

The Outlook for U.S. Agriculture – 2022
New Paths to Sustainability and Productivity Growth

U.S. Department of Agriculture
98th Agricultural Outlook Forum
Virtual Event
February 24-25, 2022

Welcome to the 98th annual Agricultural Outlook Forum (AOF). Building on our success last year, this is the second Forum to be held virtually, but I'm thrilled to be giving this speech not from my home, or my USDA office, but live and in person from the patio here at USDA's Whitten Building in Washington, DC. 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 and the outlook for commodity markets and the agricultural economy.

As we learned last year, going virtual has many benefits, especially bringing together a much larger group of participants. Last year, registrations were nearly triple our typical in-person attendance, and this year registration is even higher, coming from all 50 states and 90 countries around the world. This format allows us to come together from home, office, farm or ranch without the need, or expense, of travel to DC and allows us to have a broader and more wide-reaching discussion.

We are excited to welcome you all to discuss those issues of importance to agriculture as well as hear about the exciting things happening at USDA. Our conference organizers have done a great job in modeling this virtual experience as closely as possible to an in-person event, including many opportunities for professional networking, sidebar conversations, speaker Q&As, and an "Exhibit Hall" to highlight the activities at individual USDA agencies.

The theme of this year's Ag Outlook Forum is "New Paths to Sustainability and Productivity Growth" and if we learned anything from the past two years of economic upheaval during the pandemic, productivity growth along the entire food production chain is critical for feeding a growing world and maintaining an abundant and affordable food supply. We also know that resources are finite and must be used in ways that do not burden future generations with higher costs, reduced output, or a blemished environment. Climate change might be among the biggest challenges facing the world today, and we see growing opportunities for agriculture to play important roles meeting this challenge by reducing fossil fuel use, reducing the carbon intensity of food production, and even sequestering carbon. We have sessions throughout the next two days highlighting these issues and the new and emerging technologies that will keep us on a sustainable path to feeding the world. We'll kick off this discussion with the Plenary panel later this morning where several industry leaders will discuss how they are meeting these global challenges in ways that are profitable, responsive to the consumer, and often challenge conventional wisdom.

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 thinking about acreage, prices, and supply and demand conditions for the new year.

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 possible long-term effects of climate change. Prices do a great job of allocating 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.

The 2021 growing season started with a sense of optimism as the planting season progressed rapidly under good conditions, prices had rebounded strongly from the lows reached early in the pandemic, and international demand was strong, led by China's demand for corn, soybeans, pork, and more recently beef. But sharp regional differences in weather patterns complicated the outlook. While much of the eastern part of the country received ample rains, the western states suffered under severe drought and blazing temperatures. In the northern Plains, a dry spring extended through the growing season to become one of the driest years on record. Crop yields suffered, and the spring wheat harvest was the smallest in decades. California's ag industry was hit hard by what we now call a "megadrought," putting irrigation supplies under severe stress and furthering the discussion on difficult choices about water use in the West and how its allocated within agriculture and across different users.

We enter 2022 also with a sense of optimism but amid continued uncertainty. Economies are rapidly reopening, economic growth is strong, Covid cases are declining, and everyone is eager to return to a sense of normal. In agriculture, crop and livestock prices are strong, some are at or near record highs, and the farm sector enters the new year in good financial health with a strong cash position and solid balance sheet. But like most industries, the farm sector is also facing rising costs including much higher prices for fertilizer and fuel, along with supply chain constraints that continue to put many inputs and repair parts in short supply. Labor is also in short supply. 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.

Following my presentation, Secretary Vilsack will speak to us about USDA's efforts to support a vibrant and thriving agriculture sector, and he will also have a frank and inquisitive discussion with one of the leading U.S. experts on China. Given the outsized role that China now plays in global agriculture commodity demand, and as one of the leading markets for U.S. ag products, this will be an important opportunity to learn about U.S.-China trade relations from the perspective of China's political leadership, and what this might mean for future trade patterns between the world's largest economies. We will then wrap up the morning session with our Plenary Panel of distinguished industry speakers discussing market opportunities for climate smart, sustainable agriculture commodities and practices.

I'd now like to turn to the economic outlook for U.S. agriculture. When discussing the outlook for the sector, this year it seems even more important than most to acknowledge the continued uncertainty as we emerge from the impacts of the pandemic and the market looks for further direction.

The U.S. economy remains strong

Let's start with some observations about the global economy. The economic rebound since the early days of the pandemic has been truly remarkable, carried by strong consumer spending on goods even as demand for services remained depressed as people delayed vacations, travel and generally avoided crowded situations. Domestic demand in the U.S. food sector was very strong in 2021. Total U.S. real food at home and food away from home expenditures bounced back significantly, up 14% relative to last year (after adjusting for inflation). The increased demand was not just recovery from the 2020 pandemic year but reflects strong growth above the pre-pandemic trend. More recently, spending on leisure and hospitality services has also rebounded, notwithstanding periodic slowdowns as new Covid-19 variants emerged. Unemployment rates have plummeted, falling back to pre-pandemic levels as many businesses now struggle to find sufficient help to maintain output. In normal times, low unemployment, high income, and strong consumer demand would be unequivocally positive to the U.S. economy, but in the current environment emerging from a pandemic it has put tremendous pressure on supply chains and created inflationary pressures we haven't seen in decades. In addition, there have been some recent signs of softening of food retail demand, raising the possibility of weaker 2022 food expenditures.

Recent data on consumer prices indicate annual U.S. inflation running at about 7.5%, including food price inflation of about 7.0%. The drivers of these rising prices are extremely complex, including strong domestic and foreign demand, labor challenges, short-term supply chain constraints as well as geopolitical uncertainties that are driving up the prices of energy and raw materials, directly impacting the production costs of many goods. Additionally, weather-related agricultural production shortfalls in many parts of the world put upward pressure on commodity and food prices, but these can quickly turn around as production rebounds and supplies as replenished the following season. In the first part of 2021, food price inflation was most heavily concentrated in meat products, this has since broadened out across the food sector with bakery, cereals, horticulture, dairy, packaged and processed food items experiencing very significantly levels of inflation in the last quarter. How much these factors influence future prices and inflation remains an open question, as central banks worldwide look to tighten monetary policy in response to the above-target inflation rates.

Expectations of tighter U.S. monetary policy to tackle inflation have already led to higher interest rates, especially in shorter-duration U.S. Treasury notes. Interest rates on 5-year US Treasury notes have increased more than one-and-a-quarter points from a year ago (from 0.55% to 1.82%), while long term rates have remained relatively stable, causing the yield curve to flatten. Higher interest rates in the U.S. have helped support a strengthening of the U.S. dollar during the second half of 2021. The nominal U.S. dollar broad exchange rate index was up 3% in January from a year ago, but the outlook is uncertain as foreign central banks manage their own monetary policy in efforts to address rising prices and currency swings. Since the value of the dollar can have implications for U.S. agricultural trade, let's turn to the most recent outlook for U.S. agricultural exports and imports.

Record Exports Boosted by Strong Commodity Prices but Lingering Uncertainties

Fiscal Year (FY) 2021 ended with record exports (\$172.2B) based on very strong commodity prices and record exports supported by the U.S.-China Phase One Agreement. FY2022 is looking to also be a record year. This strength is reflected in USDA's revised forecast for U.S. agricultural trade in FY 2022, which was released today with exports now forecast at a record \$183.5 billion, or an

increase of over \$11.3 billion from FY 2021.

FY2022 agricultural exports will continue to be bolstered by strong commodity prices. Export prices for key commodities such as soybeans, wheat, cotton, and beef products are all up significantly from FY 2021, while projected export volumes are down in aggregate. Export growth is expected to be strongest in North America. USDA forecasts a record \$27.0 billion to Mexico (an increase from \$23.9 billion)—this will make it the second largest market behind China, reflecting surging exports of corn, soybeans, dairy, and pork products and a recovering economy. U.S. exports to Canada are expected to be strong, \$26.0 billion, largely driven by strong performance of corn and ethanol. Another record year is forecast for export to China, \$36.0 billion, driven in part by adverse weather conditions in South America, which is reducing global soybean supplies and supporting China demand. While China pork demand has softened on recovering pig herds, the losses are more than made up on extremely strong beef and poultry demand that surged in 2021, which is expected to continue through 2022.

However, U.S. agricultural exports face some headwinds. For instance, containerized shipping, which makes up more 35% of the value of U.S. agricultural exports, continues to face disruptions in 2022. An unprecedented rise in imports of non-agricultural goods from Asia through the pandemic period led to a surge in shipping rates and backlogged West Coast ports. U.S. containerized agricultural exports, which are forced to compete with much higher Asia-to-U.S. shipping rates, faced reduced carrier service for key export routes resulting in higher levels of empty containers being sent back to Asia. U.S. containerized agricultural exports to Southeast and East Asia (excluding China) markets have been particularly impacted, with containerized shipment volumes down more than 20% over the 2nd half of 2021. We know this will be an ongoing issue for 2022 and I encourage you to tune in to this afternoon's Supply Chain Resilience session which focuses on shipping disruptions.

There are other global uncertainties that could affect the U.S. agricultural trade forecast in 2022. For example, Russia's invasion of Ukraine could have global economic and trade implications. Together the two countries account for almost a quarter of global grain exports. Although we may expect global and regional grain markets to reorient to alternative suppliers and markets which may limit direct effects on U.S. agricultural exports, short-term broader macro effects would reverberate through the global economy depending on the severity and duration of the conflict. Additionally, interlinkages through fertilizer and energy markets could have knock-on effects for agricultural producers across the world.

For cross-border trade, ongoing disruptions related to vaccine mandates and truck driver shortages could slow U.S.-Canada trade, although these may be more short-term in nature. The U.S.-China trade relationship will also be a focus, given the importance of this market for U.S. agriculture, and will be a topic of discussion both days of the Forum. Adding to Secretary Vilsack's discussion on China, later this afternoon the Foreign Ag Service will host a session on China import demand, which will include Mr. Sui Pengfei, Director General of the Ministry of Agriculture and Rural Affairs. Tomorrow, Secretary Vilsack will discuss China and other trade policy issues with the U.S. Trade Representative, Ambassador Katherine Tai, during the morning session. This important market will be extensively covered over the next two days.

Outlook for 2022 crops led by strong international demand

Grains and oilseed prices remain persistently high driven by sharply lower soybean production in

South America and continued strong global demand for grains and oilseeds. Multiple price supportive features are expected to continue in the 2022/23 market year. Across the major commodities, implied beginning stocks for 2022/23 are still historically low. The continuing impact of the South American drought will support prices. With expectations of continued global demand growth, the stock buffer is limited relative to recent history should a weather problem or other supply shock occur in a major producing country. Continued solid demand from China is projected for the coming marketing year. In addition, modest growth in U.S. motor gasoline consumption is expected to boost demand for ethanol.

Looking ahead, planting progress of *safrinha* corn in Brazil has been more rapid than normal but the primary determinant of that crop is the outcome of the rainy season in the Center-West, which is not yet known but assumed to be normal. Input costs for U.S. and other northern hemisphere producers are sharply higher than a year ago, although it remains to be seen what, if any, impact this will have on production. Crop insurance projected prices for U.S. producers are the highest in over a decade, which provides some clarity for per acre revenue guarantees in a high production cost environment. Given these factors we expect grain and oilseed prices to remain at these higher levels, albeit lower than a year ago.

High prices support a slight increase in the combined area of corn, soybeans, and wheat relative to a year ago. However, favorable prices for competing crops such as cotton and other minor grains and oilseeds will likely limit this expansion. Likewise, prevented plantings were historically low in 2021 and under normal weather conditions we would expect an increase in prevented plantings. As a result of these factors, the combined total of corn, soybeans, and wheat area is forecast at 228.0 million acres, slightly higher than the 227.3 seen a year ago and if realized the highest since 2014.

Combined corn and soybean area is forecast at 180.0 million acres, below the historical high of 180.6 million planted in 2021. Corn area for 2022 is expected to decline 1.4 million acres to 92.0 million, driven by more attractive relative prices for other crops and high input costs. Soybean area is up 0.8 million acres to 88.0 million with very favorable forward pricing opportunities for producers given the drought in South America and continued strong U.S. crush demand.

Wheat area is above a year ago with increases for both winter and spring wheat and at 48.0 million acres would be the highest since 2016. The January 12 NASS *Winter Wheat and Canola Seedings* report estimated winter wheat area up 2 percent from 2021 and the largest since 2016 with more acres in Kansas, Texas, Nebraska, and South Dakota.

Planted area for winter wheat is estimated at 34.4 million acres, up 2 percent from 2021/22 on a favorable new-crop price outlook. Spring wheat and durum area is also expected to increase but could be constrained by a multitude of attractive alternatives beyond corn and soybeans in the Northern Plains. These include minor oilseeds, other small grains, and pulses. Total wheat area for 2022/23 is projected at 48.0 million acres, up nearly 1.3 million acres and nearly 2 million acres higher than the 5-year average. Wheat prices are projected to be modestly lower for 2022/23 on higher stocks but are above their long-term averages.

Corn, soybean, and wheat prices received by producers in 2022 are expected to decline relative to the prior year, but nevertheless remain high relative to recent history. Current forward pricing opportunities for producers are very attractive and thus it is expected that cash prices during harvest under normal weather conditions will decline from current levels.

Given the impact of drought-reduced soybean crops in South America and reduced global stocks at the beginning of the 2022/23 marketing year, we project that soybean prices will remain elevated. The soybean price will also be supported by strong domestic demand and growth in U.S. renewable diesel capacity. In contrast, corn prices are expected to decline slightly with larger corn acres and an expected return to trend yields leading to slightly higher ending stocks. Strong global demand will moderate the price decline on what is expected to be a large crop under normal weather assumptions. Planted area for cotton is estimated at 12.7 million acres in 2022/23, 13 percent higher than the year before as surging global demand for goods, changes in consumer demand favoring cotton, and nearby delivery constraints around the world have driven prices to their highest levels in a decade. With larger carryin stocks and production, exports are expected to rise, with little change in ending stocks. Shortfalls in winter precipitation across significant portions of the cotton belt are again adding uncertainty to the outlook for area and yield, however.

Rice acreage is projected up 3 percent from last year at 2.6 million acres, due entirely to an increase in medium- and short-grain. High anticipated returns for alternative crops, such as soybeans, are expected to limit long-grain rice area expansion in southern states, especially due to sharply increased fertilizer and diesel fuel prices. Rice exports are expected to decline in 2022/23 as large exportable global supplies continue to limit the competitiveness of U.S. long-grain outside of the Western Hemisphere. Rice prices are projected higher for 2022/23 as stocks remain relatively tight and are supported by broad-based strength in grain and oilseed prices.

More generally a rising global demand for more varied diets and increased animal as well as plant protein consumption continues to stimulate demand for feed grains and soybeans. Accompanying increased global demand has been an increase in competition from Brazil during the spring, resulting in more soybean acres and a second-season corn crop that has now overtaken Brazil's first-season crop in size. The higher second-crop corn acres and improved infrastructure in Brazil's northern ports have increased the competition U.S. corn faces on global markets as the U.S. harvest gets underway, potentially affecting the U.S. price received for that crop. This year, the *safrinha* plantings in Brazil's Center-West have advanced more rapid than normal, in contrast to a year ago. However, for this crop the outcome of the rainy season during April and May is the primary determinant of yield, which is assumed to be normal at this early stage.

Outlook for livestock and dairy

Despite continuing to face challenges to both supply and demand throughout 2021, the livestock and poultry sectors reached record production for total red meat and poultry. Lower pork, lamb, and turkey production was offset by expanding beef and broiler production. Supported by an improved economy and recovering international demand, prices of livestock and poultry all averaged higher in 2021, reaching multi-year highs for cattle, hogs, and broilers, while turkey was record high.

In 2022, despite high commodity prices, the livestock and poultry sector will face continuing headwinds that affected production decisions in 2021, and will likely give pause to producers this year. While it is expected that many of the challenges will dissipate – supply chain issues are likely to ease, pasture conditions are expected to improve – they remain in producers' memories and biological constraints and production decisions made in the previous year may limit the sector's ability to nimbly expand and capitalize on improved marketing opportunities.

As such, 2022 red meat and poultry production is forecast to decrease fractionally compared to 2021 production levels. Red meat production is forecast to fall slightly, the first decline since 2014. Red meat prices are a mixed bag, as tighter supplies of cattle are expected to support fed steer prices, while hog prices are forecast to be lower on softer demand. Poultry production, consumption, and prices are all expected to increase.

Beef production is forecast 2 percent lower than 2021, as cattle inventories tighten and supplies of cattle available for placement in feedlots is projected to shrink as the year progresses. Exports in 2022 are projected to decline on tighter domestic supplies and higher relative prices, with key competitors in Australia and Brazil both projected to increase production. Imports are projected 1 percent higher as well, on tight domestic supply and increased exportable supplies from Australia. Steer prices in 2022 are forecast to average \$137.50 per cwt compared to \$122.40 in 2021.

Commercial pork production is 1 percent lower than 2021 with lower slaughter numbers partially offset by higher expected carcass weights. For hogs, the December *Quarterly Hogs and Pigs* report pointed toward an overall smaller pig crop which would feed into 2022 slaughter. The estimated pig crop from second-half 2021 will result in lower first-half 2022 slaughter but reported first-half 2022 farrow intentions and expected growth in pigs per litter is expected to support a year-over-year increase in slaughter in the second part of the year. Pork exports are expected to decline 3 percent as China's import demand falls as its herds are rebuilt following African Swine Fever. Not only is this expected to affect U.S. exports to China but those of competitors exports to China who in turn will be looking for alternative export destinations including the United States. With lower domestic supplies in 2022, pork imports are projected sharply higher, up 11 percent from 2021. Hog prices are forecast to average \$65.00 per cwt in 2022 compared to \$67.29 in 2021.

Broiler meat production in 2022 is expected to reach a record, up 1 percent year over year. While the broiler-type laying flock at the beginning of the year is about 1 percent above 2021, low-hatchability issues continue to hamper the sector and may limit the pace of expansion. Broiler meat exports in 2022 are forecast virtually unchanged as higher prices may limit exports to price-sensitive destinations despite increased supplies. The whole bird broiler price for 2022 is forecast to average \$1.13 per pound compared to \$1.01 in 2021.

Similarly, the dairy sector was able to grow despite continued challenges and uncertainty in 2021. Milk production grew 1.6 percent in 2021, reaching over 226.3 billion pounds of milk production in 2021. Exports also grew, despite logistical challenges at the ports, increasing over 25 percent on a milk equivalent fat basis and 8 percent on a milk equivalent skim-solids basis.

In 2022, U.S. milk production is expected to grow slightly to 227.2 billion pounds. The dairy cow inventory was below 2021 on January 1, 2022 and is expected to show a modest decline during the year. Offsetting the lower herd is a higher projected milk yield, especially in the second half although relatively high feed prices are likely to limit improvement in yield per cow during the first part of the year. Slow growth in milk production and tightening stocks are projected to push milk prices higher in 2022 even in the face of slow growth in domestic demand and less competitive exports. However, despite higher milk prices, lower replacement heifer numbers and relatively high input costs will likely remain constraints to herd expansion during the year.

Dairy product prices are projected to strengthen in 2022, with butter, nonfat dry milk, cheese, and dry whey all expected to be higher priced. With strong product prices, Class III and Class IV prices are expected to average higher. The all milk price is forecast to average \$23.55 per cwt, compared

to \$18.69 in 2021

Net farm income expected to remain strong in 2022 on continued high crop and livestock receipts but with higher expenses taking a bite

A strong agricultural economy continues to support farm cash receipts into 2022. Commodity prices continue to be high compared to the first half of 2020, when agriculture faced sharp adjustments to the COVID-19 pandemic. Commodity prices started adjusting upwards in the second half of 2020 and have generally remained high into 2022. However, supply disruptions and strong global demand, contributing to price inflation, have placed upward pressure on production expenses and these have eaten into net farm income in 2021, as are expected decreases in direct government payments compared to 2021.

In inflation-adjusted terms, farm sector profits are expected to remain above the 20-year average in 2022, although forecast to be lower than in 2021. Lower government payments and higher expenses outweigh expected increases in livestock and crop receipts. Net cash farm income is forecast to have increased by \$17.0 billion (14.5 percent) in 2021 relative to 2020 and is forecast to increase by \$1.9 billion (1.4 percent) to \$136.1 billion in 2022 relative to 2021. However, when adjusted for inflation, 2022 net cash farm income is forecast to decrease by \$2.9 billion (2.1 percent) from 2021.

Cash receipts from the sale of agricultural commodities are forecast to increase by \$29.3 billion (6.8 percent, in nominal terms) from 2021 levels to \$461.9 billion in 2022. For crops, cash receipts are expected to increase for 2022 on the basis of higher quantities sold. Corn cash receipts in 2022 are forecast to be at the highest level since 2012 in real terms. Crop cash receipts are forecast at \$248.6 billion in 2022, an increase of \$12.0 billion (5.1 percent) from the forecast for 2021 in nominal terms. Growth in receipts for corn, soybeans, wheat, and cotton are forecast to account for almost all of the net increase, while receipts are expected to fall for fruits and nuts.

Total animal/animal product cash receipts are expected to increase \$17.4 billion (8.9 percent in nominal terms) to \$213.3 billion in 2022. Growth in receipts is forecast for milk, cattle and calves, and broilers due to higher prices. Hog receipts are expected to decline due to lower prices.

While 2022 cash receipts overall are expected to increase, lower direct government payments and higher production expenses are expected to counteract their net effects. Direct government payments are forecast to fall by \$15.5 billion (57 percent) from 2021 to \$11.7 billion in 2022. The decrease is expected because of lower supplemental and ad hoc disaster assistance for COVID-19 relief in 2022 compared with 2021.

Total production expenses are forecast to increase by \$20.1 billion (5.1 percent) in 2022 to \$411.6 billion. Nearly all categories of expenses are forecast to be higher in 2022, with feed and fertilizer-lime-soil conditioner purchases expected to see the largest dollar increases. Feed expenses, the largest single expense category, are forecast to increase in 2022 by \$3.9 billion (6.1 percent) in nominal terms to \$68.9 billion because of higher prices for feed commodities. The year 2020 marked the first increase in inflation-adjusted production expenses since 2014, and are forecast to increase again in 2021 and 2022 and moderate increased commodity prices and cash receipts in the bottom line.

In nominal dollars, farm equity – the difference between farm sector total assets and total debt – and

assets are forecast to rise in 2022 in nominal terms but are expected to fall in real terms. Farm sector equity is expected to increase by 1.0 percent in 2022 to \$2.85 trillion in nominal terms. Farm sector assets are forecast to increase 1.3 percent (nominal) in 2022 to \$3.31 trillion following increases in the value of farm real estate assets. When adjusted for inflation, both total assets and farm real estate assets are forecast to fall by 2.2 percent and 2.5 percent, respectively. Total farm debt is forecast to increase by \$13.1 billion (2.9 percent) to \$467.4 billion (in nominal terms) but decline 0.7 percent when adjusted for inflation.

Farm real estate assets (land and structures) at \$2.72 trillion is forecast to account for 82 percent of farm sector assets in 2022 after increasing 1.0 percent relative to 2021 in nominal terms (a decline of 2.5 percent when adjusting for inflation). The value of non-real estate farm assets—which includes investments, inventories, and machinery and equipment—is expected to gain \$15.4 billion, a 2.7 percent increase in nominal terms (a 0.9 percent decline in real terms) to \$592.3 billion in 2022. Farm non-real estate debt is expected to increase by 1.8 percent in nominal terms to \$155.4 billion in 2022.

The farm sector's risk of insolvency is forecast at the highest level since 2002. However, the likelihood of default across the sector remains well below its peak in 1985 despite an upward trend since 2013. The debt-to-asset ratio is forecast to increase from 13.89 percent in 2021 to 14.11 percent in 2022 while the debt-to-equity ratio is expected to increase from 16.13 percent to 16.43 percent. The equity-to-asset ratio is forecast to decrease from 86.11 percent to 85.89 percent. Broadly speaking, these changes are small, and despite concerns over the impact of rising input costs on producer returns, commodity prices remain high while interest rates remain historically low, continuing to support farm finances.

Acknowledging uncertainty and looking beyond next season

The long-term outlook for agriculture continues to be characterized by an unusually high level of near-term uncertainty as markets adjust to a post-pandemic world, while persistent and enduring trends in productivity, global food demand, and trade patterns continue to shape long-term market expectations. At the start of the pandemic, bottlenecks in the food supply chain were particularly acute as meat packing plants, food processors and even retail establishments struggled to maintain output as workers fell ill and quarantine and social distance measures were implemented.

With adaptation, many of these disruptions have been mitigated or at least dramatically reduced. However, supply chains are still straining to meet the strong demand for goods as disposable incomes rise and demand for services is still recovering. Labor and transportation resources remain particularly tight, rippling through industries leading to higher costs and reduced availability of consumer goods and agricultural inputs. Rising energy costs, in part reflecting geopolitical tensions in the Black Sea region, add to these cost pressures. While markets continue to adjust and guide resources to overcome these supply chain challenges, inflationary pressures throughout the U.S. economy have risen to levels not seen in 40 years, creating new uncertainty about how these rising prices—and efforts to tame them—might affect economic growth and consumer demand in the near and long term.

Nevertheless, the long-term outlook for U.S. agriculture remains favorable, characterized by continued productivity growth and strong demand. China has returned to become one of our leading markets as trade tensions have eased, purchasing substantial amounts of U.S. grains, oilseeds, meat, and cotton. USDA's recently published long-run projections report shows that U.S. agricultural

export values to all destinations are expected to grow at an annual rate averaging 0.8 percent per year from 2021 through 2031. The long-run outlook continues to reflect decades-long trends in income growth and shifting dietary patterns toward an increasingly diverse set of crop and animal products, especially in developing countries. Developing country economic growth will remain a key factor in the global outlook for demand of agricultural products. Projected rising per capita income will likely lead to developing countries spending income gains on improving and diversifying their diets. Real GDP growth in developing regions is projected to continue to outpace growth in developed countries over the next ten years.

World demand for beef, pork, and poultry (combined) is projected to increase by 15 percent through 2031, supporting an increase in world corn trade of 27.1 percent (53.8 million tons) and soybean trade of 29.0 percent (51.1 million tons), by the end of the 2031/32 crop year. The U.S. is expected to capture a significant—but declining—share of this growth, with U.S. corn exports projected to grow 17.1 million tons to 78.1 million, and U.S. soybeans exports would increase from 58.2 million tons in 2022/23 to 61.9 million tons by 2031/32.

Global coarse grain consumption is projected to expand by 14.3 percent during 2021/22–2030/31, with feed use growing 17.3 percent and accounting for more than 75 percent of the total expansion. While the largest producers—China, Brazil, the United States, and the European Union—account for the largest shares of gains, developing countries and regions, including Mexico, India, Iran, and Southeast Asia show the strongest growth in feed demand.

World soybean imports are projected to increase by 29.0 percent between 2022/23 and 2031/32, with China accounting for about 72 percent of the projected increase, and Brazil, with its ability to expand area and double cropping, meeting about 83 percent of the increased demand, followed by the United States, Other South America, and Argentina. Soybean meal import demand is projected to expand 15.2 percent and is broad-based, including gains by the European Union, the largest global importer, and an array of other importers. Argentina, Brazil, and the United States are projected to remain the major soybean meal exporters. Soybean oil imports rise 13.6 percent over the projection period based on demand by India, the world’s largest importer, and other developing country markets. Argentine exports meet virtually all increased import demand.

Global demand for cotton fiber to produce cotton yarn is projected to increase 18.7 percent between 2021/22 and 2030/31, with China and India, the two largest producers, accounting for most of the increase, along with smaller, but fast-growing, markets including Vietnam, Bangladesh, and Pakistan.

Global consumption of beef, pork, and poultry is projected to grow 9.8 percent, 11.4 percent, and 16.7 percent, respectively, between 2023 and 2031. China, accounts for the largest single share of increased consumption of all three meat commodities and a dominant 64.7-percent share of the projected increase in pork demand. Projected demand growth for all meats is fastest among middle-income developing regions, including Southeast Asia, Latin America, Africa, and the Middle East. Consistent with its position as the cheapest of the meat commodities, growth in poultry consumption is the most broad-based, including significant gains in lower income developing countries.

Closing Remarks

Returning to the theme of our Forum, “New Paths to Sustainability and Productivity Growth,” these

past two 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 and rising input costs facing producers 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 pandemic. 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 participate virtually in the Ag Outlook Forum again this year, 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
U.S. Department of Agriculture