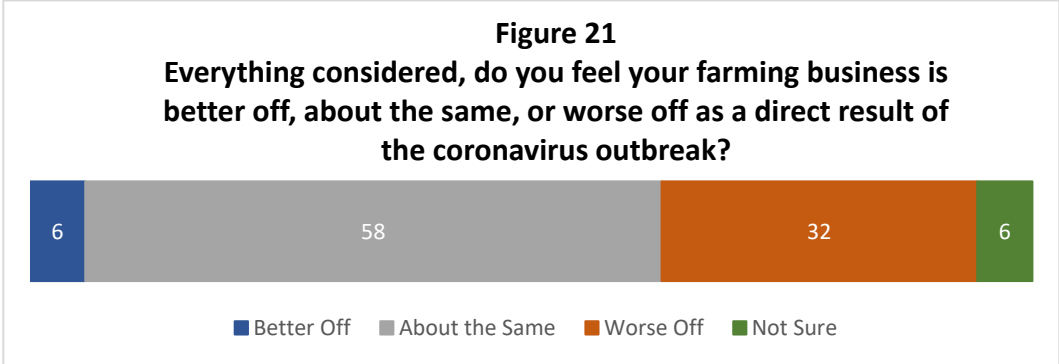


**Figure 20**  
**Strategies Central Alabama Farmers Used to Deal with the Problems they Faced as a Result of the COVID-19 Pandemic**

BIGGEST PROBLEM	WAYS TO OVERCOME
Higher Costs	Use less, only buy what’s needed, change products to cheaper alternatives, shut down operations
Availability of essential supplies	Go without, order ahead, buy in bulk, reduce/shut down operations

**THE IMPACT OF COVID-19 ON CENTRAL ALABAMA FARMERS**

Close to one-third (32%) of Central Alabama’s farmers feel they are worse off as a direct result of the coronavirus outbreak. Six percent (6%) feel they are better off, while 58% of the farmers indicated that COVID-19 has not impacted their farming operations (see *Figure 21*).

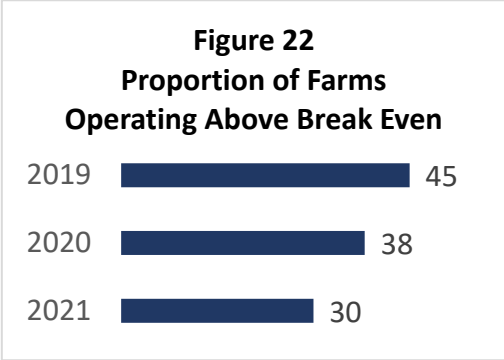


**FINANCIAL ASSISTANCE RECEIVED BY CENTRAL ALABAMA FARMERS DURING THE PANDEMIC**

More than one out of ten (14%) Central Alabama farmers reported they received funds from the Paycheck Protection Program, while 15% received funds from the USDA Pandemic Assistance to Producers, and 7% received assistance from the Coronavirus Food Assistance Program (CFAP).

**HAVE CENTRAL ALABAMA FARMERS BEEN ABLE TO OPERATE ABOVE BREAK EVEN DURING COVID-19?**

When considering all of their farming expenses and all of their farming related revenues, the ability of Central Alabama farmers to operate above break even has declined since the start of the coronavirus pandemic (see *Figure 22*).



**B. *Assessment of COVID-19’s Impact on the Central Alabama Agricultural Industry by Stakeholders and Other Components of the Industry***

As a part of the process of assessing the impact of COVID-19 on Central Alabama’s farming industry, interviews were conducted with sixteen individuals and organizations. These stakeholders represent agricultural supply companies and feed stores, elected officials, banking/farm credit agencies, food production companies, and Auburn University cooperative extension agents. The contributing included a professor in the Auburn University School of Agriculture. For a copy of the interview instrument, see *Appendix A*.

**PERCEIVED IMPACT OF COVID-19 ON CENTRAL ALABAMA FARMERS**

Close to nine out of ten (87%, n=13) stakeholders believe Central Alabama farmers have, to various degrees, been negatively impacted as a result of the COVID-19 pandemic. Stakeholders mentioned three key areas impacting regional farming:

*Increased Costs*  
*Supply Chain Issues*  
*Labor*

Several stakeholders mentioned that the rising cost of fuel, fertilizer, equipment, parts, and other essential farming products has already had an effect on farmers, and stakeholders anticipate the situation to get worse in 2022 and beyond.

Supply chain issues, including manufacturing and transportation, are preventing farmers and food processors from getting the supplies they need to operate as well as preventing them from getting their products to market. One stakeholder said, “We can’t get what we are normally able to get. There are lots of things from overseas that are taking longer to get. The domestic companies are behind because they have limited workers and limited personnel.” With the rising fuel costs, another stakeholder said, “Farmers are finding it more expensive and harder to get livestock and crops to market.”

Labor is in short supply. One stakeholder said, “Farmers are not able to hire workers capable of operating their equipment. Processors, whether poultry, timber or crops, have not been able to process their products.”

Eight out of ten (80%, n=12) stakeholders feel the pandemic has created long-term problems and/or weaknesses to the agricultural industry in Central Alabama. One stakeholder said, “We are seeing the reality of how interlinked our food supply chain is. Agricultural products are perishable. Shipping problems

created issues for Central Alabama farmers (the meat and animal industry especially). Transportation issues have caused food shortages.” Another stated, “The next six months may be critical. While commodity prices are good now, farmers are not making money because their input costs have increased so much.”

***“The next six months may be critical. While commodity prices are good now, farmers are not making money because their input costs have increased so much.”***

### **GROWTH POTENTIAL FOR AGRICULTURE IN CENTRAL ALABAMA**

Two-thirds (67%, n=10) of the stakeholders surveyed believe the agricultural industry in Alabama has not reached its growth potential. While there is still land available now, area farmers are competing with developers.

It was noted that growth may be in the form of more efficiency. “We continue to make advancement in technology resulting in improved crops, improved animal production (i.e., growing off chickens much quicker), disease control, etc. Future growth may be more in terms of improved efficiency of farming.” Another stakeholder noted, “There is an increasing need for better food, fiber and wood products.”

### **STRENGTHS OF THE AGRICULTURAL INDUSTRY IN CENTRAL ALABAMA**

Warm weather, abundant water supply, long growing season, knowledgeable farmers, and abundant resources such as Auburn University and the Alabama Cooperative Extension Service were all mentioned as major **strengths** of the agriculture industry in Central Alabama.

### **WEAKNESSES OF THE AGRICULTURAL INDUSTRY IN CENTRAL ALABAMA**

The **weaknesses** of Central Alabama’s agriculture industry mentioned most by stakeholders included no local processing facilities and no local markets to sell grains and cattle. Other weaknesses mentioned were losing farmland to residential developers, farmers retiring, and many farmers are not adapting to new technology.

### **OPPORTUNITIES FOR GROWTH**

When stakeholders were asked what they thought were the greatest **growth opportunities** for the agriculture industry in Central Alabama over the next 5 to 10 years, four stakeholders mentioned growing hemp. Other expansion ideas included farm expansion, farming efficiency, and applying precision agricultural concepts used by row crop farmers to cattle and other animal farming.

## THREATS TO THE AGRICULTURAL INDUSTRY IN CENTRAL ALABAMA

The **biggest challenge** for Central Alabama farmers that was mentioned by stakeholders is rising input costs. One stakeholder stated, “I predict the input cost will be close to double in 2022 vs pre-COVID.” Stakeholders also feel labor shortages and supply chain issues will continue to have a big impact on farmers and food processors.

### C. **Impact of COVID-19 on Agro-Tourism Businesses in Central Alabama**

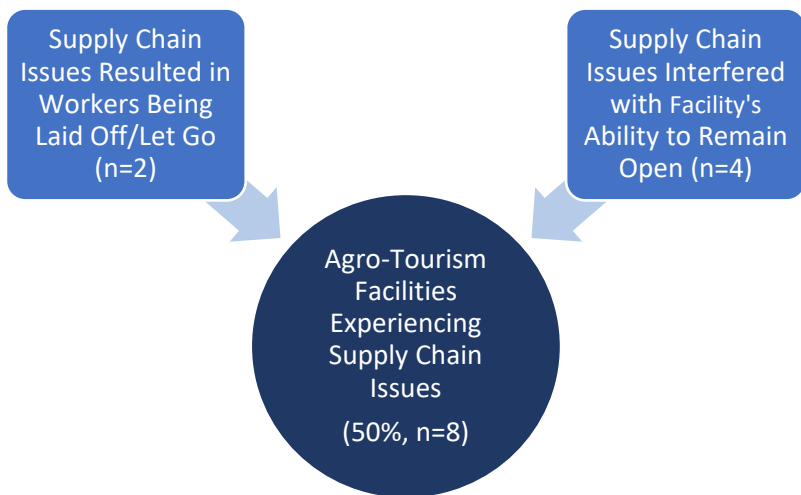
To collect data for this phase of the study, surveys were conducted with sixteen Central Alabama agro-tourism businesses. The agro-tourism businesses surveyed, included those offering agricultural-based educational experiences, outdoor recreation, direct sales, and entertainment. For a copy of the survey instrument, see *Appendix A*.

#### SUPPLY CHAIN ISSUES

Among the sixteen agro-tourism businesses surveyed, one-half (n=8) reported experiencing issues obtaining operating supplies or inventories as a direct result of issues associated with the coronavirus pandemic. Four of the businesses that experienced supply chain issues indicated the supply chain issues interfered with their facility’s ability to remain open for their customers. And, two agro-tourism businesses indicated that their supply chain issues resulted in some of their workers being temporarily laid off or let go.

#### IMPACT OF COVID-19 ON OPERATIONS

Since the COVID-19 pandemic started, close to one in five agro-tourism facilities have had to shut down or reduce operations because an owner or employee contracted COVID-19. In addition, close to one in five agro-tourism businesses reported that their facility was required to temporarily shut down by either the U.S. government or the state of Alabama as a direct result of the coronavirus pandemic. All totaled, more



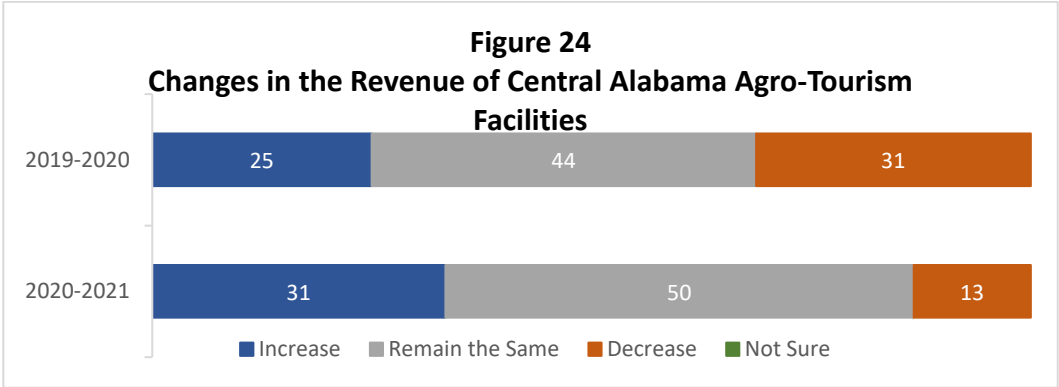
than three out of ten agro-tourism businesses reported having to shut down or reduce operations (at least temporarily) due to COVID-19 (see *Figure 23*).

**Figure 23**  
**Operational Issues Experienced by Central Alabama Agro-Tourism Facilities as a Direct Result of the Coronavirus Pandemic**

<b>Total number of agro-tourism facilities that had to shut down or reduce operations (at least temporarily) due to the coronavirus pandemic</b>	<b>31%</b>
<b>Facilities that had to shut down or reduce operations as a direct result of the coronavirus pandemic among their own employees</b>	<b>19%</b>
<b>Facilities that were required to shut down by either the U.S. Government or the State of Alabama as a direct result of the coronavirus pandemic</b>	<b>19%</b>

**IMPACT OF COVID-19 ON FACILITIES’ REVENUE**

From 2019 to 2020, close to one-third (31%, n=5) of the agro-tourism businesses surveyed experienced a decrease in their facility’s revenues (see *Figure 24*). Four out of five agro-tourism businesses felt their revenue decrease was due mainly to COVID-19, while one business reported it was due to a combination of COVID-19 and other factors. From 2020 to 2021, only two of the agro-tourism facilities surveyed (13%) experienced a decrease in revenue. One facility attributed their revenue decrease to COVID-19, while the other facility indicated it was due to a combination of COVID-19 and other factors.



**IMPACT OF COVID-19 ON FACILITIES’ EMPLOYMENT**

As shown in *Figure 25*, the average number of people employed by agro-tourism facilities in Central Alabama declined by four people from pre-COVID to the time of this survey (January 2022). Further analysis of the data reveals that the average number of people employed by the agro-tourism facilities declined by 37% from pre-COVID to January 2022.

Eight out of ten agro-tourism facilities indicated they had sufficient internet service to communicate with their customers, suppliers, and workers during the pandemic.

Close to one-third (n=5) of Central Alabama agro-tourism facilities have some employees who

commute to work from rural areas. None of the facilities felt that issues directly related to the COVID-19 outbreak created transportation problems for their workers who commute to work from rural areas. However, one agro-tourism facility indicated some of their workers would benefit from having a rural transportation system serving their community.

**Figure 25**  
**Impact of the COVID-19 Pandemic on the Number of People Employed by Central Alabama Agro-Tourism Facilities**

<b>Average number employed before the COVID-19 pandemic</b>	10.1
<b>Average number currently employed</b>	6.4

**BIGGEST PROBLEMS AGRO-TOURISM FACILITIES HAD TO DEAL WITH AS A DIRECT RESULT OF COVID-19**

The biggest problems Central Alabama agro-tourism facilities had to deal with as a direct result of the COVID-19 pandemic are listed in *Figure 26*, along with the strategies they used to deal with these problems. Two of the three biggest problems that agro-tourism facilities had to deal with because of COVID-19 were following guidelines/operating restrictions and lack of employees. A number of the agro-tourism facilities indicated they temporarily closed their business to deal with these problems.

**Figure 26**  
**Strategies Central Alabama Agro-Tourism Facilities Used to Deal with the Problems they Faced as a Result of the COVID-19 Pandemic**

<b>BIGGEST PROBLEM</b>	<b>WAYS TO OVERCOME</b>
<b>Supply chain disruptions</b>	Buy online, buy things from different vendors
<b>Follow guidelines/operating restrictions</b>	Advertise more, advertise to locals, temporarily close
<b>Lack of employees</b>	Increased wages, work overtime, hire younger/high school kids, temporarily close

**CHALLENGES AGRO-TOURISM FACILITIES FACE HIRING NEW EMPLOYEES**

As shown in *Figure 27*, the biggest challenges agro-tourism facilities in Central Alabama face when hiring new employees include “finding people who want to work,” which was mentioned by 6 of the 16 facilities. Nineteen percent (19%) of



the facilities stated that they “can’t afford to pay enough/can’t afford to pay more than unemployment/stimulus money.”

**Figure 27**  
**Biggest Challenges Central Alabama Agro-Tourism Facilities**  
**are Facing When Hiring New Employees**

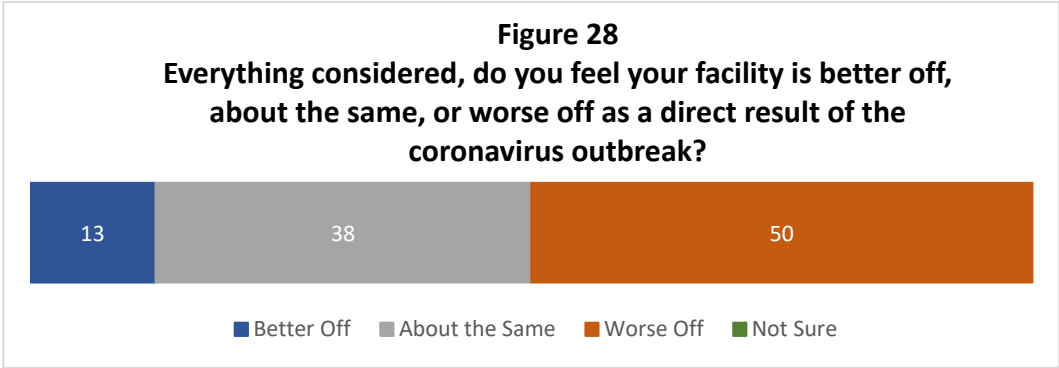
Finding people who want to work	38%
Can’t afford to pay enough/can’t afford to pay more than unemployment/stimulus money	19%
People with education/experience/qualifications for the job	13%

**INFRASTRUCTURE IMPROVEMENTS AGRO-TOURISM FACILITIES FEEL WOULD BENEFIT THEIR BUSINESS**

While one-half of the agro-tourism facilities indicated no infrastructure improvements were needed in their area, three of the facilities surveyed mentioned their facility would benefit from having faster/better internet service.

**THE IMPACT OF COVID-19 ON CENTRAL ALABAMA AGRO-TOURISM FACILITIES**

One-half (50%) of Central Alabama’s agro-tourism facilities feel they are worse off as a direct result of the coronavirus outbreak. Thirteen percent (13%) feel they are better off, while 38% indicated their businesses were not affected by COVID-19 (see *Figure 28*).



**GOVERNMENT FUNDING OBTAINED BY AGRO-TOURISM FACILITIES**

One out of four (25%) of Central Alabama’s agro-tourism facilities reported they received funds from the Paycheck Protection Program. One facility obtained funds through the Economic Injury Loan program and one facility received funding from another source.

## XV. Appendix A - Questionnaires

### A. Agro-Tourism Questionnaire

The data for the agro-tourism survey are based on a telephone survey conducted between December 2021 and January 2022 with 16 randomly selected agro-tourism facilities located in Autauga, Elmore, and Montgomery counties in Alabama. All surveys were conducted with live telephone interviewers using a sample generated by Southeast Research.

#### SURVEY INSTRUMENT

Hello, my name is \_\_\_\_\_ and I am calling from Southeast Research, a public opinion research company. We are conducting a study to better understand the economic impact that the coronavirus is having on agriculture, including agro-tourism and recreation in Central Alabama. Funding for this study is provided by the U.S. Economic Development Administration's CARES Act Recovery Assistance Program. Do you have a few minutes to complete our economic study and how your agro-tourism business has been affected by COVID-19?

1. These first few questions are concerned with whether Central Alabama agro-tourism businesses have experienced any supply chain issues as a result of COVID-19. During the past year or so did your business experience any issues obtaining operating supplies or inventories as a direct result of issues associated with the coronavirus pandemic?  
-1 ( ) Yes  
-2 ( ) No → **SKIP TO Q.4**  
-3 ( ) Not sure → **SKIP TO Q.4**
2. Did these supply chain issues result in some of your workers being temporarily laid off or let go?  
-1 ( ) Yes  
-2 ( ) No  
-3 ( ) Not sure
3. Did these supply chain issues interfere with your agro-tourism facility's ability to remain open for your customers?  
-1 ( ) Yes  
-2 ( ) No  
-3 ( ) Not sure

4. Since the COVID-19 Pandemic started did your agro-tourism facility ever have to shut down or reduce operations because either you, a family member or an employee contracted COVID-19?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure
5. And since the COVID-19 pandemic started was your agro-tourism facility ever required to temporarily shut down by either the U.S. Government or the State of Alabama as a direct result of the coronavirus pandemic?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure
6. From 2019 to 2020 did your agro-tourism facility's revenue increase, decrease, or remain about the same?
- 1 ( ) Increase → **SKIP TO Q.9**
  - 2 ( ) Decrease → **CONTINUE**
  - 3 ( ) Remained about the same → **SKIP TO Q.9**
  - 4 ( ) Company not in business in 2019 → **SKIP TO Q.9**
  - 5 ( ) Company not in business in 2020 → **SKIP TO Q.9**
  - 6 ( ) Not sure → **SKIP TO Q.9**
7. What was the percentage decline in revenue from 2019 to 2020? \_\_\_\_\_%
8. Do you feel the decrease in your agro-tourism facility's revenue in 2020 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?
- 1 ( ) Due mainly to other factors
  - 2 ( ) Was due mainly to COVID-19
  - 3 ( ) Was due to a combination of COVID-19 and other factors
  - 4 ( ) Not sure
  - 5 ( ) Other
9. How many people were employed at your agro-tourism facility before the pandemic? \_\_\_\_\_
10. And, how many people are currently working at your agro-tourism facility?  
\_\_\_\_\_

11. From 2020 to 2021 did your agro-tourism facility's revenue increase, decrease, or remain about the same?
- 1 ( ) Increase → **SKIP TO Q.14**
  - 2 ( ) Decrease → **CONTINUE**
  - 3 ( ) Remained about the same → **SKIP TO Q.14**
  - 4 ( ) Company not in business in 2020 → **SKIP TO Q.14**
  - 5 ( ) Company not in business in 2021 → **SKIP TO Q.14**
  - 6 ( ) Not sure → **SKIP TO Q.14**
12. What was the percentage decline in revenue from 2020 to 2021? \_\_\_\_\_%
13. Do you feel the decrease in your agro-tourism facility's revenue in 2021 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?
- 1 ( ) Due mainly to other factors
  - 2 ( ) Was due mainly to COVID-19
  - 3 ( ) Was due to a combination of COVID-19 and other factors
  - 4 ( ) Not sure
  - 5 ( ) Other
14. During the pandemic have you had sufficient internet service to communicate with your customers, suppliers, and workers?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure
15. Do you have any workers that commute to work from rural areas?
- 1 ( ) Yes
  - 2 ( ) No → **SKIP TO Q.18**
  - 3 ( ) Not sure → **SKIP TO Q.18**
16. And, to your knowledge did issues directly related to the coronavirus outbreak create transportation problems for these workers making it difficult for them to get to work?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure

17. Do you know whether or not any of your workers could benefit from having a rural transportation system serving their community?

- 1 ( ) Yes
- 2 ( ) No
- 3 ( ) Not sure

18. Everything considered, what was the biggest problem that your agro-tourism facility had to deal with as a direct result of the COVID-19 pandemic?

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19. And, what measures did you take to deal with this issue? PROBE

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20. What was the second biggest problem that your agro-tourism facility had to deal with as a direct result of the COVID-19 pandemic?

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21. And, what measures did you take to deal with this issue? PROBE

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22. What is the biggest challenge your agro-tourism facility faces when you are hiring new employees in the Central Alabama area? PROBE

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23. Next, I want to ask you about the infrastructure in your area such as internet service, roads, sidewalks, and sewer service. Are there any infrastructure improvements needed in your area that, if made, would benefit your agro-tourism facility? PLEASE DESCRIBE

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24. Everything considered, do you feel your agro-tourism facility is better off, about the same, or worse off as a direct result of the coronavirus outbreak?
- 1 ( ) Better off
  - 2 ( ) About the same
  - 3 ( ) Worse off
  - 4 ( ) Not Sure
25. Did your agro-tourism facility receive funds through the Paycheck Protection Program (PPP)?
- 1 ( ) Yes → How many PPP loans did you receive? \_\_\_\_\_
  - 2 ( ) No
  - 3 ( ) Not sure
26. Did your business obtain funds through the Economic Injury Loan program during the pandemic?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure
27. Were there other sources of funds that you obtained during the pandemic?
- 1 ( ) Yes → What were they? \_\_\_\_\_
  - 2 ( ) No
  - 3 ( ) Not Sure

## B. Farms/Farmer Questionnaire

The data for the farms/farmer survey are based on a telephone survey conducted between December 2021 and February 2022 with 73 randomly selected farms/farmers located in Autauga, Elmore, and Montgomery counties in Alabama. All surveys were conducted with live telephone interviewers using a sample generate by Southeast Research and Data Axle.

### SURVEY INSTRUMENT

Hello, my name is \_\_\_\_\_ and I am calling from Southeast Research, a public opinion research company. We are conducting a study to better understand the economic impact that the coronavirus is having on agriculture in Central Alabama. Funding for this study is provided by the U.S. Economic Development administration's CARES Act Recovery Assistance Program. Do you have a few minutes to complete our economic study and relate how your farming business has been affected by COVID-19?

1. These first few questions are concerned with whether Central Alabama farmers have experienced any supply chain issues as a result of COVID-19. During the past two years year or so did your farm experience any issues obtaining operating supplies or equipment as a direct result of issues associated with the coronavirus pandemic?  
-1 ( ) Yes  
-2 ( ) No → **SKIP TO Q.4**  
-3 ( ) Not sure → **SKIP TO Q.4**
  
2. Did these supply chain issues result in some of your workers being temporarily laid off or let go?  
-1 ( ) Yes  
-2 ( ) No  
-3 ( ) Not sure
  
3. Did these supply chain issues affect the operational efficiency of your farming operations?  
-1 ( ) Yes  
-2 ( ) No  
-3 ( ) Not sure

4. Since the COVID-19 pandemic started, did your farming operations ever have to reduce operations because either you, a family member or an employee contracted COVID-19?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure
5. And since the COVID-19 pandemic started, was your farming operation ever required to temporarily shut down by any government or agency as a direct result of the coronavirus pandemic?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not sure
6. From 2019 to 2020 did the revenue generated from your farming operation increase, decrease, or remain about the same?
- 1 ( ) Increase → **SKIP TO Q.10**
  - 2 ( ) Decrease → **CONTINUE**
  - 3 ( ) Remained about the same → **SKIP TO Q.10**
  - 4 ( ) Company not in business in 2019 → **SKIP TO Q.10**
  - 5 ( ) Company not in business in 2020 → **SKIP TO Q.10**
  - 6 ( ) Not sure → **SKIP TO Q.10**
7. Do you feel the decrease in revenue from your farming operation in 2020 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?
- 1 ( ) Due mainly to other factors
  - 2 ( ) Was due mainly to COVID-19
  - 3 ( ) Was due to a combination of COVID-19 and other factors
  - 4 ( ) Not sure
  - 5 ( ) Other
8. In 2020 did you receive any assistance payments from either the USDA or any other government agency?
- 1 ( ) Yes → **CONTINUE**
  - 2 ( ) No → **SKIP TO Q.10**
  - 3 ( ) Other (explain) \_\_\_\_\_
  - 4 ( ) Refused → **SKIP TO Q.10**



9. When these assistance payments are included in your 2020 farming revenue, would your total revenue for 2020 be greater, less, or about the same as your total revenue in 2019?
- 1 ( ) Greater
  - 2 ( ) Less
  - 3 ( ) About the same
  - 4 ( ) Not sure
  - 5 ( ) Refused
10. How many people, including yourself, were employed at your farming operation before the pandemic? \_\_\_\_\_
11. And, how many people are currently working at your farm? \_\_\_\_\_
12. From 2020 to 2021 did the revenue generated from your farming operation increase, decrease, or remain about the same?
- 1 ( ) Increase → **SKIP TO Q.14**
  - 2 ( ) Decrease → **CONTINUE**
  - 3 ( ) Remained about the same → **SKIP TO Q.14**
  - 4 ( ) Company not in business in 2020 → **SKIP TO Q.14**
  - 5 ( ) Company not in business in 2021 → **SKIP TO Q.14**
  - 6 ( ) Not sure → **SKIP TO Q.14**
13. Do you feel the decrease in revenue from your farming operation in 2021 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?
- 1 ( ) Due mainly to other factors
  - 2 ( ) Was due mainly to COVID-19
  - 3 ( ) Was due to a combination of COVID-19 and other factors
  - 4 ( ) Not sure
  - 5 ( ) Other
14. In 2021 did you receive any assistance payments from either the USDA or any other government agency?
- 1 ( ) Yes → **CONTINUE**
  - 2 ( ) No → **SKIP TO Q.16**
  - 3 ( ) Other (explain) \_\_\_\_\_
  - 4 ( ) Refused → **SKIP TO Q.16**

15. When these assistance payments are included in your 2021 farming revenue, would your total revenue for 2021 be greater, less, or about the same as your revenue in 2020?
- 1 ( ) Greater
  - 2 ( ) Less
  - 3 ( ) About the same
  - 4 ( ) Not sure
  - 5 ( ) Refused
16. Have you had sufficient internet service to communicate with your customers, suppliers, and workers during the pandemic?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not Sure
17. Currently what is the overall condition of your farm equipment- would you say excellent, good, just fair, or poor?
- 1 ( ) Excellent
  - 2 ( ) Good
  - 3 ( ) Fair
  - 4 ( ) Poor
  - 5 ( ) Refused
  - 6 ( ) Other (explain)\_\_\_\_\_
18. If you needed to replace a major piece of farm equipment today, would you likely have access to funds to do this or not?
- 1 ( ) Yes
  - 2 ( ) No
  - 3 ( ) Not Sure
  - 4 ( ) Other (explain)\_\_\_\_\_
19. Compared to 2021, do you anticipate that your operating costs in 2022 will be...
- 1 ( ) Much higher
  - 2 ( ) Somewhat higher
  - 3 ( ) A little higher
  - 4 ( ) About the same
  - 5 ( ) Lower
  - 6 ( ) Not Sure

20. Thinking about the 2022 farming season, which farming costs are you most concerned about? \_\_\_\_\_  
 \_\_\_\_\_

21. What kind of effect do you feel supply chain issues will have on the availability of farm supplies that you will need this year?  
 -1 ( ) A large effect  
 -2 ( ) Moderate effect  
 -3 ( ) No significant effect  
 -4 ( ) Not sure  
 -5 ( ) Other (explain) \_\_\_\_\_

21A. Which farm supplies or equipment are you experiencing supply chain issues with? \_\_\_\_\_

22. Everything considered, do you feel your farming business today is better off, about the same, or worse off as a direct result of the coronavirus outbreak?  
 -1 ( ) Better off  
 -2 ( ) About the same  
 -3 ( ) Worse off  
 -4 ( ) Not sure

23. Which of the following agriculture assistance programs did your farm benefit from during the pandemic?

	Yes	No	Not Sure
Paycheck Protection Program	-1 ( ) → What year?	-2 ( )	-3 ( )
USDA Pandemic Assistance to Producers	-1 ( ) → What year?	-2 ( )	-3 ( )
Coronavirus Food Program	-1 ( ) → What year?	-2 ( )	-3 ( )

Any other assistance program you have benefited from during the pandemic? \_\_\_\_\_  
 \_\_\_\_\_

24. Everything considered what has been the biggest problem your farming business has had to deal with as a direct result of the COVID-19 pandemic?  
 \_\_\_\_\_  
 \_\_\_\_\_

And what measures have you taken to deal with this problem? PROBE \_\_\_\_\_

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25. Considering all of your farming expenses and all of your farming related revenues in 2019, did your farm operate above break even in 2019?

-1 ( ) Yes

-2 ( ) No

-3 ( ) Not sure

-4 ( ) Refused

-5 ( ) Other (explain) \_\_\_\_\_

26. And considering all of your farming expenses and all of your farming related revenues in 2020, did your farm operate above break even?

-1 ( ) Yes

-2 ( ) No

-3 ( ) Not sure

-4 ( ) Refused

-5 ( ) Other (explain) \_\_\_\_\_

27. Finally, considering all of your farming expenses and all of your farming related revenues in 2021, did your farm operate above break even?

-1 ( ) Yes

-2 ( ) No

-3 ( ) Not sure

-4 ( ) Refused

-5 ( ) Other (explain) \_\_\_\_\_

### C. Stakeholder Questionnaire

The data for the stakeholder survey are based on a telephone survey conducted between January and February 2022 with 16 stakeholders located in or servicing Autauga, Elmore, and Montgomery counties in Alabama. All surveys were conducted with live telephone interviewers using a sample generate by Southeast Research.

#### SURVEY INSTRUMENT

Hello, my name is \_\_\_\_\_ and I'm calling for Southeast Research, an opinion research company. We are conducting a study to assess the impact of the COVID-19 pandemic on Central Alabama farmers. Funding for this study is provided by the US Economic Development Administration's CARES act recovery program. Do you have a few minutes to share your views on how Central Alabama farmers may have been affected by COVID-19?

Our survey is concerned with farmers and ranchers in the Counties of Autauga, Elmore and Montgomery in Central Alabama.

1. From what you have seen or heard have Central Alabama farmers been negatively impacted as a result of the COVID-19 Pandemic or not?  
-1 ( ) Not sure →**SKIP TO Q.2**  
-2 ( ) No →**SKIP TO Q.2**  
-3 ( ) Yes

And, what are some of the ways that you feel the pandemic had affected farmers and ranchers in Central Alabama? PROBE

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2. In your opinion has the pandemic created any long-term problems or weaknesses to the agricultural industry in Central Alabama?  
-1 ( ) Not sure →**SKIP TO Q.3**  
-2 ( ) No →**SKIP TO Q.3**  
-3 ( ) Yes

And, how would you describe some of the long-term problems or weakness to the Central Alabama agricultural industry that were caused by the pandemic? PROBE

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3. Looking ahead do you feel the agricultural industry in Alabama has reached its potential for growth or it has it not reached its growth potential?

- 1 ( ) Reached its growth potential
- 2 ( ) Not sure
- 3 ( ) Has not reached its growth potential

And, why do you feel this way? PROBE

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- 4. Agriculture, like most other industries, has both its strength and its weaknesses. What do you see as the major strengths of the agriculture industry in Central Alabama? PROBE

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- 5. And what do you see as the major weaknesses of Central Alabama's agriculture industry? PROBE

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- 6. In your opinion, what could be some of the greatest growth opportunities for the agriculture industry in Central Alabama over the next 5 or 10 years? PROBE

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- 7. What do you see as the biggest challenges Central Alabama farmers and ranchers will likely be facing this year? PROBE

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## XVI. Appendix B - Tabular Data

### A. Survey of Agro-Tourism Businesses

**Table 1**

**County Where Business is Located**

<b>CHARACTERISTICS OF BUSINESSES</b>			
COUNTY	Autauga	6	37.5%
	Elmore	4	25.0%
	Montgomery	6	37.5%
	Total	16	100.0%

**Table 2**

**These first few questions are concerned with whether Central Alabama agro-tourism businesses have experienced any supply chain issues as a result of COVID-19. During the past year or so did your business experience any issues obtaining operating supplies or inventories as a direct result of issues associated with the coronavirus pandemic?**

SUPPLY CHAIN	Yes	8	50.0%
	No	8	50.0%
	Total	16	100.0%

**Table 3**

**Did these supply chain issues result in some of your workers being temporarily laid off or let go?**

LAI D OFF	Yes	2	25.0%
	No	6	75.0%
	Total	8	100.0%

Includes only businesses who have experienced supply chain issues as a result of COVID-19.

**Table 4**

**Did these supply chain issues interfere with your agro-tourism facility's ability to remain open for your customers?**

REMAIN OPEN	Yes	4	50.0%
	No	4	50.0%
	Total	8	100.0%

Includes only businesses who have experienced supply chain issues as a result of COVID-19.

**Table 5**

**Since the COVID-19 pandemic started, did your agro-tourism facility ever have to shut down or reduce operations because either you, a family member, or an employee contracted COVID-19?**

EMPLOYEE	Yes	3	18.8%
	No	13	81.3%
	Total	16	100.0%

**Table 6**

**And since the COVID-19 pandemic started, was your agro-tourism facility ever required to temporarily shut down by either the U.S. Government or the State of Alabama as a direct result of the coronavirus pandemic?**

GOVERNMENT SHUT DOWN	Yes	3	18.8%
	No	13	81.3%
	Total	16	100.0%

**Table 7**

**Total of Central Alabama Agro-Tourism Businesses Who Had to Shut Down or Reduce Operations (At Least Temporarily) For Any Reason Due to COVID**

CLOSE BUSINESS	Yes	5	31.3%
	No	11	68.8%
	Total	16	100.0%



**Table 8**

**From 2019 to 2020 did your agro-tourism facility's revenues increase, decrease, or remain about the same?**

REVENUES 2019-2020	Increase	4	25.0%
	Decrease	5	31.3%
	Remained about the same	7	43.8%
	Total	16	100.0%

Facilities that reported a decrease in revenues (n=5), on average reported a 38% decrease.

**Table 9**

**Do you feel the decrease in your agro-tourism facility's revenues in 2020 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?**

REASON	Was due mainly to COVID-19	4	80.0%
	Was due to combination of COVID-19 and other factors	1	20.0%
	Total	5	100.0%

Includes only businesses who indicated their revenues decreased from 2019 to 2020.

**Table 10**

**From 2020 to 2021 did your agro-tourism facility's revenues increase, decrease, or remain about the same?**

REVENUES 2020-2021	Increase	5	31.3%
	Decrease	2	12.5%
	Remained about the same	8	50.0%
	Not Sure	1	6.3%
	Total	16	100.0%

Facilities that reported a decrease in revenues (n=2), on average reported a 33% decrease.

**Table 11**

**Do you feel the decrease in your agro-tourism facility's revenues in 2021 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?**

REASON	Was due mainly to COVID-19	1	50.0%
	Was due to combination of COVID-19 and other factors	1	50.0%
	Total	2	100.0%

Includes only businesses who indicated their revenues decreased from 2020 to 2021.

**Table 12**

**How many people were employed at your agro-tourism facility before the pandemic?**

Average number of employees before the pandemic	10.1
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**Table 13**

**How many people are currently working at your agro-tourism facility?**

Average number of employees currently working at facility	6.4
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**Table 14**

**During the pandemic have you had sufficient internet service to communicate with your customers, suppliers, and workers?**

INTERNET	Yes	13	81.3%
	No	3	18.8%
	Total	16	100.0%

**Table 15**

**Do you have any workers that commute to work from rural areas?**

COMMUTE	Yes	5	31.3%
	No	11	68.8%
	Total	16	100.0%

**Table 16**

**And, to your knowledge did issues directly related to the coronavirus outbreak created transportation problems for these workers making it difficult for them to get to work?**

TRANSPORTATION	No	4	80.0%
	Not Sure	1	20.0%
	Total	5	100.0%

Includes only businesses who indicated they have employees who commute from rural areas.

**Table 17**

**Do you know whether or not any of your workers could benefit from having a rural transportation system serving their community?**

RURAL TRANSPORTATION	Yes	1	20.0%
	No	2	40.0%
	Not Sure	2	40.0%
	Total	5	100.0%

Includes only businesses who indicated they have employees who commute from rural areas.

**Table 18**

**What were the two biggest problems that your agro-tourism facility had to deal with as a direct result of the COVID-19 pandemic?**

TWO BIGGEST PROBLEMS	Lack of employees	31.3%
	Dealing with the public	12.5%
	Employees with COVID/ having to quarantine	6.3%
	Supply chain disruptions	50.0%
	Increased operating costs	6.3%
	Customers scared of COVID/ not shopping	25.0%
	Follow guidelines/operating restrictions	37.5%
	Having to shut down business	18.8%
	Other	12.5%
	Nothing	6.3%

Totals exceed 100% due to multiple responses.

**Table 19**

**What is the biggest challenge your agro-tourism facility faces when you are hiring new employees in the Central Alabama area?**

HIRING	Finding people who want to work	37.5%
	People with education/ experience/ qualifications for job	12.5%
	Can't pay enough/ can't afford to pay more than unemployment/ stimulus money	18.8%
	Fear of COVID	6.3%
	No problems/not hiring	25.0%

Totals exceed 100% due to multiple responses.

**Table 20**

**Next, I want to ask you about the infrastructure in your area such as internet service, roads, sidewalks, and sewer service. Are there any infrastructure improvements needed in your area that, if made, would benefit your agro-tourism facility?**

INFRASTRUCTURE	Pave/repair roads	12.5%
	Access to city water/better quality water	12.5%
	Access to sewer instead of septic/improve sewer system	6.3%
	Better/faster internet	18.8%
	Maintenance of Riverfront	6.3%
	Nothing	50.0%

Totals exceed 100% due to multiple responses.

**Table 21**

**Everything considered, do you feel your agro-tourism facility is better off, about the same, or worse off as a direct result of the coronavirus outbreak?**

CURRENT POSITION	Better off	2	12.5%
	About the same	6	37.5%
	Worse off	8	50.0%
	Total	16	100.0%

**Table 22**

**Did your agro-tourism facility receive funds through the Paycheck Protection Program (PPP)?**

PPP	Yes	4	25.0%
	No	12	75.0%
	Total	16	100.0%

The 4 facilities that received funding through the Paycheck Protection Program, received the funding one time.

**Table 23**

**Did your business obtain funds through the Economic Injury Loan program during the pandemic?**

ECONOMIC INJURY LOAN	Yes	1	6.3%
	No	14	87.5%
	Not Sure	1	6.3%
	Total	16	100.0%

**Table 24**

**Were there other sources of funds that you obtained during the pandemic?**

OTHER FUNDING SOURCES	Yes	1	6.3%
	No	14	87.5%
	Not Sure	1	6.3%
	Total	16	100.0%

## B. Survey of Farms/Farmers

**Table 1**

**County Where Farm is Located**

**CHARACTERISTICS OF FARMS**

COUNTY	Autauga	6	8.2%
	Elmore	24	32.9%
	Montgomery	43	58.9%
	Total	73	100.0%

**Table 2**

**These first few questions are concerned with whether Central Alabama farmers have experienced any supply chain issues as a result of COVID-19.**

**During the past two years or so did your farm experience any issues obtaining operating supplies or equipment as a direct result of issues associated with the coronavirus pandemic?**

SUPPLY CHAIN	Yes	26	35.6%
	No	45	61.6%
	Not Sure	2	2.7%
	Total	73	100.0%

**Table 3**

**Did these supply chain issues result in some of your workers being temporarily laid off or let go?**

LAID OFF	Yes	7	26.9%
	No	19	73.1%
	Total	26	100.0%

Includes only farms who have experienced supply chain issues as a result of COVID-19.

**Table 4**

**Did these supply chain issues affect the operational efficiency of your farming operations?**

REMAIN OPEN	Yes	16	61.5%
	No	10	38.5%
	Total	26	100.0%

Includes only farms who have experienced supply chain issues as a result of COVID-19.

**Table 5**

**Since the COVID-19 pandemic started, did your farming operations ever have to reduce operations because either you, a family member, or an employee contracted COVID-19?**

EMPLOYEE	Yes	15	20.5%
	No	58	79.5%
	Total	73	100.0%

**Table 6**

**And since the COVID-19 pandemic started, was your farming operation ever required to temporarily shut down by any government or agency as a direct result of the coronavirus pandemic?**

GOVERNMENT SHUT DOWN	Yes	2	2.7%
	No	71	97.3%
	Total	73	100.0%

**Table 7**

**Total of Central Alabama Farms Who Had to Shut Down or Reduce Operations (At Least Temporarily) For Any Reason Due to COVID**

CLOSE FARM	Yes	17	23.3%
	No	56	76.7%
	Total	73	100.0%

**Table 8**

**From 2019 to 2020 did the revenue generated from your farming operation increase, decrease, or remain about the same?**

REVENUES 2019-2020	Increase	5	6.8%
	Decrease	24	32.9%
	Remained about the same	43	58.9%
	Company not in business in 2020	1	1.4%
	Total	73	100.0%

**Table 9**

**Do you feel the decrease in revenue from your farming operation in 2020 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?**

REASON	Due mainly to other factors	2	8.3%
	Was due mainly to COVID-19	5	20.8%
	Was due to combination of COVID-19 and other factors	16	66.7%
	Not Sure	1	4.2%
	Total	24	100.0%

Includes only businesses who indicated their revenues decreased from 2019 to 2020.

**Table 10**

**In 2020 did you receive assistance payments from either the USDA or any other government agency?**

2020 ASSISTANCE PAYMENTS	Yes	10	41.7%
	No	14	58.3%
	Total	24	100.0%

Includes only businesses who indicated their revenues decreased from 2019 to 2020.



**Table 11**

**When these assistance payments are included in your 2020 farming revenue, would your total revenue for 2020 be greater, less, or about the same as your total revenue in 2019?**

2020 REVENUES WITH ASSISTANCE	Less	6	60.0%
PAYMENTS	About the same	4	40.0%
	Total	10	100.0%

Includes only businesses who indicated their revenues decreased from 2019 to 2020 and they received assistance payment from a government agency in 2020.

**Table 12**

**From 2020 to 2021 did the revenue generated from your farming operation increase, decrease, or remain about the same?**

REVENUES 2020-2021	Increase	7	9.6%
	Decrease	13	17.8%
	Remained about the same	49	67.1%
	Company not in business in 2021	4	5.5%
	Total	73	100.0%

**Table 13**

**Do you feel the decrease in revenues from your farming operation in 2021 was mainly due to the coronavirus pandemic or mainly due to other factors, or was it due to a combination of the pandemic and other factors?**

REASON	Due mainly to other factors	2	15.4%
	Was due to combination of COVID-19 and other factors	10	76.9%
	Not Sure	1	7.7%
	Total	13	100.0%

Includes only farms who indicated their revenues decreased from 2020 to 2021.

**Table 14**

**In 2021 did you receive assistance payments from either the USDA or any other government agency?**

2021 ASSISTANCE PAYMENTS	Yes	3	23.1%
	No	10	76.9%
	Total	13	100.0%

Includes only businesses who indicated their revenues decreased from 2020 to 2021.

**Table 15**

**When these assistance payments are included in your 2021 farming revenue, would your total revenue for 2021 be greater, less, or about the same as your total revenue in 2020?**

2021 REVENUES WITH ASSISTANCE PAYMENTS	Less	3	100.0%
	Total	3	100.0%

Includes only businesses who indicated their revenues decreased from 2020 to 2021 and they received assistance payment from a government agency in 2021.

**Table 16**

**How many people, including yourself, were employed at your farming operation before the pandemic?**

Average number of employees before the pandemic	2.8
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**Table 17**

**How many people are currently working at your farm?**

Average number of employees currently working at farm	2.2
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**Table 18**

**Have you had sufficient internet service to communicate with your customers, suppliers, and workers during the pandemic?**

INTERNET	Yes	59	80.8%
	No	14	19.2%
	Total	73	100.0%

**Table 19**

**Currently what is the overall condition of your farm equipment? Would you say excellent, good, just fair, or poor?**

CONDITION OF EQUIPMENT	Excellent	11	15.1%
	Good	35	47.9%
	Fair	18	24.7%
	Poor	5	6.8%
	Other	4	5.5%
	Total	73	100.0%

**Table 20**

**If you needed to replace a major piece of farm equipment today, would you likely have access to funds to do this or not?**

EQUIPMENT FUNDING	Yes	40	54.8%
	No	25	34.2%
	Not Sure	4	5.5%
	Other	4	5.5%
	Total	73	100.0%

**Table 21**

**Compared to 2021, do you anticipate that your operating costs in 2022 will be...**

2022 OPERATING COSTS	Much higher	35	47.9%
	Somewhat higher	13	17.8%
	A little higher	6	8.2%
	About the same	12	16.4%
	Lower	1	1.4%
	Not Sure	6	8.2%
	Total	73	100.0%

**Table 22**

**Thinking about the 2022 farming season, which farming costs are you most concerned about?**

FARMING COSTS	Fertilizer	35.2%
	Fuel	35.2%
	Feed	23.9%
	Labor	8.5%
	Fencing materials/lumber	2.8%
	Chemicals	5.6%
	Seeds	2.8%
	Hay	2.8%
	General supplies	2.8%
	Equipment	4.2%
	Tractor parts	2.8%
	Maintenance costs	2.8%
	Other	2.8%
	All of them/everything more expensive	2.8%
	None	11.3%
	Not sure	1.4%

Totals exceed 100% due to multiple responses.

**Table 23**

**What kind of effect do you feel supply chain issues will have on the availability of farm supplies that you will need this year?**

SUPPLY CHAIN ISSUES	A large effect	16	21.9%
	Moderate effect	25	34.2%
	No significant effect	14	19.2%
	Not sure	14	19.2%
	Other	4	5.5%
	Total	73	100.0%

**Table 24**

**Which farm supplies or equipment are you experiencing supply chain issues with?**

SUPPLY CHAIN ISSUES	Fertilizer	16.4%
	Tractors	4.1%
	Seed	2.7%
	Fencing materials/lumber	4.1%
	Hay/straw	1.4%
	Feed	8.2%
	Fuel	6.8%
	Equipment/implement parts	21.9%
	Propane	1.4%
	Herbicides	1.4%
	Baler twine	2.7%
	Chemicals	2.7%
	Production supplies (containers, lids)	2.7%
	Other	2.7%
	Nothing	43.8%

Totals exceed 100% due to multiple responses.

**Table 25**

**Everything considered, do you feel your farming business today is better off, about the same, or worse off as a direct result of the coronavirus outbreak?**

CURRENT POSITION	Better off	4	5.5%
	About the same	42	57.5%
	Worse off	23	31.5%
	Not Sure	4	5.5%
	Total	73	100.0%

**Table 26**

**Which of the following agriculture assistance programs did your farm benefit from during the pandemic?**

PAYCHECK PROTECTION PROGRAM	Yes	10	13.7%
	No	57	78.1%
	Not Sure	6	8.2%
	Total	73	100.0%
USDA PANDEMIC ASSISTANCE TO PRODUCERS	Yes	11	15.1%
	No	55	75.3%
	Not Sure	7	9.6%
	Total	73	100.0%
CORONAVIRUS FOOD PROGRAM	Yes	5	6.8%
	No	63	86.3%
	Not Sure	5	6.8%
	Total	73	100.0%

**Table 27**

**Everything considered, what has been the biggest problem your farming business has had to deal with as a direct result of the COVID-19 pandemic?**

BIGGEST PROBLEM	Higher costs	31.5%
	Availability of essential supplies	17.8%
	Ability to quarantine while operating farm	5.5%
	Labor	6.8%
	Selling at a loss	4.1%
	Having to shut down operations	1.4%
	Unable to get needed financial assistance	1.4%
	Farmers markets closing	1.4%
	Change in people's buying habits	2.7%
	Other	4.1%
	None	30.1%

Totals exceed 100% due to multiple responses.

**Table 28**

**Considering all of your farming expenses and all of your farming related revenues in [YEAR] did your farm operate above break even?**

2019	Yes	33	45.2%
	No	33	45.2%
	Not Sure	3	4.1%
	Refused	3	4.1%
	Other	1	1.4%
2020	Yes	28	38.4%
	No	36	49.3%
	Not Sure	4	5.5%
	Refused	3	4.1%
	Other	2	2.7%
2021	Yes	22	30.1%
	No	30	41.1%
	Not Sure	16	21.9%
	Refused	3	4.1%
	Other	2	2.7%
Total		73	100.0%

## C. Stakeholder Survey

**Table 1**

**From what you have seen or heard have Central Alabama farmers been negatively impacted as a result of the COVID-19**

**Pandemic or not?**

NEGATIVE IMPACT	No	2	13.3%
	Yes	13	86.7%
	Total	15	100.0%

**Table 2**

**In your opinion has the pandemic created any long-term problems or weaknesses to the agricultural industry in Central Alabama?**

LONG-TERM PROBLEMS	Not Sure	2	13.3%
	No	1	6.7%
	Yes	12	80.0%
	Total	15	100.0%

**Table 3**

**Looking ahead do you feel the agricultural industry in Alabama has reached its potential for growth or it has it not reached its growth potential?**

GROWTH POTENTIAL	Reached its growth potential	1	6.7%
	Not sure	4	26.7%
	Has not reached its growth potential	10	66.7%
	Total	15	100.0%



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