THE ECONOMIC LANDSCAPE OF U.S. AGRICULTURE IN 2021

AgAmerica's Chief Economist analyzes the path of economic recovery for U.S. agriculture and financial outlook of each major sector moving forward.

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SUMMARY

The whirlwind of 2020 led to extreme volatility that permeated through all sectors of American agriculture. From a global pandemic to a new presidential administration, AgAmerica's Chief Economist Dr. John Penson has kept a close eye on the U.S. economic climate in relation to its impact on our nation's farmers and ranchers. In this assessment, we reflect on the resilience of U.S. agriculture in 2020 and provide insights into how major agricultural commodities will fare in 2021.

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PART ONE

THE ROAD TO ECONOMIC RECOVERY

2020 RECAP

The abrupt shift in consumer demand caused by the COVID-19 pandemic was an unparalleled event in modern history. Consumers are normally at the receiving end of events impacting supply in farm commodity markets. The effects of surpluses or shortages of farm production are passed upstream through intermediaries (gold arrows) in the nation's food supply chain to consumers in the form of prices and availability.

The major change in consumer demand experienced last year sent shock waves downstream to distributors, processors, and farmers (red arrows). The stay-at-home orders in mid-March increased the consumption of food at home. According to the USDA, **consumers spent just over 28 percent less on food "away from home" in March 2020 than the year prior**. In fact, the amount spent eating out was the lowest since 1997. Processors and distributors in the food supply chain attempted to pivot from these institutional buyers to focus more on demand at retail grocery stores. This transition was difficult for a variety of reasons, including product size packaging. The disruptions at the processor and distribution level were ultimately passed downstream to farmers and ranchers, and were particularly devastating for time-sensitive products like milk, meat, and fresh produce.

COMMODITY SECTOR PERFORMANCE SNAPSHOT IN 2020

LIVESTOCK

As the virus spread to workers in meat and poultry processing plants, some workers became ill while other workers refused to work for fear they would also contract the virus. Labor shortages caused by the virus prompted processing plants to shut down and reconfigure their operations to mitigate infection. Fewer animals were processed, causing inventories on farms to swell.

FRUITS & VEGETABLES

Cancellation of fruit and vegetable orders by institutional buyers meant produce was left rotting in fields and subsequently plowed under. Fast food vendors canceled orders for potatoes. Contracts for leafy green produce and fruit were canceled by restaurants, hotels, and schools. Since harvesting costs are almost the same as production costs, many producers made the difficult decision to plow under a large portion of their crop.

CORN, SOYBEANS, & COTTON

The combination of lower production due to adverse weather events and the strong finish in export demand translated into low stock-to-use ratios for commodities like corn, soybeans, and cotton. Fourth quarter prices for these three key commodities had not been seen since the 2013/2014 marketing year which reflected the major drought in 2012.

DAIRY

In the initial phases of pandemic, the dairy farmers were forced to dump millions of gallons of milk because processing plants that pasteurize and package milk, faced order cancellations due to restaurant and school closures. This pertained not only for milk but also cheese, butter, and ice cream products.

POULTRY

There were reports of chickens on farms geared toward liquid egg production being euthanized because an upstream liquidizing plant shut down and farmers were not equipped to switch to whole egg sales.

PART TWO

LOOKING AHEAD TO U.S. AGRICULTURE IN 2021

As several COVID-19 vaccinations have since been developed and distribution is in progress nationwide, there is optimism that virus spread will slow and business restrictions will ease. However, the abrupt disruption will likely have lasting impacts on our food supply chain, particularly, in the realm of digitalization–from the rise of e-commerce to increased use of precision ag technology. This, combined with a new presidential administration with their own set of policy priorities, will translate to an accelerated era of sustainable, climate-smart agriculture.

A NEW ADMINISTRATION: MAJOR AGRICULTURAL POLICY INITIATIVES IN 2021

Uncertainty surrounded us in 2020—from export trade to the pandemic—and will likely linger into 2021 with a new administration in the White House and a new set of policy agendas. **Four major agricultural initiatives beyond COVID-19 have been pushed into the limelight that will likely shape ag policymaking past 2021.**

CLIMATE CHANGE

GLOBAL TRADE RELATIONS

FARM LABOR & IMMIGRATION REFORM

FEDERAL AID

INSIGHTS & OUTLOOK

2021 GENERAL U.S. ECONOMY

Before diving into market specifics, here are several data-driven assumptions regarding the U.S. economic landscape at large:

INTEREST RATES

Interest rates are expected to remain relatively low throughout the year as inflation pressures remain muted despite the substantial increase in national debt. While the recently-passed American Rescue Bill Act of 2021 has boosted economic growth trends and stalled the dwindling rate environment, rates are still lower than pre-COVID averages.

GDP GROWTH RATE

The nation's GDP growth rate is expected to be in the 6.5 percent range in 2021 after a 3.5 percent contraction in 2020. This will return real GDP to where it stood before the pandemic began. Much of this growth is expected in the second half of the year on the assumption that the vaccine rollout reaches most of the population by then.

UNEMPLOYMENT RATE

The unemployment rate at the start of the year was 6.7 percent and has dropped to 6.2 percent as of March 2021. This is much lower than the 2020 unemployment peak of 14.7 percent back in April 2020 but nearly twice as high as the 3.5 percent average at the end of 2019.

DOLLAR VALUE

The value of the dollar against major currencies will remain relatively weak due to the large current account trade deficit and other economic, financial, social, and political conditions in the U.S. in comparison to our major trading partners. A weaker dollar makes imports more expensive to U.S. buyers, but enhances the competitiveness of U.S. goods in overseas markets.

CONSUMER DEMAND

Consumer demand will grow as vaccination distributions increase and consumers feel more comfortable about venturing out to restaurants, shopping malls, and other venues. The personal savings rate in the fourth quarter of 2020 was 13.4 percent compared to 7.3 percent a year earlier. This should support greater consumer spending in 2021.

E-COMMERCE

E-commerce has grown to account for more than 10 percent of total grocery spending and will likely remain a prominent fixture of the food supply chain long after the pandemic has ended.

1

FIRST INITIATIVE

CLIMATE CHANGE

U.S. agriculture is particularly vulnerable to the impacts of climate change as severe weather fluctuations—from West Coast wildfires to arctic temperatures in Texas—make it more difficult for crops to grow and increase susceptibility to pests and diseases. President Biden has taken a strong stance on mitigating the impacts of greenhouse gas emissions on our planet's atmosphere and designated U.S. agriculture as a key player in joining the fight.

JULY 14, 2020

Presidential Nominee Joe Biden announces his $2 trillion climate plan.

DECEMBER 22, 2020

Presidential Nominee Joe Biden introduces the members of his climate change taskforce.

JANUARY 20, 2021

President Biden releases an executive action that involves:

- Rejoining the Climate Accord
- Reestablishing the interagency processes that worked towards measuring the social cost of carbon and methane.
- Directing the Secretary of Agriculture to collect input from farmers and ranchers on how to implement federal programs that will encourage the voluntary adoption of climate-smart ag practices, while generating new jobs for rural Americans.

MARCH 11, 2021

Members of the Senate Ag Committee hold their first hearing on farming and climate change.

APRIL 22, 2021

President Biden plans to host a Leaders' Summit on Earth Day to reconvene the Major Economies Forum.

The most-discussed strategy to encourage the adoption of climate-friendly farming practices is the use of **carbon banks**. The new U.S. Department of Agriculture Secretary Tom Vilsack used the term "ag carbon bank" during his confirmation hearing to explain the process of paying

farmers who adopt certified carbon sequestration practices, such as minimal-till methods and cover crops. Secretary Vilsack suggested the Commodity Credit Corporation (CCC) could finance this effort.

The flexibility of this USDA agency has supported farmers through the Great Depression and—most recently—through retaliatory trade wars and COVID-19. Implementing a carbon bank would be in addition to its role of distributing safety net payments under 2018 Farm Bill programs, such as the ARC and PLC. Expansion of the $30 billion cap will be needed to finance the carbon bank initiative without taking funds away from existing programs. Other concerns include regional inequality based on the sequestrating potential of soil and a lack of incentives for early adopters who are already implementing these practices on their farms.

"I think agriculture is probably the first and best place to begin getting some wins in this climate area. Farmers are prepared for it. Farmers are anxious to do it. If it's voluntary, if it's market-based, if it's incentive-based, I think you will see farmers, ranchers, and producers cooperate extensively."

TOM VILSACK

USDA SECRETARY

FACT SHEET

CLIMATE-SMART AGRICULTURE

3 OUT OF 10 FARMERS

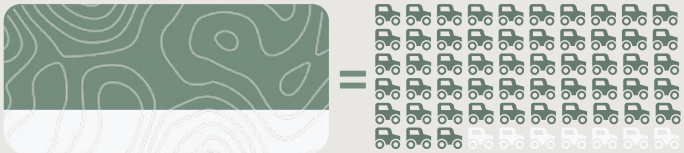
Farmers who know about carbon capture payments.

22% ACTIVE

Aware farmers who are in active discussion about carbon capture payments.

51%

Farmers planning to use more conservation practices.



70% CROPLAND

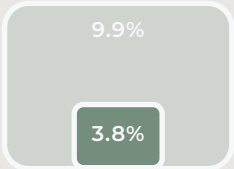
The adoption of just two regenerative practices—cover crops and no-till—on 70 percent of America's cropland.

53 MILLION CARS

Equivalent amount of cars removed from the road if adoption is made.

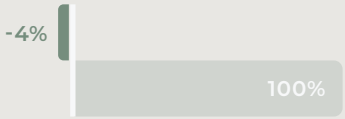
56% DEFICIT

The fresh water deficit the world faces by 2030 if no water conservation action is taken.



6.1% REDUCTION

Possible total U.S. greenhouse gas (GHG) emission from 9.9 percent by 2025 with widespread adoption of climate-smart agriculture practices.



NEGATIVE 4%

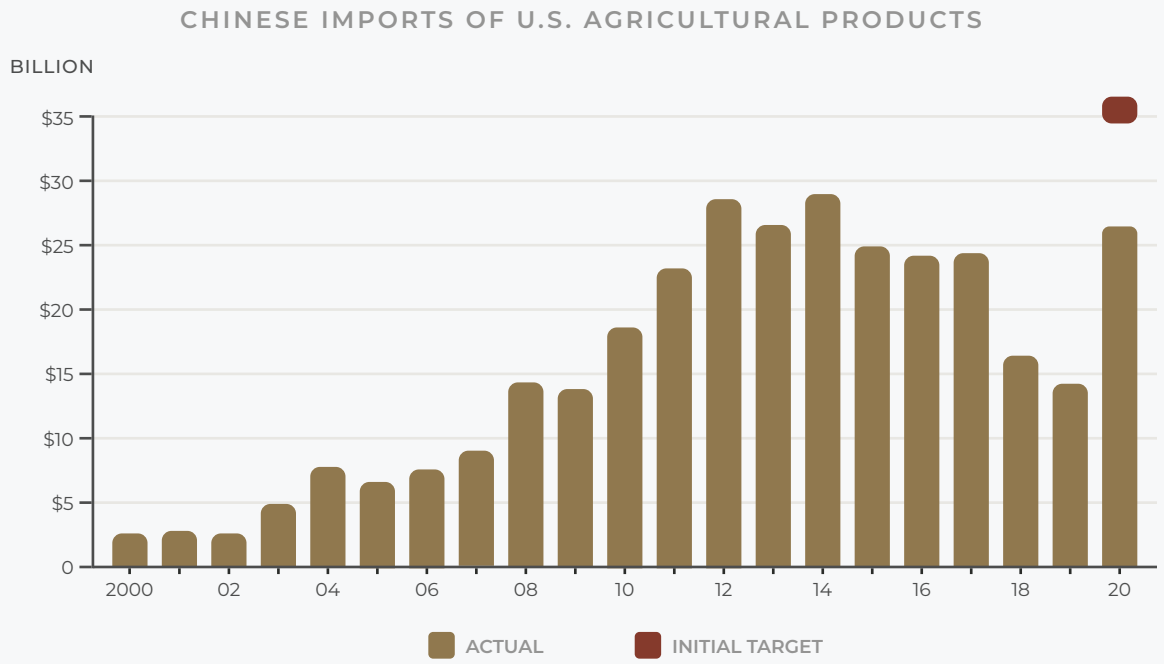
Possible total U.S. GHG emissions and a carbon sink potential for U.S. agriculture by 2035 with increased investments and partnerships across the food and agriculture value chain and integration of promising frontier technologies.

2

SECOND INITIATIVE

GLOBAL TRADE RELATIONS

The Phase One trade agreement between the U.S. and China that was signed in January of last year, called for $36.5 billion in purchases of agricultural products by China in 2020. This goal, specified in dollars, was already ambitious given the low U.S. commodity prices early in the year and even more difficult to obtain once COVID-19 hit.



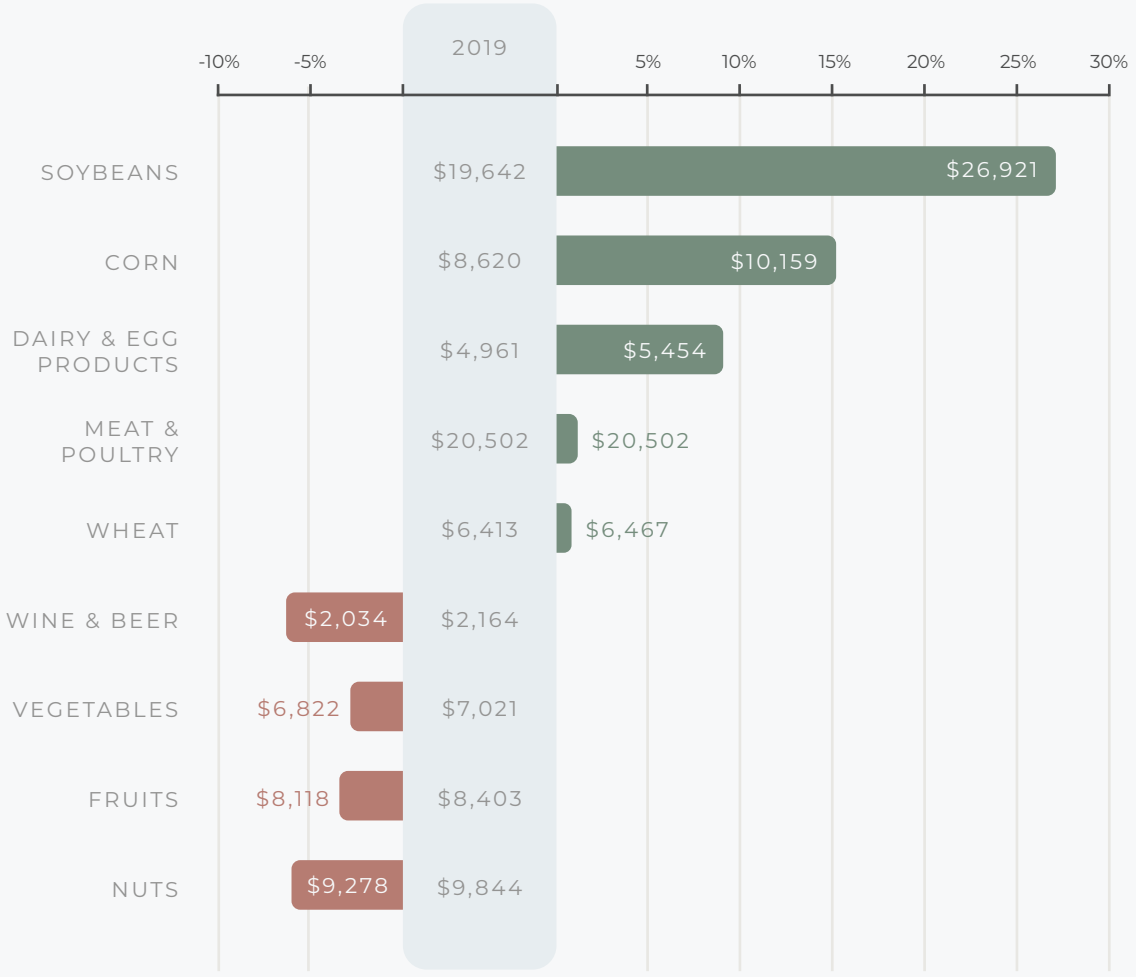
Source: U.S. Department of Agriculture (USDA)

Chinese purchases by the end of 2020 approached two-thirds of this initial target. Even so, total agricultural exports to China in 2020 were the highest since 2017, before the tariff war between China and the U.S. began. U.S. exports to China are estimated to increase to $31.5 billion in 2021—a $4.5 billion jump from the November 2020 forecast.

Recent remarks by the USDA's Chief Economist Seth Meyers indicate the USDA's projection for crop acreage and price forecasts is based upon China's continued participation in the two-year Phase 1 trade agreement signed last year. Meyers pointed to the sales already on the books for 2021 as evidence of the underlying demand for U.S. agricultural imports and that China will follow through with those purchase commitments. Time will tell.

The total U.S. goods and services trade deficit increased $101.9 billion to $678.7 billion from 2019 to 2020. U.S. goods deficit increased six percent, while the U.S. services surplus decreased by 17.5 percent. When singularly focused on agricultural goods, the U.S. narrowly achieved a trade surplus of $2.65 billion for total agricultural trade despite historic disruption to the global supply chain. However, the surplus was not felt universally as some ag commodities fared better than others.

U.S. AGRICULTURAL TRADE SURPLUS & DEFICITS FROM 2019 TO 2020 (IN MILLIONS)

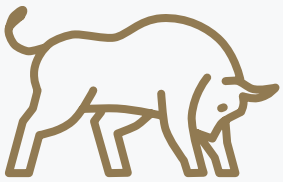


Source: USDA Agricultural Trade Data Update

U.S. AGRICULTURAL TRADE FORECAST IN 2021

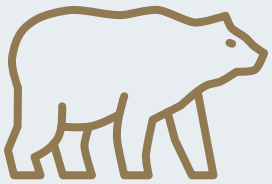
Moving forward, the Biden administration plans to take a tough stance on trade with China and keep many Trump-era tariffs intact. Collaboration and engagement with historic allies will also be an important piece to watch when monitoring the state of U.S. trade in 2021. The incoming trade team is stacked with linchpins, such as U.S. Trade Representative Katherine Tai—the chief trade lawyer who was involved in the outline of labor provisions in the USMCA agreement and who has already expressed support in enforcing the existing tract pact with Canada and Mexico. We will continue to closely observe the U.S. ag trade landscape and provide updates throughout the year as 2021 events unfold.

According to the latest USDA trade forecast, **total U.S. agriculture exports are projected at a record $157 billion this year with a trade surplus of $19.5 billion and up 14 percent from the $135.7 billion recorded in 2020.**



THE BULL PERSPECTIVE

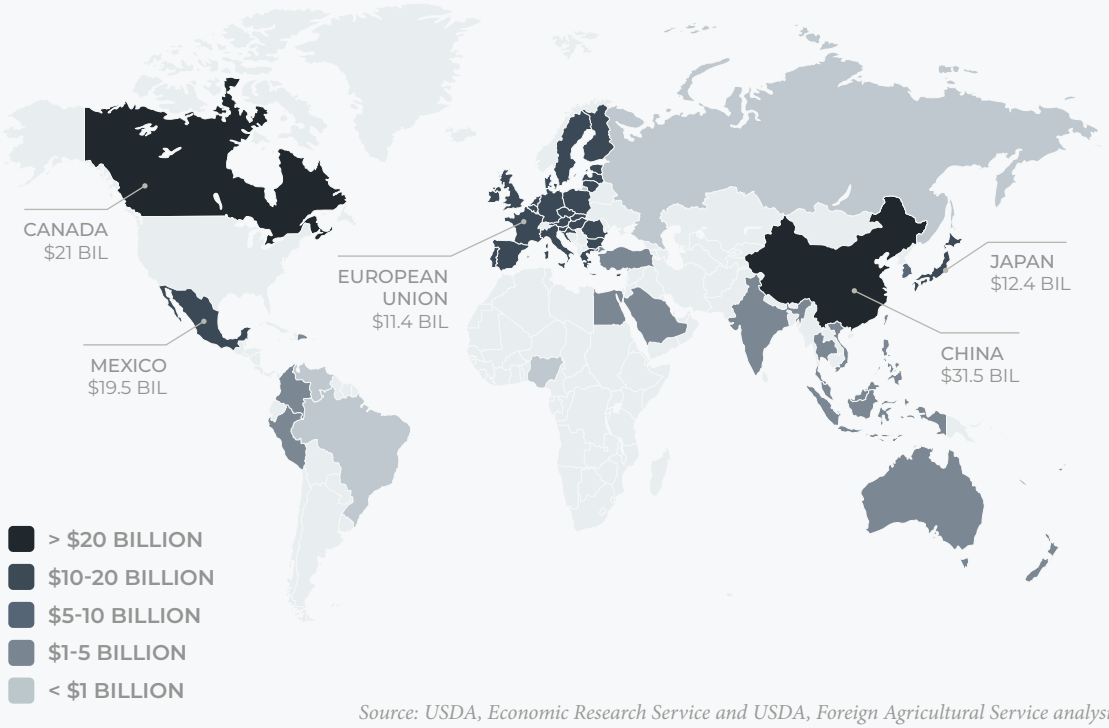
Trade is off to a strong start in 2021 with record purchase of U.S. corn by China, weak dollar, and less than ideal weather conditions for South America crop production.



THE BEAR PERSPECTIVE

While the impact won't be immediate, China has made it clear that they are focused on food security self-reliance, which could mean fewer U.S. imports over time. In addition, a strong dollar and expanded production in South America could affect international ag trade flows and commodity prices.

OUTLOOK FOR U.S. AGRICULTURAL EXPORTS BY REGION



Source: USDA, Economic Research Service and USDA, Foreign Agricultural Service analysis and forecasts using data from U.S. Department of Commerce, Bureau of Census

"As we look ahead to 2021 with the Biden administration moving forward on another stimulus, the U.S. economy is forecasted to grow more quickly in the second half of the year, the U.S. will import more, and the trade deficit is likely to rise again. Slow recovery in other countries will weaken U.S. exports."

MARY LOVELY

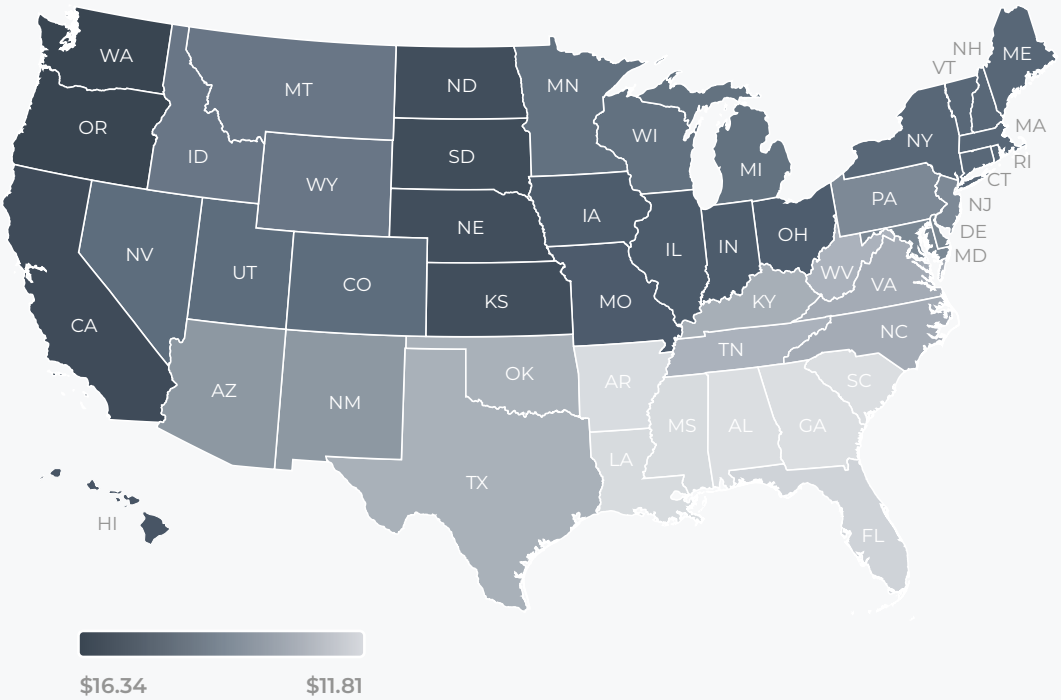
A SENIOR FELLOW AT THE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

3

THIRD INITIATIVE

FARM LABOR & IMMIGRATION REFORM

The USDA Farm Labor Survey (FLS) went on quite the journey last year as proposed policy changes postponed the release of the Adverse Effect Wage Rate (AEWR) and caused confusion regarding the minimum wage farmers needed to pay H-2A workers in 2021. The FLS was reinstated in court this past December, delaying the release of the AEWR until February 2021.



Source: USDA Farm Labor Survey

Upon its release, annual national average gross wage rates for farmworkers are expected to increase 4.5 percent to $14.62. On a regional basis, the state with the highest wage increase was California at 8.7 percent to $16.05 an hour. States in the Delta and Southeast regions experienced the lowest wage increases. Wage rates increased less than one percent in states like South Carolina, Georgia, Alabama, Mississippi, Arkansas, and Louisiana.

FACT SHEET

U.S. FARM LABOR

NEARLY HALF

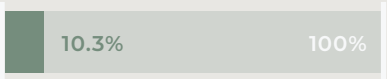
Crop farmworkers who lack legal status.

THREE-QUARTERS

U.S. farm labor workforce who are immigrants.

4% U.S. CITIZENSHIP

Immigrant farmworkers who have been able to obtain U.S. citizenship.



THIRD-HIGHEST EXPENSE

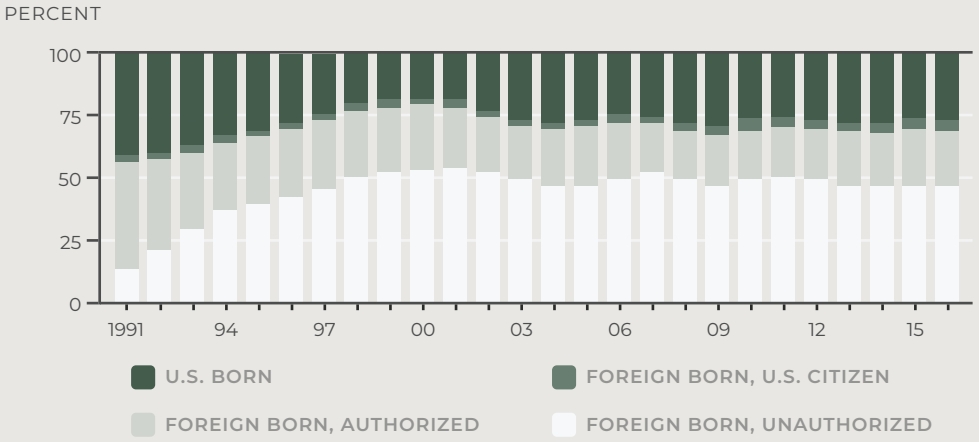
Labor accounts for 10.3 percent of average input costs.

2 MIL

TWO MILLION HIRED WORKERS

The estimated amount needed to maintain production.

LEGAL STATUS OF HIRED CROP FARMWORKERS, FISCAL 1991-2016



Source: USDA ERS

WHAT DOES ALL THIS MEAN FOR AMERICAN FARMERS AND RANCHERS?

Input costs associated with labor will likely rise in 2021 but will hopefully be offset by higher market prices. On the other hand, lower AEWR regions could have more difficulty finding necessary labor for crop production. Just as regions influence the gravity of impact, commodity type will also influence the impact it will have on a farm operation. The variability of wage increases for crop and livestock farmworkers is high, ranging from nine to 35 percent over the last five years. Fruit and vegetable growers are historically more sensitive to changes in farm labor policy due to their labor-intensive nature. *This is discussed further in the commodity deep dive.*

Considering a large majority of U.S. farm labor is comprised of immigrant workers, the industry is sensitive to changes in immigration policy—a major initiative in the new administration. On January 20th, 2021, President Biden signed an executive order that aimed to strengthen the incentives and protections for essential immigrant workers and "dreamers"—*undocumented immigrant children*. This legislative bill proposes a fast-tracked path to citizenship for undocumented residents and temporary visa farmworkers. Undocumented farmworkers in the U.S. would be able to gain legal status upon passing a criminal background check and showing they worked at least 100 days in agriculture for four out of the last five years. In addition, it authorizes increased funding for border security to expedite the screening process and increase identification of narcotics and other contraband at all ports of entry.

Farmers who are impacted by these programs generally support a path to citizenship for migrant farmworkers. Those who participate in H-2A often work alongside the same workers year after year and consider them to be an extension of their family, while understanding how vital they are to the success of their farm operation. In addition to a path to citizenship, many farm groups are encouraging an expansion of the H-2A program to increase access to foreign labor. One concern of this bill is that newly legalized workers would leave agriculture for other jobs, in turn, putting farmers in a difficult spot to secure necessary labor.

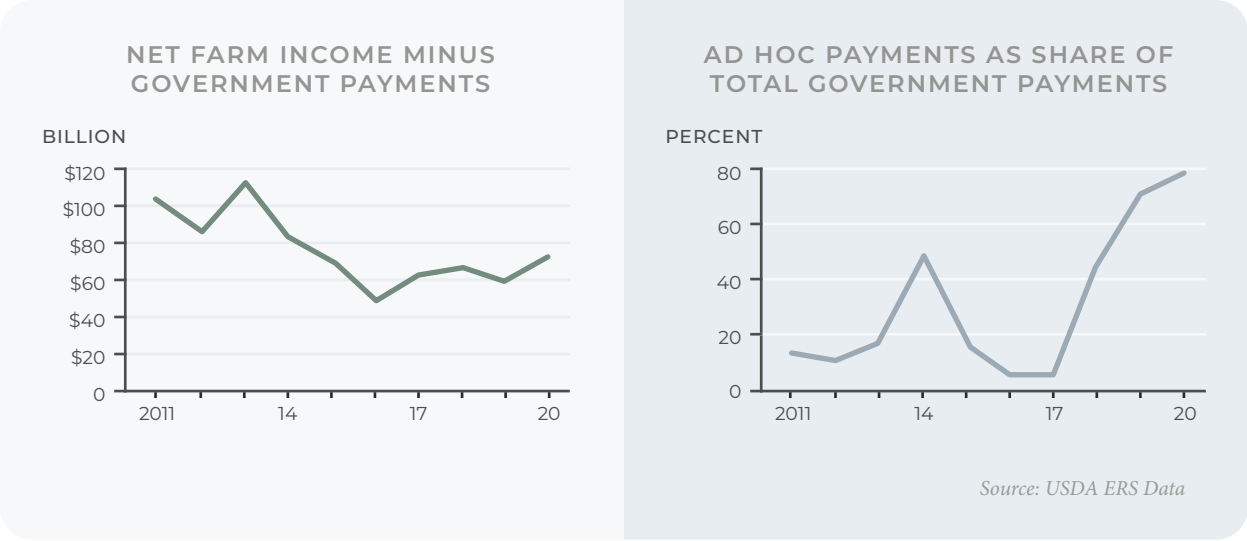
A multilateral examination of immigration reform is necessary to develop policies that benefit the agricultural community as a whole, without straining an already volatile yet essential industry.

4

FOURTH INITIATIVE

FEDERAL AID

The farm sector ended 2020 with a record high net farm income of $121 billion. However, that number doesn't convey the full story. While net farm income excluding farm program payments did rise in 2020 as shown in the left-hand graph below, a significant portion of total net farm income in 2020 were ad hoc payments. Ad hoc payments refer to one-off payments for temporary situations—like the **Market Facilitation Program** (MFP) and the **Coronavirus Food Assistance Program** (CFAP)—as opposed to the safety net programs, such as the **Agricultural Revenue Coverage** (ARC) and **Price Loss Coverage** (PLC) programs.



The $900 billion COVID-19 relief package that passed at the end of 2020 includes $13 billion in discretionary funding for agriculture, with $11.2 billion being allocated to the Secretary of Agriculture for direct assistance to agriculture. In late January, the USDA froze $2.3 billion of this funding to review the rules that governed its distribution. A major target of that funding was contract poultry and livestock producers. The new administration may redirect some of this funding to farmworkers and smaller food processors elsewhere in the food supply chain, but that has yet to remain seen.

The $1.9 trillion COVID-19 relief legislation recently passed has roughly $16 billion in specific funding implications for the USDA. Approximately 35 percent or $3.6 billion of this funding is for food purchases and distribution efforts. The bill also incorporates targeted benefits to minority or socially disadvantaged farmers, including $4 billion in debt forgiveness, $1 billion in outreach and support, and $5 million in educational support.

FACT SHEET

FEDERAL AID

$36.1 BILLION
Supplemental ad hoc payments in 2020 that did not require repayment.

$46.5 BILLION
Total federal payments made to U.S. farmers and ranchers in 2020.

$6.1 BILLION
Total PLC and ARC payments in 2020.

$15 BILLION
The estimated amount of CFAP payments in 2021.

AD HOC
Made up 77% of total government payments in 2020.

50% DECLINE
The 2021 estimation of government payments.

AGRICULTURAL PROVISIONS OF AMERICAN RESCUE PLAN (MILLION DOLLAR)

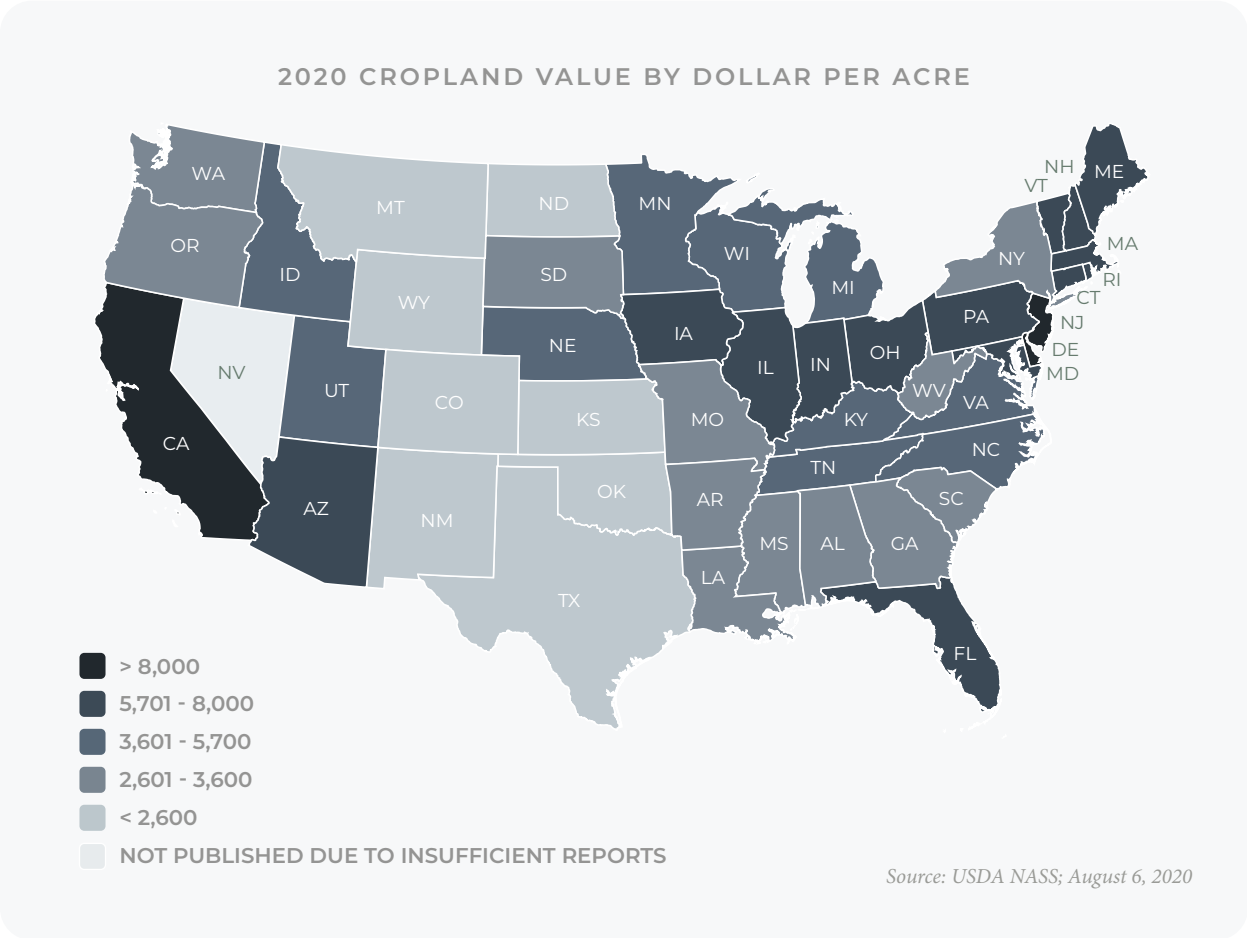
$10.4 BILLION TOTAL

- DEBT FORGIVENESS FOR SOCIALLY DISADVANTAGED FARMERS, 39%
- FOOD PURCHASES & DISTRIBUTION EFFORTS, PANDEMIC RESPONSE, 35%
- OUTREACH & SUPPORT FOR SOCIALLY DISADVANTAGED FARMERS, 9.5%
- FOOD FOR PEACE, 7.7%
- RURAL HEALTH CARE GRANTS, 4.8%
- ANIMAL SURVALLENCE, 2.9%
- OVERTIME INSPECTION COST REDUCTION, 1%
- ADMINISTRATION, 0.5%
- EDUCATION SUPPORT FOR SOCIALLY DISADVANTAGED FARMERS, 0.05%
- INSPECTOR GENERAL, 0.02%

Source: American Farm Bureau Federation

ECONOMIC OUTLOOK ON U.S. FARMLAND VALUES

Historic federal government aid transformed what was to be a below-average year to one that achieved a record level net farm income, enhanced debt repayment capacity, and strengthened farmland values.



On a national level, cropland values as of August 2020 were equal to values one year prior. The stability of land values contradicts the extreme variability seen in the farm sector in 2020. Many farmers are using the record level net farm income as an opportune time to pay down debt, build liquidity, modernize their machinery and equipment, or expand their operations. Rural real estate companies in the Corn Belt and Northern Plains regions of the map above reported a 35 percent increase in farmland sales in the fourth quarter of last year, citing farmer demand and investor interest in this stabilizing and finite asset.

As interest in rural land investment increases in 2021, expect to see 5 to 10 percent appreciation in cropland values, particularly where corn and soybean production are prevalent.

PART THREE

ECONOMIC DEEP DIVES FOR MAJOR AGRICULTURE COMMODITIES

LIVESTOCK

As seen in media headlines earlier in 2020, processing plants were forced to shut down operations after they became virus hotspots. Workers were able to return once processing plants restructured operations and facilities were sanitized to ensure worker safety. The highly concentrated structure of the meat processing industry bottlenecked supply, creating devastating consequences for livestock farmers and ranchers.

▲ 20% INCREASE

Calf prices rose from 2020 summer lows in December 2020, and were roughly equal to one year earlier.

▲ 18% INCREASE

Fed cattle prices closed the year with a rise from summer lows, but still 8 percent lower than one year earlier.

$13 BILLION

Cattle industry's estimated economic impact.

▼ $5 BILLION

Hog industry estimated loss.

▼ 5.98% DECREASE

Cattle and calves cash receipts.

▼ 5.15% DECREASE

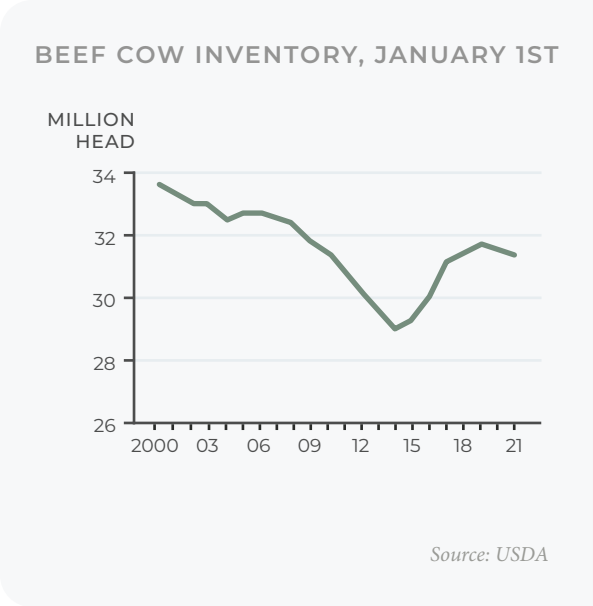
Hog cash receipts.

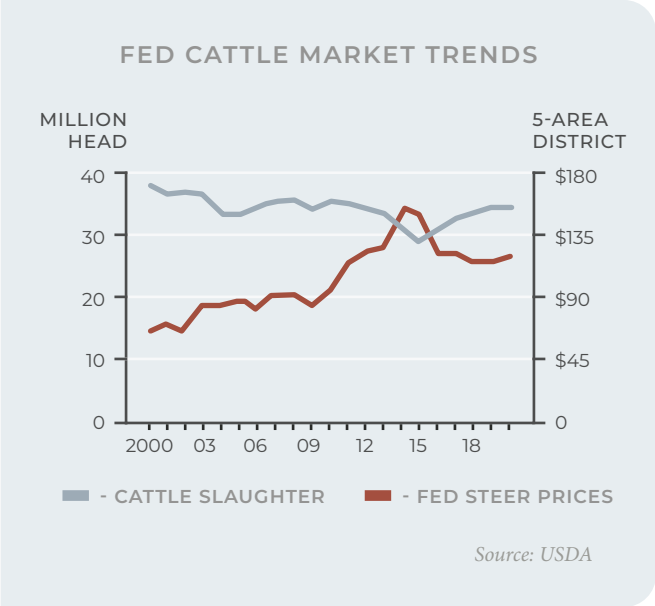
▼ 23.72% DECREASE

Broilers cash receipts.

▲ "AT HOME" DINING

Turkey cash receipts finished higher in 2020 thanks to "at home" dining this past Thanksgiving.





While cattle ranchers continue to show remarkable tenacity and market prices are improving, disruptions to the beef industry will likely carryover to 2021. Total beef cow inventory on January 1st was 31.2 million head—one percent below last year. Steers weighing 500 pounds and over as of January 1st totaled 16.6 million head—up slightly from the start of 2020. The USDA WASDE April report forecasts higher beef production this year, driven by heavier weights in the first half of the year. Higher placements in the first half of the year will lead to greater marketings in the second half. Higher feed cost driven by corn prices will also lead to higher feedlot ration costs as well as supplemental feed costs for cow-calf and stocker operations which could influence market weights at slaughter.

The USDA WASDE April report also projected higher steer prices in the second half of 2021, up 10 percent from one year earlier despite a slight decline in per capita consumption. The weekly weighted average direct price is expected to reach $116 per hundred pounds (cwt) in the fourth quarter as opposed to $108 one year earlier. The June 2021 futures price for live cattle is $125.28 while the August 2021 feeder cattle piece is $161.88.

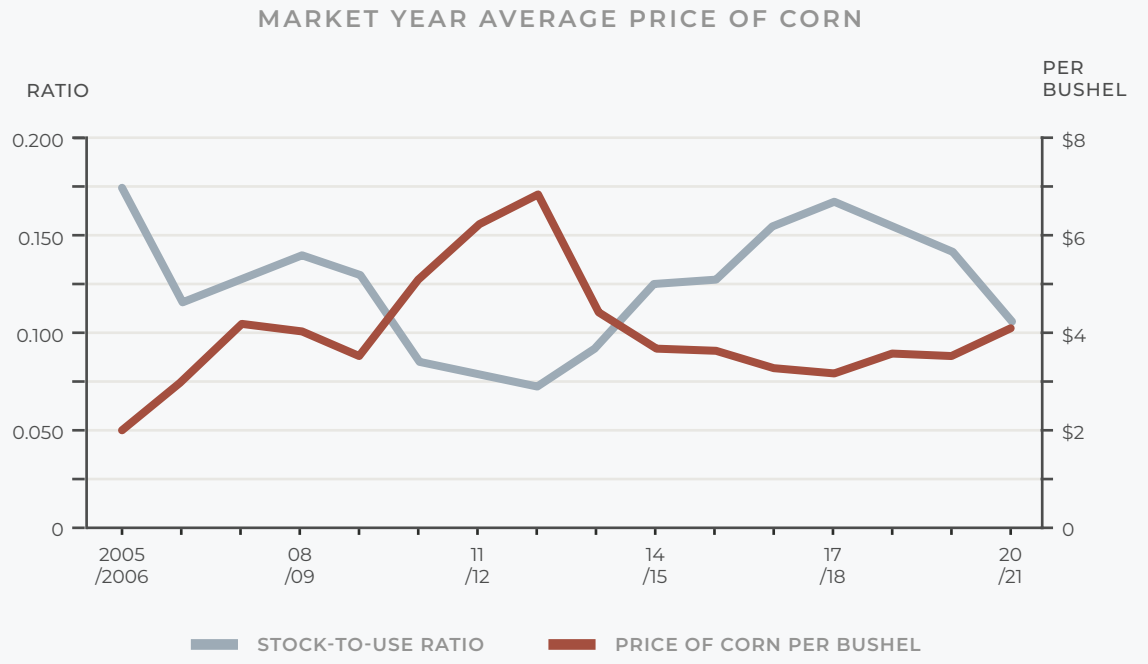
2021 LIVESTOCK MARKET OUTLOOK

Livestock and poultry will experience higher feed costs in 2021. Consumer demand for food away from home will decide the breadth of profit margins farmers and ranchers will experience this year. The continuation of drought conditions in the Southwest and Western half of the country could affect pasture conditions and the cost of forage for cow-calf operations.

CORN

From severe weather events to record-setting exports, U.S. corn experienced historic volatility in 2020 that made it nearly impossible for farmers to plan ahead. Corn farmers have experienced years of a weak market as the price of corn had drifted below $4.00 per bushel since 2013. The stock-to-use ratio peaked in 2017 due mostly to overproduction in the industry. In 2020, although ethanol demand plummeted because of COVID-19, corn export demand skyrocketed. Prices began to rally as supply dwindled. While they have not reached the record high of $6.98 per bushel seen in 2012, they are drifting towards the same trend of low stock and high market prices that were seen during that year.

Recent executive orders signed by President Biden during his first week in office included revoking the permit for the Keystone XL pipeline, pausing oil and gas leases on federal lands and waters, promoting federal use of electric vehicles, and rejoining the Paris Climate Accord—all of which signal a future reckoning for the fossil fuel industry. This has direct implications for the ethanol industry and corn markets indirectly, which accounts for one-third of total corn usage. On the other hand, the last week in January saw a series of sales to China that broke the record on weekly sales dating back to 1991. Significant problems with dry weather in South America delayed planting and reduced their crop forecast by one to two million metric tons, strengthening export demand for U.S. growers.



Source: USDA

▼ 0.092 S/U

Current stock-to-use ratio (S/U) is the lowest we have seen in six years.

14.2 BILLION BUSHELS

Corn trend line yield for total production this coming season.

▲ $4.30 MY PRICE

A seven-year high projected price for 2020/2021 Market Year (MY) by the April USDA WASDE report.

▲ 5.86 MILLION METRIC TONS

A record purchases of corn by Chinese buyers at the end of January, which instantly doubled the amount purchased in the 2019/2020 MY.

▲ 91.1 MILLION ACRES

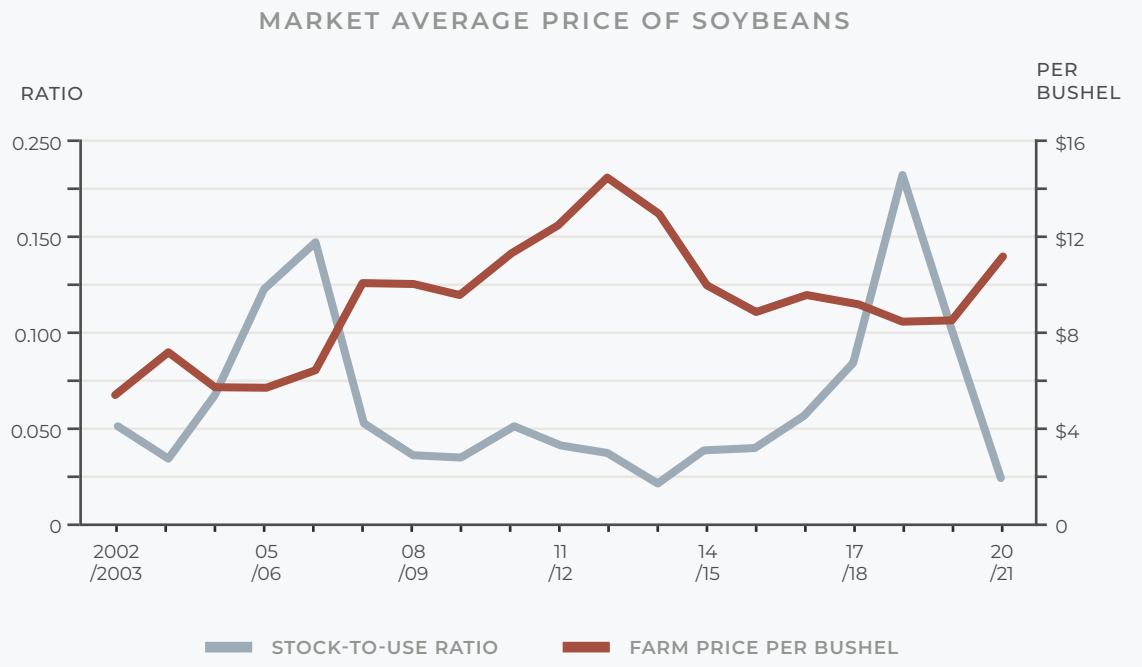
Corn acres planted in 2021 is expected to be near or slightly above 2020 acres.

2021 CORN MARKET FORECAST

Tight stocks and high prices are creating a bidding war between corn and soybeans. Look for a second year of low stock-to-use ratios and higher average price if the export demand for corn stays high. Unpredictable weather events will be a deviating factor. Adverse weather—as seen in recent years—could lower crop yields and push market prices higher. The USDA is forecasting a record 178 million acres planted to corn and soybeans this year, up 7 percent from last year.

SOYBEANS

Soybeans followed a similar pattern as corn, experiencing volatility as COVID-19 emerged, ending the year with strong prices due to significant exports to China. The Phase One agreement with China indicates even greater ag purchases in 2021. Soybeans are expected to be a significant portion of these purchases as China strives to rebuild its hog herds. Crushed soybean meal is in short supply around the world due to below average rainfall in South America. Strong global demand combined with a dwindling supply bodes well for U.S. soybean farmers as prices continue to increase. However, these higher prices will translate to higher feed costs for livestock producers, as previously discussed.



Source: USDA

▲ 7.46% INCREASE

Soybean cash receipts in 2020.

83.1 MILLION ACRES

Soybeans farmers planted in 2020, yielding a total production of 4.14 billion bushels.

▲ 30% ABOVE

Percentage above last year's market year (MY) price of soybeans projeced in the April WASDE report, highest since 2014.

▲ UP 4.6 MILLION ACRES

Estimated 87.6 million acres of soybeans planted in 2021, up from 83 million last year.

▲ UP $6.5 BILLION

USDA trade outlook that predicts U.S. soybean exports to a record $25.7 billion in 2020 MY.

▼ 2.6% S/U

Stock-to-use ratio for the 2020/2021 MY, the lowest recorded since the 2013/2014 MY.

$11.25

The WASDE report estimated price for soybeans in the 2020/2021 MY.

$8.57

Average annual price for prior market year.

▼ FUTURE QUOTES

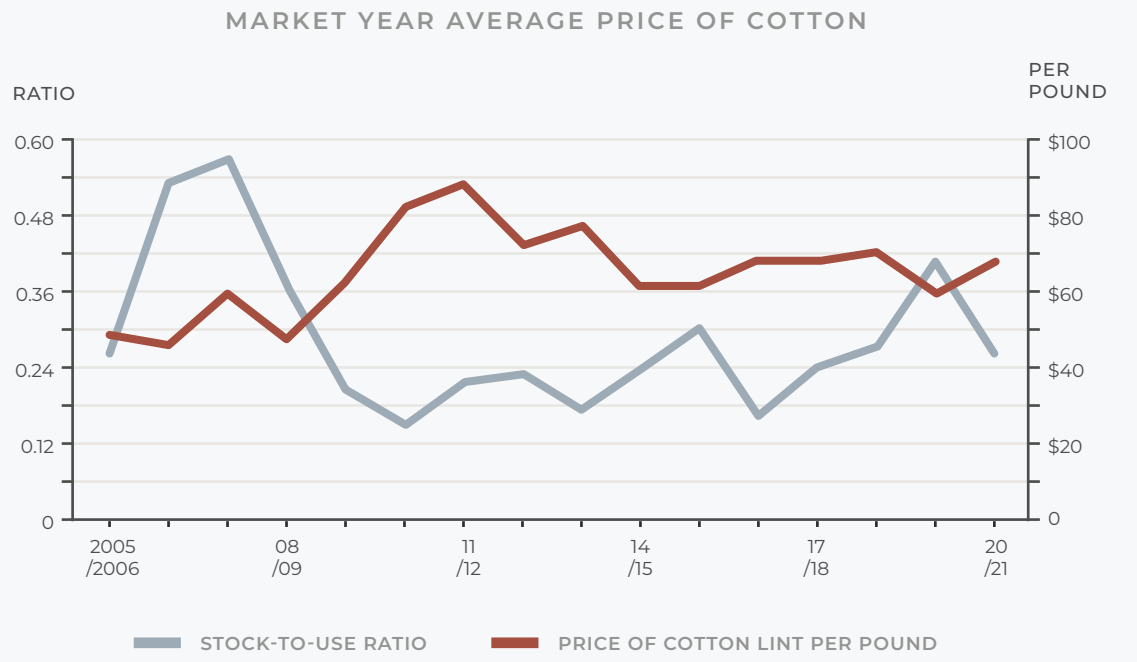
Future quote for May 2021 soybeans contracts is $14.06. November 2021 contracts are priced at $12.68.

2021 SOYBEAN MARKET FORECAST

Increasing demand and decreasing supply has led to a seven-year high for soybean prices. Some analysts predict MYA prices will climb as high as $13 per bushel which is a stark comparison to the initial 2020 USDA prediction of $8.20 reported back in May of last year. Look for as much as 6 percent more acres planted to soybeans this year compared to last.

COTTON

The drop in cotton production in the U.S. over the past couple of years has resulted in an increase in market prices for farmers. This year, the global cotton production forecast declined 6.5 percent, the lowest output in four years. U.S. cotton exports are estimated to account for 35 percent of the global total as competition continues to increase. Comparatively, China and India are expected to account for more than half of global cotton production.



Source: USDA

▼ DOWN 7.82%

Cotton cash receipts were down in 2020, reflecting fewer acres planted than seen in the past two years.

▼ 0.216 S/U

Stock-to-use ratio for cotton in the 2020/2021 MY, a 47% drop from last year's ratio of 0.41.

▲ 68 CENTS PER POUND

The MY average price for cotton projected in the April WASDE report, 14% higher than last year.

81 CENTS

Futures estimated price for July 2021 cotton.

▲ 14% INCREASE

Global cotton domestic use in 2020/2021 MY is projected at 117.2 million bales, up from last year.

▼ 7% DECREASE

Global cotton production in 2020/2021 MY is forecasted at 114.1 million bales, down from last year.

2021 COTTON MARKET FORECAST

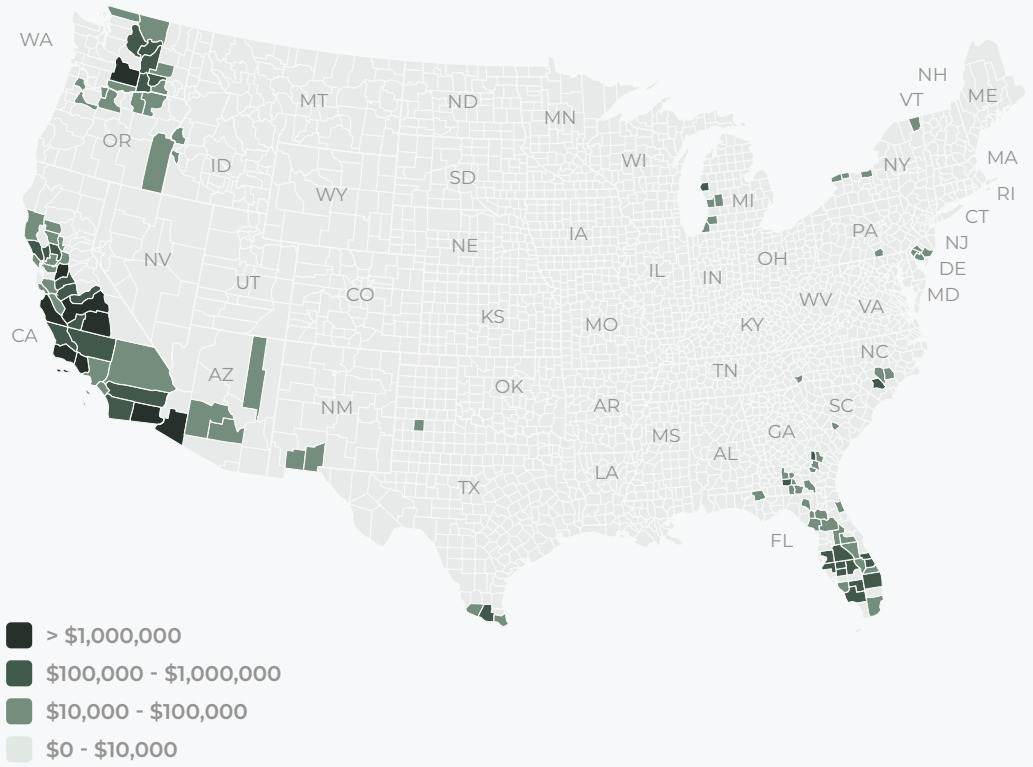
Tighter stocks have led to a 14 percent increase in cotton prices and are predicted to increase even further in the coming year due to global higher use relative to production. These higher prices are expected to generate greater competition in the global market for U.S. cotton farmers.

FRUITS & VEGETABLES

Labor availability impacted a large majority of specialty crop farmers—such as strawberries, peaches, leafy greens, and more—and continues to do so going into 2021. As discussed in the immigration reform section earlier, seven out of 10 farmworkers are born outside of the United States. Many of these workers travel on work visas to help American farmers with planting and harvesting. COVID-19 made traveling more complicated and some refused to do so altogether to avoid potential virus contraction.

As many commodities fall within the fruits and vegetables category, not all were impacted the same. For example, retail sales of fresh potatoes experienced a record growth in the fourth quarter, as did melons and nuts. However, price declines for cantaloupes, celery, and onions more than offset the increases for more fortunate commodities. The perishable nature of these products makes them highly susceptible to disruption—whether it's sudden shifts in our food supply or limited access to necessary farm labor.

ESTIMATED PRODUCTION LOSSES, BY COUNTY



Source: USDA NASS

▲ 3.7% INCREASE

Vegetable and melon cash receipt increase from 2019 to 2020.

▲ 16.5% INCREASE

Fruits and nuts cash receipt increase by the end of 2020.

▲ 12% & 8.2% INCREASE

Fresh potatoes were up 12 percent in dollar sales, and 8.2 percent in volume at the end of 2020 when compared to the same time in 2019.

▼ $12 TO $48 MILLION

Total fruit and vegetable crop losses tied to labor shortages were estimated to range from $12 million in a conservative economic model to as much as $48 million in the extreme scenario.

▼ $22 MILLION

Estimated fruit and vegetable losses in California.

In 2021, produce packaging will become an important issue for consumers. Farmers will be pressured to balance product quality, food safety, and sustainability. With the exception of the federal crop insurance program, specialty crops lack support in the farm bill safety net and are also being challenged by increasing imports from Mexico. Agriculture Secretary Tom Vilsack has acknowledged these challenges and tossed around the idea of "food hubs", which would essentially allow specialty crop farmers to market directly to schools and other institution buyers as a means of adding more flexibility to the food supply chain moving forward.

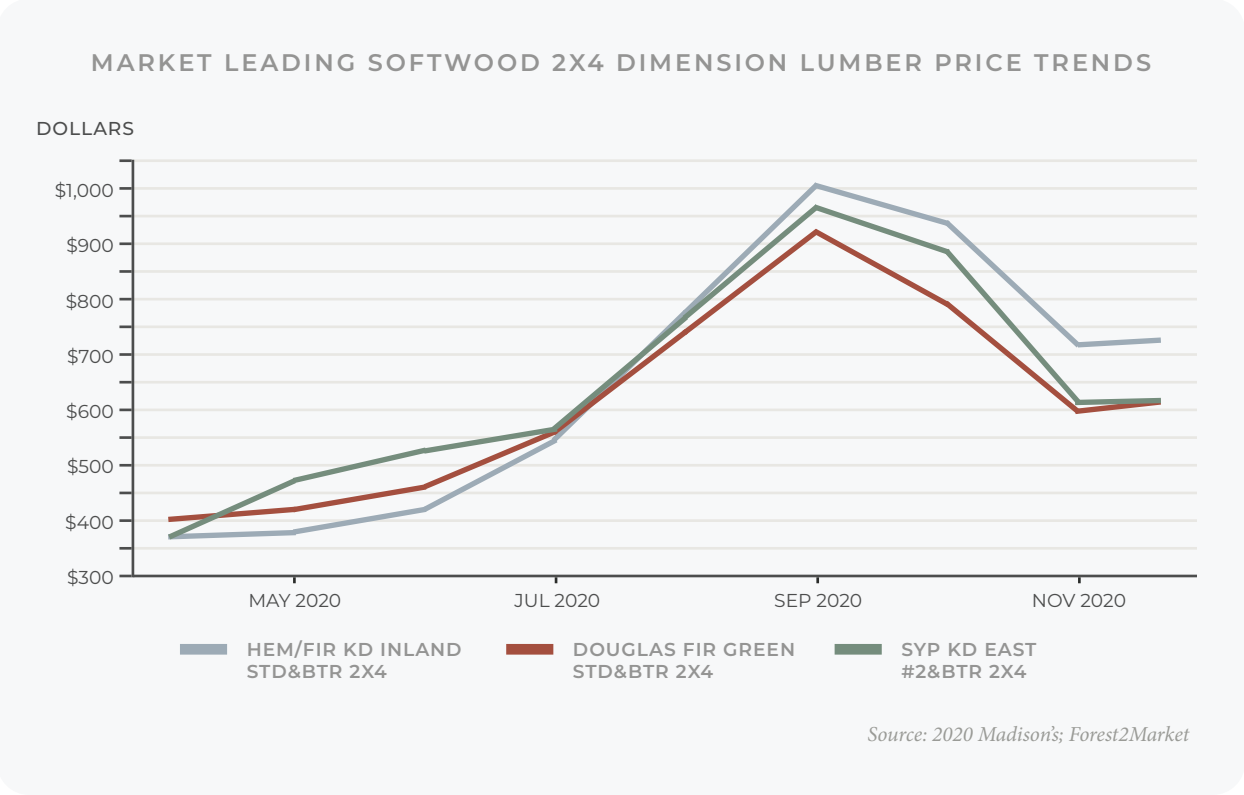
The artic blast in mid-February caused temperatures to fall in the Southern Plains over a six-day period, in some cases breaking records dating back to 1895. Reports suggests that 100 percent of Texas' unharvested orange crop was destroyed. It is also estimated that much of the unharvested grapefruit crop is lost as well. The question is how much permanent damage has been done to the trees. The preliminary estimate of the loss to Texas citrus alone is $305 million. Other fruit trees that had emerged from dormancy are also susceptible to damage and any active buds are likely lost. The effect on leafy green vegetables like spinach and other crops like potatoes suffered considerable damage as well.

2021 FRUITS & VEGETABLES MARKET FORECAST

The outlook for 2021 will be heavily influenced by several factors, including school openings and further easing of restrictions on the restaurant industry. The lasting impacts of recent severe weather events also plays a role. Immigration policy reform will affect labor supply for this sector as well. Increases in minimum farmworker wage rates will impact these farmers as labor costs represent the majority of fruit and vegetable production costs.

TIMBER

The timber industry experienced significant volatility in 2020. The hoarding of tissue paper and towel products when stay at home orders were instituted caught the industry off guard. Home construction declined at the onset of the virus, which led some lumber producers to cut back their operations or cease production altogether. When mortgage interest rates fell sharply as the Federal Reserve cut interest rates to near zero to stimulate the economy, the home building market and home remodeling market began to pick up steam.



$847 BFM

May 2021 futures prices for thousand board foot (BFM) of lumber.

▲ 31%

Commercial construction contractors in 2020 who reported shortage of lumber, compared to 11 percent in 2019.

$580 BFM

Comparatively the fourth quarter average.

41%

Contractors who say less availability of building products and materials is a severe consequence of the pandemic.

By early summer, there was significant shortage of lumber. The price of Southern Yellow Pine (SYP) as well as Hem Fir and Douglas lumber reached historic highs in September, more than double the prices seen before the pandemic began. Lumber prices fell somewhat from the September high, but high prices and lengthy delays in availability continued to characterize the timber industry in the fourth quarter of 2020.

2021 TIMBER MARKET FORECAST

The Southern Yellow Pine (SYP) lumber price has risen sharply in recent months and is on track to reach the $1,000 BFM price recorded last September. The SYP lumber price for the week ending January 22nd was $945 per BFM, 161 percent higher than the same time last year. A strong demand for new home construction reflecting a shortage of existing homes on the market, low mortgage interest rates, and mild weather the last quarter of 2020 leading to increased construction activity. In turn, prices for SYP have been driven back up to the record high levels seen last summer. This pent-up demand is expected to keep SYP prices high well into 2021 as the pace of recovery in the general economy picks up in the second half of the year.

"The pandemic has exacerbated issues that contractors were already facing in availability and cost of materials from tariffs and a shortage of skilled workers. But there's reason for optimism. More than one in three contractors plan to hire more workers in the next six months, and most see sufficient new business in the coming year."

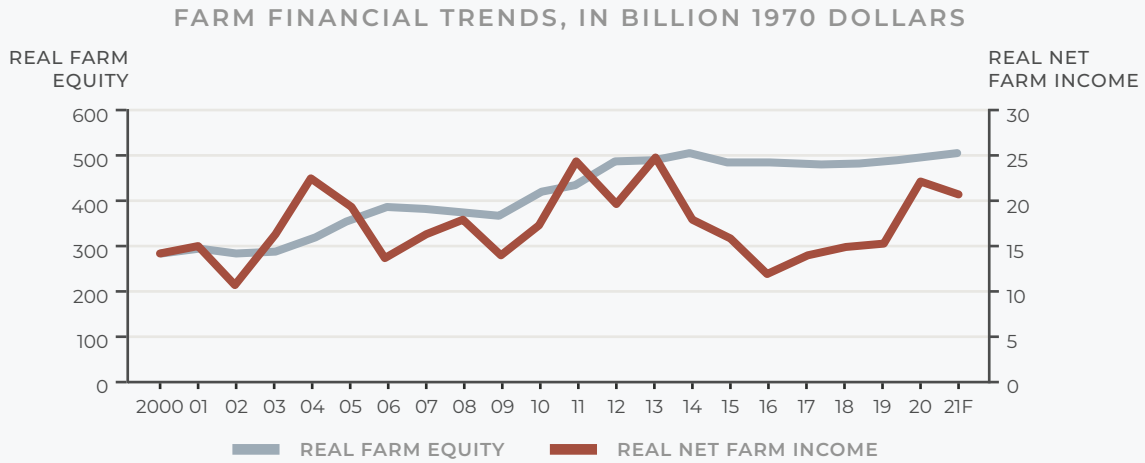
NEIL BRADLEY

U.S. CHAMBER OF COMMERCE EXECUTIVE
VICE PRESIDENT AND CHIEF POLICY OFFICER

PART FOUR

FARM FINANCIALS IN 2021

In the face of historic disruption, farmers and ranchers ended 2020 strong, with an estimated net farm income of $121 billion—a stark contrast to the $96.7 billion initially forecasted in February 2020. The USDA's 2021 Farm Sector Income Forecast dropped its farm income forecast by eight percent to $111.4 billion. Much of this decline is based on the assumption that government payments will fall by 45 percent from 2020 historic levels.



Source: USDA

Even so, **forecasted net farm income expressed in real terms is the second highest since 2013 and fourth highest in the last two decades.** The improving net farm income picture last year, coupled with the expected net farm income in 2021, contribute to a gradual improvement in real farm equity. Real farm equity has been remarkably resilient since 2014, despite declining net farm incomes and low interest rates, thanks to relatively stable farmland prices. Net farm income last year and 2021 forecast are also helping to build the liquidity positions of farmers and ranchers after five years of decline from 2014 levels.

While some sectors are in a stronger position than others, the industry as a whole is looking onward with optimism. In April, the Farm Capital Investment Index—a measurement of farmers' willingness to buy equipment or upgrade their operation—stood at 88 points. This fell from the record-high of 93 recorded earlier this year but is still a drastic difference from a year ago when farmers' confidence in the ag economy plummeted to 54 points. Through a national lens, farm balance sheets are strong and credit conditions are positive. While repayment rates are higher and loan extensions are lower than a year prior for many American farm operations, true financial conditions vary widely based on commodity and location.

FACT SHEET

FARMER SENTIMENT

63% INCREASE

Farmers' optimism to update operation compared to March 2020.

60% OF FARMERS

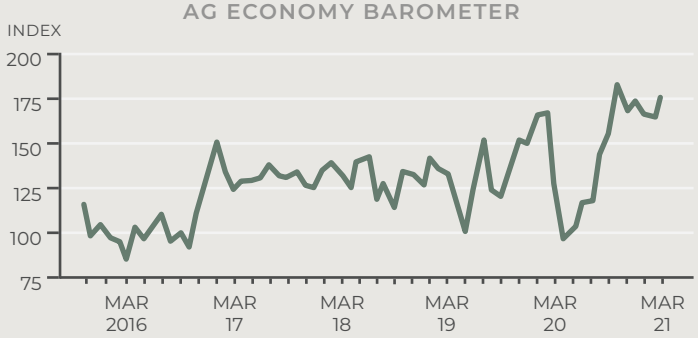
Listed paying down farm debts or purchasing equipment as likely uses of extra income.

22% INCREASE

Farmers who expect long-term appreciation of farmland values.

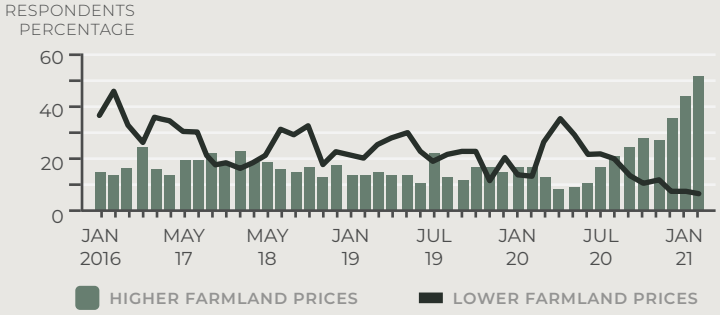
61% EXPECT NO CHANGE

Respondents expect interest rates to remain unchanged.



34% EXPECT GROWTH

Respondents expect their operations to grow five percent or more in 2021.



Source: American Farm Bureau Federation

PART FIVE

WELCOME TO THE AGE OF AGRICULTURAL ENLIGHTENMENT

COVID-19 brought about a number of trials and heartaches, but it also ignited a fire of appreciation for our domestic food supply chain system and the farmers that keep it going. These trials accelerated technological advancements in the industry and the adoption of innovative digital platforms to connect farmers to consumers. Local agriculture is gaining momentum with each passing year and a new wave of omnichannel shoppers have emerged. Millennials and Generation Z are stepping up and setting the stage for long-term consumer behavior patterns that will become engrained into mainstream society for years to come.

As a champion for the American farmer, AgAmerica is committed to adapting to the evolving needs of the industry. Founded with roots in agriculture, we are proud to offer a spectrum of financing solutions that are singularly focused on agricultural land to support the long-term success of farmers, ranchers, and rural landowners nationwide. Our flexible loan structures empower our clients to reduce loan payments, purchase land, upgrade farm equipment, increase working capital, and achieve their operational goals.

ABOUT AGAMERICA'S CHIEF ECONOMIST

DR. JOHN PENSON

Dr. Penson is the Chief Economist at AgAmerica Lending. He has held the title of Regents Professor and Stiles Professor in the Department of Agricultural Economics at Texas A&M University. He earned his PhD in Agricultural Economics from the University of Illinois and B.S. and M.S. degree from Southern Illinois University, where he received the Outstanding Alumnus Award.

His research efforts over the years have focused on the relationship between the general economy and the nation's food and fiber industries. These efforts have led to a number of national awards from the American Agricultural Economics Association in addition to the Distinguished Achievement Award in Research at the university level by Association of Former Students at Texas A&M University.

Dr. Penson has also received numerous awards for his teaching efforts, including Distinguished Teaching Awards for both the American Agricultural Economics Association and the Western Agricultural Economics Association. His teaching program has also been recognized by the Association of Former Students at Texas A&M University with Distinguished Achievement Awards, twice at the university level and once at the college level.