

**The Outlook for U.S. Agriculture – 2023**  
**U.S. Agriculture: Seeds of Growth Through**  
**Innovation**

U.S. Department of Agriculture  
99<sup>th</sup> Agricultural Outlook Forum  
Virtual Event  
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Welcome to the 99<sup>th</sup> annual Agricultural Outlook Forum (AOF). It is great to be back in-person after two years of being limited to virtual interactions. I can say that the use of our online platform allowed us to reach a much wider audience these past two years, including some who might not come to Washington DC in February, but are eager to log on from their farm, small town or urban center, here in the United States and around the world. So, I am also pleased that today we are joined online by participants from across the nation and the world who otherwise would be unable to be here and so I welcome all our attendees online and hope our sessions over the next two days can be interactive. But I truly enjoy the opportunity to be here with you today and hope you all find me to stop and talk between sessions. It is these hallway interactions that help to make this event such an interesting and enjoyable experience. As the Deputy Secretary indicated, we have a fantastic program for you again this year. Secretary Vilsack is here, of course, and will provide his own remarks following the outlook. We are excited once again to have such a broad audience from across the globe tuning in to hear about the latest activities at USDA as well as the outlook for commodity markets and the agricultural economy.

The theme of this year's Ag Outlook Forum is "Seeds of Growth Through Innovation," and the sessions throughout this afternoon and tomorrow have a strong focus on solutions to the triple challenges to be met by agriculture: producing safe and affordable food and products, addressing and adapting to environmental challenges, and facilitating income streams for agricultural producers across the bioeconomy. The Forum brings together experts from across food and agriculture to share their expertise and experiences on issues critical to agriculture. And of course, true to the long history of the Forum, we also provide USDA's latest perspective on markets, including the outlook for Farm Income, Food Prices, and the crop and livestock sectors. As we start looking forward to spring we will discuss acreage, prices, and supply and demand conditions for the new year, but also a great deal more of importance to Agriculture.

One year ago, when I presented the outlook that had been constructed over the prior weeks, it was less than 24 hours since the Russian invasion of Ukraine, an event that injected tremendous uncertainty into agriculture and energy-related markets. Risk and uncertainty have always been fundamental characteristics of farming, and few other industries are as vulnerable to the vagaries of the weather or the threat of long-term effects of climate change. However, the war in Ukraine is unlike a drought as it had a sudden beginning. It also has no clear anticipated conclusion and remains a source of uncertainty in agricultural markets even as the human tragedy continues.

The immediate effect on global food markets was a halt in supplies from one of the world's top agricultural producers and exporters. Prior to the invasion, Ukraine was the world's fourth largest exporter of corn, fifth largest exporter of wheat, and top exporter of sunflower oil and sunflower

meal. While Ukraine was able to shift some export volumes to overland routes and Danube ports, it wasn't until July 22 with the signing of the *Black Sea Grain Initiative* that exports through Black Sea ports could resume, although the pace remains far below pre-invasion volumes. There is a critical negotiation for extension of this deal in the coming weeks.

In the U.S. the 2022 growing season got off to a slow start due to a wet, cold spring, but by June the weather quickly turned dry and warm and the planting pace for corn and soybeans accelerated. Still, the weather-related delays led to an above average number of acres that were prevented from being planted in some regions, lowering the national crop acreage total especially for corn. At the same time drought was unrelenting in much of the West. Farmers were also facing a sharp increase in input costs relative to previous years, especially fertilizer, producing some anxiety about potential margins despite crop prices that remained strong.

We enter 2023 with a sense of optimism but amid continued uncertainty. There are positive economic signals, but uncertainty is high as inflationary pressures persist and interest rates rise. Economies including China are reopening and COVID is no longer the major risk to the outlook that it was at this time last year. In agriculture, crop and livestock prices are still strong despite declining from recent highs and the farm sector, as a whole, enters the new year in good financial health with a strong cash position and solid balance sheet following a year of record-high net cash farm income in 2022. Not all commodities or geographies are faring equally well, there are risks, including the implications of the western drought on cattle supplies and winter wheat conditions, the cost of producer inputs, the trajectory of future High Pathogenic Avian Influenza (HPAI) cases, always the possibility of unusual weather that disrupts crop production in parts of the U.S and elsewhere, and of course, the ongoing war in Ukraine. But U.S. agriculture is resilient and innovative, and these challenges only highlight the need for continued productivity growth to maintain the abundant and affordable food supply we so easily take for granted.

Prices reflect and influence the allocation of acreage across different crops, determining trade flows, and driving investment decisions, but weather always has the final say on production and can quickly change the market outlook from one of abundant supplies to one of tight stocks and rising prices. So as we look toward the next crop season we can add the war and lingering impacts of COVID to the traditional factors of weather and disease.

### **The U.S. economy and farm economy are strong, but some risks remain.**

The global economy similarly faced numerous challenges in the previous year including shocks associated with the war in Ukraine, high rates of inflation, and lingering supply chain problems. Let's start with some observations on the U.S. economy. Much of the macro-economic environment in 2022 and moving into 2023 has been driven by inflation dynamics and recessionary risks. The rate of U.S. consumer price inflation peaked in June 2022, reaching 8.9%, the highest in over four decades. Inflationary pressures have begun to ease, falling recently to 6.3%, following aggressive successive interest rate increases by the Federal Reserve. These rate hikes have increased borrowing costs for both businesses and consumers which has, as its objective, slowed economic activity. The Fed has indicated the rate of inflation remains above its target and as a result more interest rate hikes are expected. Yet the signals for the Federal Reserve Bank remain mixed as unemployment in the United States is at an historic low and consumer spending remains strong, leaving the pace and magnitude of forthcoming rate increases uncertain.

Inflation was felt among food consumers who saw their grocery bills rise with the Food CPI reaching 11.3% in August. Recently, food price inflation has slowed from the 2022 pace with softer commodity prices, weakening food demand and easing supply chain pressures, along with base effects of the prior year's growth, which moderated month-over-month and year-over-year increases in the food CPI. Egg prices have experienced the most significant price growth (70%, year-over-year) partially on supply pressures from layer flock depopulation as a result of High Pathogenic Avian Influenza (HPAI) along with strong holiday demand towards the end of the year. Cereals, fats and vegetable oil prices rose sharply during the first half of the year following Russia's invasion of Ukraine. There was generally broad-based price growth across most grocery items, although beef and pork prices, having kicked off inflationary pressure in 2021, experienced relatively lower levels of growth.

The macroeconomic outlook for 2023 has improved over the past few months, as downside risks of recession have lessened and the prospects of a 'soft' or at least 'softer' landing appear to be improving. Economic growth is expected to remain steady but at a slower pace than in recent years. According to the International Monetary Fund's estimate from January 2023, projected growth for the United States' real GDP in 2023 is forecast to increase to 1.4 percent from their previous estimate of 1.0 percent made in October of 2022. Consumer spending and retail sales trends remain important indicators of economic activity as elevated food and energy costs pose challenges to consumers' discretionary spending. World real GDP is projected to increase by 2.8 percent in 2023. Continental Europe's economy has benefitted from a moderate winter, which has helped to mitigate the elevated energy prices during most of 2022 due in part to Russia's invasion of Ukraine. In addition, China's economic reopening from strict lockdown policies is expected to support trade and increase global demand for some commodities, including petroleum and provide a boost to global economic activity.

### **Grain market volatility eases, but prices remain elevated.**

The significant volatility in grains and oilseeds prices, in the immediate aftermath of the war in Ukraine and exacerbated by some countries' ill-advised export controls, faded into the later part of 2022 as the *Black Sea Grain Initiative* brought back some Ukrainian supplies and northern hemisphere crops were confirmed. Grains and oilseed prices are down from recent peaks but remain relatively high by historic standards driven by strong demand and tightening global stocks of many of the major commodities, including corn, wheat, and rice. Multiple price supportive features are expected to continue in the new marketing year. Across many major commodities, implied global beginning stocks for 2023/24 are still low by historical standards, although current forecasts for a record-large soybean harvest in Brazil indicate a year-over-year increase in global soybean carry-in and continued solid demand from China is projected for the coming marketing year. In addition, corn used for ethanol in the U.S. is expected to remain unchanged based on expectations for flat motor gasoline consumption and strong global economic growth would support a rebound in cotton mill use.

Input costs for U.S. and other northern hemisphere producers remain elevated, especially fuel and interest costs, although fertilizer prices have retreated noticeably from this time last year. Fuel prices have also come down from their peak. While risks of the last several years have not faded from memory, producers are currently facing a somewhat more traditional acreage allocation decision for 2023, where "currently" seems like a crucial qualifier given the last several years, Crop insurance projected prices for U.S. producers provide some clarity for per acre revenue guarantees

in a high production cost environment. Given the totality of these factors, we expect grain and oilseed prices to remain relatively strong, albeit lower than a year ago.

The initial expectations for 2023 planted area indicate growth in total planted area of corn, wheat, and soybeans relative to the previous year. Combined acreage for the three crops is projected at 228 million acres—a nearly 3-percent increase from 2022 when acres were constrained by unfavorable planting weather in the spring. Season average prices received by farmers for all three crops are projected to be lower than in 2022 but remain higher relative to historical averages over the past 10 years.

Among the three main crops, wheat area is projected to increase the most, in response to continued high global prices and tight U.S. and global supplies, partially due to the ongoing war in Ukraine. After a period of trending lower wheat acres, this represents a sharp rebound, but is not likely to be a trend reversal for the long-term. Soybean area is expected to remain largely unchanged from planted area in 2022. Demand for soybeans in the United States is expected to be driven by stronger demand for domestic crush—largely driven by growth in biofuel use, while exports likely face competition from continued production growth in South American during the 2023/24 U.S. marketing year. Corn planted area is projected to increase about 3 percent relative to last year when plantings were affected by weather-related delays, prevented planting in key-producing regions and some expressed concern by producers about the higher costs of corn production and uncertainty about input availability.

Total wheat planted area for 2023/24 is projected at 49.5 million acres, up nearly 3.8 million acres from last year and the highest wheat area since 2016/17. The NASS *Winter Wheat and Canola Seedings* report estimated winter wheat seeded area at 37.0 million acres, up 11 percent from 2022/23 and the largest since 2015/16. Combined spring and durum wheat plantings for 2023/24 are projected slightly higher than last year with the area expansion constrained by expected favorable net returns for corn, soybeans, and other crops in the Northern Plains. The 2023/24 Harvest-to-Plant ratio is projected at 77.5 percent, similar to last year's 77.6 percent and below the 10-year average of 82.1 percent reflecting the long-term drought continuing to affect the Southern Plains region and with the crop entering dormancy in very poor condition, the ultimate harvest ratio will depend significantly on conditions leading up to, and through, emergence.

Indications are that Ukraine's 2023/24 exportable wheat supplies will be reduced with winter wheat planted area lower due to the effects of the ongoing war. It is still too soon to know how the war will affect the area of spring-planted crops in Ukraine, but challenges associated with sourcing inputs and credit in a war zone clearly add significant risk. The continuation of the *Black Sea Grain Initiative* will be critical in maintaining Ukraine's wheat and corn exports as these seaports have historically dominated that country's export shipping options.

Corn, soybean, wheat, cotton, and rice prices received by producers for the 2023/24 crops are expected to decline relative to the prior year, but nevertheless remain high relative to recent history. The soybean season average price is forecast to be lower this year as global stocks rise with the record harvest currently underway in Brazil. South American supplies are expected to be higher this year as the U.S. 2023/24 export season gets underway, and with another large South American harvest expected in early 2024, export competition will likely limit potential gains in U.S. exports in the second half of the marketing year. However, soybean oil for biofuel in the U.S. is expected to grow 8 percent to 12.5 billion pounds in 2023/24, supporting domestic crush. As new renewable

diesel producers enter the market, competition for biofuel feedstocks will continue to support soybean oil prices and limit growth in other domestic markets and soybean exports.

The corn price is forecast lower in 2023/24 as a larger U.S. acreage and a return to a trend yield, based on a normal weather assumption during the growing season, will boost supplies. Along with price pressure domestically, the increase in U.S. supplies is expected to put pressure on global prices as well despite anticipation of lower exportable supplies out of Ukraine. There is potential for close to a 100 million metric ton second crop of corn (under trend yields) being planted in Brazil right now, the condition of which will be better known when our own producers are in the middle of planting and this may have a significant impact on price direction.

U.S. cotton production in 2023/24 is expected to rise to 15.8 million bales, despite lower planted area. Lower planted area is driven by relative prices, while higher production is anticipated due to a 20-percent increase in harvested area, as abandonment is reduced dramatically from the record level seen in 2022/23. Domestic mill use is forecast to improve but remains at a relatively low level in 2023/24, with exports also projected higher at 13.8 million bales consistent with an average U.S. share of global trade. Ending stocks and the stocks-to-use ratio are forecast modestly lower.

The 2023/24 rice outlook is for a partial rebound in production, larger domestic and residual use, higher exports, and increased ending stocks. Total 2023 planted area is projected up almost 13 percent from this year to 2.5 million acres. Medium- and short grain area in California is expected to partially rebound on strong winter precipitation to date that raised reservoir levels. Exports are forecast to increase 8.0 million cwt from this year but would still be significantly below previous years as relatively tight supplies and strong U.S. prices limit export growth especially for medium- and short-grain rice. The all-rice season average farm price is forecast to decline \$1.00 per cwt to \$18.40, as prices for all classes of rice recede from 2022/23 record or near-record levels but remain elevated.

### **Increases in hog and poultry production while cattle decline**

Despite continuing to face challenges to both supply and demand throughout 2022, total meat and poultry production was record large. Disease outbreaks were costly, notably HPAI for the poultry industry, while drought conditions in the West and Midwest regions throughout most of the year heavily impacted hay supplies and accelerated placement and marketing decisions, pulling forward supplies, for the cattle sector. Facing these headwinds, broiler production expanded, while pork, lamb, and turkey production were lower than the previous year. Beef production expanded as well, but as a result of pulling forward cattle for slaughter at the cost of production in future periods.

In 2023, red meat and poultry production is projected to reflect many of the challenges that affected production decisions in 2022, and thus far into the year producers across different sectors seem relatively cautious in expanding production despite strong prices. While logistical constraints are expected to loosen during the year, pasture conditions improve, and feed prices ease, biological constraints and production plans already in place will, in many cases, limit the ability of the sector to respond rapidly to improvements in external conditions. For 2023, red meat and poultry production is forecast to decrease fractionally to 106.9 billion pounds as declines in beef production more than offset higher pork and poultry production. Although the projected decline in production is small, if realized, it will be the first decline in total red meat and poultry production since 2014.

Notably, beef production is forecast to fall by 6 percent, with steer and heifer slaughter in the first half of the year the expected to be down slightly from last year, while marketings in second half of the year will decline reflecting lower first-half placements and smaller feedlot numbers due to the tightening supplies and a dwindling herd. The January 2023 NASS *Cattle* report did not yet show a signal of a reversal of the contraction, however, beef cow slaughter later in the year is expected to decline sharply due to lower inventories and stronger returns and improved forage that will likely incentivize producers retaining cows later in the year. Beef exports are projected to decline on tighter domestic supplies and higher relative prices. The 5-Area steer price for 2023 is forecast to average a record \$159.0 per cwt, approximately \$15 per cwt above 2022's average price.

Commercial pork production for 2023 is forecast at 27.44 billion pounds, almost 2 percent above 2022. After declining in 2022, total commercial slaughter is projected to rise, as well as carcass weights. Favorable feed prices compared to the previous year is likely to provide an incentive to feed to heavier weights. The strong demand pulls from China in 2019 and 2020, caused by outbreaks of African Swine Fever, subsided in 2022. Declines in key markets such as Japan, Canada, and Colombia were at least partially offset by increases in Mexico, South Korea, and the Dominican Republic. Exports in 2023 are forecast slightly above 2022 levels at 6.35 billion pounds. With increased production, hog prices are forecast to decline to \$66.5 per cwt from \$71.21 in 2022

For broiler meat, production in 2023 is forecast just over 1 percent higher to a record 46.7 billion pounds. The first quarter of 2022 saw a slight contraction as the sector faced several challenges, including relatively low rates of hatch which limited the rates of growth in chick placements despite an increase in the laying flock. U.S. broiler meat exports for 2023 are forecast to increase fractionally to 7.32 billion pounds. More exportable supplies will be available due to increased production, offset by higher prices that will likely dampen demand in price sensitive markets, as well as ongoing HPAI-related trade restrictions. The National Composite wholesale broiler price is forecast to average \$1.27 per pound in 2023, 10 percent lower compared than the 2022 average, as expanding supplies weigh on prices.

The U.S. dairy farm sector enters 2023 facing pressures from lower milk prices and relatively high input costs. After declining during the latter part of 2021, dairy cow numbers rebounded slightly in the first half of 2022 as the national average all milk price was at record high levels. However, despite high milk prices, higher feed prices and other costs as well as continued logistical constraints began to stress producer returns and set the stage for a gradual reduction in cow numbers during the second half of 2022. Growth in milk per cow also lagged historical trends during much of the year as poor feed quality early in the year affected yields.

Entering 2023, dairy producers are facing the prospects of weaker milk prices, moderating but relatively high feed costs and uncertainty in forage supplies. Yet high feed prices and tight supplies of forage will make 2023 a challenging year for the sector. To some extent these concerns have manifest themselves in the decline in cow numbers and higher levels of dairy cow slaughter thus far in the year. Milk per cow is expected to increase at a more rapid rate than 2022, but the increase is expected to be only slightly above 1 percent. The dairy herd is expected to average 9.380 million head, 0.3 percent below 2022 and the lowest level since 2019. Dairy product prices are projected to weaken in 2023, with cheese, butter, NDM, and whey prices under pressure from larger supplies and soft demand. With weaker product prices, the 2023 all milk price is forecast to decline to \$20.70 per cwt. Although this is about a \$4.90 decline from 2022, it would be the second highest price since 2014. The Class III price is expected to decline to \$17.90 and the Class IV price is expected

to average \$18.25 per cwt.

### **Exports Forecast to Fall in FY 2023 from Record FY 2022 Levels; Imports Remain Strong**

Fiscal Year (FY) 2022 ended with record exports (\$196.4 billion), driven by high commodity prices and strong demand. USDA's revised FY 2023 U.S. agricultural trade forecast, which was released today, is for lower exports (\$184.5 billion) and record imports (\$199.0 billion), reflecting slowing global economic growth, a relatively strong U.S. dollar, softening commodity prices, and lower export volumes for some commodities.

The largest declines in FY2023 agricultural exports are forecast for corn, sorghum, and cotton, which are all lowered on volume and in the case of cotton, also on price. This in part reflects lower forecast U.S. production of these crops in 2022/23 relative to the previous year, as well as soft global demand for cotton given the broader macroeconomic situation. Increasing competition from other suppliers, particularly for corn and cotton, also contribute to the lower forecast. FY 2023 exports for most other commodity sectors are expected to be lower, albeit in many cases from record levels in FY 2022. Moreover, the FY 2023 export forecast, if realized, would still be the second highest on record.

China remains the top destination for U.S. agricultural exports, although FY 2023 exports are projected to fall \$2.4 billion from FY 2022's record of \$36.4 billion, reflecting reduced sorghum, cotton, and tree nut exports. FY 2023 exports to Mexico and Canada are projected to fall slightly, with a larger decline in exports to Canada due to reduced corn sales, which would put Mexico as the second largest U.S. agricultural export market if the forecast is realized. FY 2023 exports to our third largest market, Japan, are projected \$1.2 billion lower than FY 2022, due to lower expected corn, beef, and tree nut sales. Exports to the EU are also down slightly, while the forecast for exports to South Korea is on par with FY 2022's levels.

FY 2023 imports are forecast at a new record of \$199 billion, up 3 percent from FY 2022, which was the previous record. The import forecast reflects the relative strength of the U.S. dollar, continued strength in horticulture import growth, and a somewhat improved outlook for the U.S. economy for 2023 relative to what was forecast last year. Horticultural products remain the largest import category, forecast at \$99.9 billion in FY 2023, or nearly half of the total. While fruits, vegetables, and tree nuts make up almost half of this category, the rest is comprised of other horticultural products, a category which includes a wide variety of goods. Over half of these other horticultural products are distilled spirits, wine, and beer, followed by miscellaneous horticultural products, such as processed foods and ingredients, as well as essential oils, nursery, and cut flowers. Import growth was strongest for Mexico, which is forecast to remain the top supplier of agricultural products to the United States, followed by Canada and the EU.

Beyond macroeconomic factors previously discussed, there are other market and policy uncertainties that could affect the trade forecast for 2023. For example, Russia's invasion of Ukraine nearly a year ago continues to impact global grain and oilseed markets and negatively affect Ukraine's agricultural sector as farmers adjust production to what they can financially manage and constrained by what can be exported through existing channels. We will hear more about the situation in Ukraine later today, via a prerecorded video address by the Ukrainian Minister of Agriculture. Trade policy developments, such as Mexico's recent decision to ban certain types of biotech corn, also create uncertainty and can impact the trade outlook. Under Secretary Alexis

Taylor will discuss some of these trade challenges, and opportunities, with her U.S. Trade Representative counterpart, Ambassador Doug McKalip, in a session later today. And last but not least, weather developments can have significant impacts on trade flows, as evidenced by lower corn and soybean crops in Argentina due to drought or shifts in La Niña weakening weather pattern, and the outcome of the second corn crop in Brazil, the planting of which has been delayed, pushing the key development phase further into a riskier rainfall period.

### **Net farm income is expected to decrease in 2023 on lower receipts and higher expenses**

Net cash farm income is expected to fall in 2023 to \$150.56 billion after reaching a record high in 2022. Commodity prices continue to be high compared to the first half of 2020 when agriculture was facing sharp adjustments in the early stages of the COVID-19 pandemic, but lower than the highs over the last year to date (with a notable exception of cattle). As a result, inflation-adjusted net cash farm income is expected to remain above the 20-year average in 2023. Relative to 2022, lower crop and livestock receipts, lower government payments, and higher expenses reduce farm income in 2023. When adjusted for inflation, 2023 net cash farm income is forecast to decrease by \$44.72 billion (22.9 percent) from its record high in 2022 but remain above the 2002-2021 average of \$130.5 billion.

Cash receipts from the sale of agricultural commodities are forecast to decrease by \$23.6 billion (4.3 percent, in nominal terms) from a record 2022 level to \$519.9 billion in 2023, and if realized would be the third highest in inflation-adjusted terms. For crops, 2023 cash receipts are expected to decrease with lower prices. Corn cash receipts in 2023 are forecast to fall \$4.05 billion from 2022 (4.5 percent in nominal terms) but if realized, would be at their second-highest level in inflation-adjusted terms since 2012. Oil crops (e.g. soybeans) cash receipts are forecast to fall \$5.133 billion in 2023 from 2022 (7.6 percent in nominal terms), but still be at their second-highest level in real terms. Crop cash receipts are forecast at \$276.87 billion in 2023, a decrease of \$8.86 billion (3.1 percent) from the forecast for 2022 in nominal terms. Growth in receipts from 2022 to 2023 for crops such as rice, hay, wheat, and sorghum are expected to be outweighed by lower cash receipts in other field crops. Receipts for vegetable and melons are expected to fall by 8.7 percent, and for fruits by 0.4 percent in nominal terms, respectively.

Animal and animal product cash receipts are expected to decrease \$14.70 billion (5.7 percent in nominal terms) to \$243.0 billion in 2023. In a notable exception, cattle receipts are expected to increase by \$2.13 billion (2.4 percent in nominal terms), with increases in prices more than offsetting the decrease in production due to the Western drought and other causes. However, growth in expected receipts for cattle only partially offsets expected decreases in receipts for milk, hogs, broilers, and eggs, leading to an overall decline in animal product receipts. Direct government payments are forecast to fall by \$5.36 billion (34.4 percent) from 2022 to \$10.25 billion in 2023, below the 2010-2019 pre-pandemic average of \$15.67 billion. The decrease from 2022 is expected because of lower pandemic and supplemental ad hoc disaster assistance and represents a sharp reduction for 2020 when sizable pandemic related payments were made.

Total production expenses are forecast to increase by \$18.21 billion (4.1 percent in nominal terms) in 2023 to \$455.76 billion, a slowing versus the 18.5 percent increase from 2021 to 2022. Cash labor, seed and electricity expenses are forecast to be higher in 2023, but fertilizer and fuel expenses are expected to fall. Feed expenses, the largest single expense category, are forecast to decrease in 2023 by \$3.92 billion (5.1 percent) in nominal terms to \$72.67 billion because of lower prices for



feed commodities. Fertilizer-lime-soil conditioner expenses are forecast to decrease slightly by \$0.33 billion (0.8 percent) in nominal terms to \$42.17 billion.

In nominal dollars, farm equity – the difference between farm sector total assets and total debt—and assets are forecast to rise in 2023 by \$167.65 billion (5.0% in nominal terms) to \$3.51 trillion. Farm sector assets are forecast to increase 5.2% percent (nominal) in 2023 to \$4.05 trillion following increases in the value of farm real estate assets. Total farm debt is forecast to increase by \$31.19 billion (6.2 percent) to \$535.09 billion (in nominal terms).

Farm real estate assets (land and its attachments) at \$3.39 trillion is forecast to account for 83.75 percent of farm sector assets in 2023 after increasing 6.3 percent relative to 2022. The value of non-real estate farm assets—which includes investments, inventories, and machinery and equipment—is expected to decline \$2.49 billion, a 0.38 percent decrease in nominal terms (a 3.1 percent decline in real terms) to \$657.48 billion in 2023. Farm non-real estate debt is expected to increase by 2.84 percent in nominal terms to \$159.23 billion in 2023.

The farm sector's risk of insolvency is forecast to increase slightly in 2023. However, the likelihood of default across the sector remains well below its peak in 1985 and is also lower than in 2020. The debt-to-asset ratio is forecast to increase from 13.09 percent in 2022 to 13.22 percent in 2023 while the debt-to-equity ratio is expected to increase from 15.07 percent to 15.24 percent. The equity-to-asset ratio is forecast to decrease from 86.91 percent to 86.78 percent. Broadly speaking, these changes are small, and despite concerns over the impact of rising input costs on producer returns, commodity prices remain high enough while interest rates remain historically low enough to continue to support farm finances for the sector as a whole.

### **Acknowledging uncertainty, prospects for farm income and looking beyond next season**

The outlook for agriculture continues to be characterized by an unusually high level of near-term uncertainty as markets adjust to geopolitical, macroeconomic, and weather stresses. The war in Ukraine continues to disrupt commodity markets worldwide. U.S. and global inflation and economic growth continue as major concerns; however, inflation peaked in the middle of 2022 and the U.S. economy proved more resilient than initially feared. Still, the Federal Reserve, as well as other central banks, continue to aggressively fight inflation, which may lead to further interest rate hikes that constrain economic growth and increase borrowing and input costs.

It is the intertwined outcomes for inflation and, through the Fed response, interest rates that are expected to play an outsized role in input cost changes in 2023. Economic signals such as unemployment rates, CPI and PPI measures and consumer spending all contribute to Federal Reserve interest rate policy consistent with achieving inflation closer to 2%. Persistent inflation above this level will result in more aggressive interest rate policies.

Given the tightness in primary grains and oilseeds markets, the direction of prices and receipts will be sensitive to the relative supply and demand balances in several markets. The ongoing drought in the Western U.S. has further drifted into cattle and wheat areas and there appears to be no immediate scope for significant improvement. The current Brazilian soybean crop is estimated to be record large, a significant rebound from last year. A fading three year La Niña weather pattern which contributes to regional dryness, and continued expansion in planted area in Brazil in particular, could add to global soybean stocks. Alternatively, Australia's three-year string of record wheat

crops could be curtailed for the same weather reason. Brazil's *safrinha* corn crop is being planted, if a bit delayed, and will provide increased competition for US corn with Brazil's new access to China, even as China's import of corn and corn substitutes is effectively highly managed by state owned enterprises. Other uncertainties also depend on market balances. The contraction in global cotton mill use in 2022/23 should reverse in 2023/24 with positive economic growth and the opening of the Chinese economy but will be met by an anticipated increase in U.S. lint production, much of which is exported. Similarly, U.S. domestic meat demand was robust through much of 2020 through mid-2022 and will need resilient demand to moderate price declines from anticipated increases in production for pork and poultry. Despite these uncertainties, given strong levels of farm income in 2022, the sector, as a whole is expected to see above average levels of farm income in 2023 and is well positioned to handle some turbulence though the year.

## **Closing Remarks**

Returning to the theme of our Forum, "Seeds of Growth Through Innovation," these past three years of economic uncertainty and market disruption brought on by the pandemic reinforce the importance of productivity growth in maintaining an abundant and affordable food supply. World populations continue to grow, putting ever-greater pressure on the agriculture system to supply more while using less, protecting resources for future generations. The focus on sustainability recognizes that resources are finite and suggests new approaches to production practices to use these resources more efficiently. This could require a change in mindset and a new direction from some long-standing practices, but over the next two days we hope to highlight some of the opportunities that this can offer U.S. producers through reduced costs and higher productivity and new market opportunities. Sustainability and profitability need not be at opposite ends of the spectrum; in fact, they can be mutually reinforcing, generating benefits for the environment, the climate, and the bottom line. The high input costs facing producers again this year are a reminder of the value that can be gained by using resources more efficiently, and where possible, reducing dependence on fossil fuel-based products.

The U.S. is a country that encourages innovation and has always been at the forefront in science, technology, and management practices that support a safe, abundant, and sustainable food supply and distribution sector. The sector is well-positioned to lead in addressing many of the biggest challenges faced by the world today, including eliminating food insecurity in the U.S. and worldwide, addressing and mitigating the root cause and impacts of climate change, increasing nutrition security, and continuing to address the economic fallout related to the war in Ukraine. The economic fundamentals for the agriculture sector remain positive.

We have an exciting program over the next two days that will highlight many of the challenges that remain, and the work being done to address them. We are pleased that so many people are able to be here in person this year, along with those participating virtually, and hope that you enjoy the program we have in store for you.

Now I would like to turn the program over to Secretary Vilsack for his keynote remarks. Thank you.

Seth Meyer, Chief Economist

