[Farm Income and Financial Forecasts, November 2023 Update]

Good afternoon, everyone and welcome to today's webinar: *Farm Income and Financial Forecasts: November 2023 Update.* My name is Liz Hills, and I will be your host today. As a reminder, this webinar is being recorded and will be posted on the ERS website next week. If you have questions during the webinar, please enter them into the chat feature located at the bottom left-hand corner of your screen for questions and answers session at the end of today's presentation. We also have a link under the event resources tab that will direct you to the ERS webpage: *Highlights from the November 2023 Farm Income Forecast* where you can see all of our published data on farm income. Today, our presenter is Carrie Litkowski. Carrie is a Senior Economist and Farm Income team leader in USDA's Economic Research Service. She is responsible for developing sector-wide measures of farm income, value added, and the aggregate farm sector balance sheet. Previously, Carrie served as an economist at the Bureau of Economic Analysis where she was responsible for the production of farm income and employment statistics nationwide. Thank you for joining us today, Carrie. The floor is yours.

Thank you, Liz, and to everyone online, thank you for joining me today as I present the latest USDA forecast for 2023 farm sector income and finances, or wealth, for the U.S. This is our third forecast, or our third time, forecasting 2023 and, you know, we're combining the latest information and data that we get from across USDA and from other agencies such as the Federal Reserve. So, I kind of like to equate it to putting together a quilt in that we're combining data to get a complete picture of the farm sector's finances. And the USDA's Economic Research Service farm income and finance program- its goal is to measure, forecast, and explain indicators of economic performance for the U.S. farm sector. It can be used to gauge the health, or financial health, of the farm sector. We do release forecast three times a year and with today's release we've updated our U.S. level calendar year forecast for 2023 to include some new and revised data as it has become available since our last data release in August. This includes some survey-based data on 2023 production, prices and marketing patterns, as well as the latest information on prices paid by farmers for production inputs. It also includes the latest forecast from the November World Agricultural Supply and Demand Estimates report, the WASDE report.

So, what does our forecast cover? Or what is the farm sector? It is comprised of just slightly under 2 million farm operations which cover about 900 million acres of land, about half of those farms are what we would consider farm businesses, defined as larger farms and knows where the principal occupation of the operator is farming. These farms account for over 90 percent of the total value of agricultural production in the U.S. and we have some additional data and forecasts on their finances.

Lastly, we'll look at the well-being of the nearly 5 million people who live in households that operate a farm.

Here's an overview of what I'll be talking about today and what we're forecasting for 2023. Starting with the profits for the farm sector, as a whole, which after hitting record levels in 2022 are forecast to decline in 2023, as commodity prices have fallen, and production expenses remain elevated. Net cash farm income, for calendar year 2023, is forecast to fall 21 percent relative to 2022 in nominal dollars. While net farm income is forecast down about 17 percent, and I'll explain those two measures bit in in my next slide. Much of this decline is due to lower cash receipts for crop and animal product sales. In total, they are forecast to decline almost 5 percent in 2023. Also, contributing to the forecast decline in net income in 2023 are government payments and production expenses. Direct government payments are forecast to decrease 22 percent and total production expenses are forecast to increase 3.5 percent in 2023. On the farm sector balance sheet, farm sector assets, debt, and equity are each forecast to increase, with equity forecast to increase almost 7 percent. When we simulate how these changes in income and expenses might affect farm businesses on average, we forecast that farm income for farm businesses, those are larger farms and those farms where the operator's primary occupation is farming, will decrease 8.6 percent. For those household holds that operate a farm, median total farm household income, is forecast to increase 4.6 percent to 99,800 in 2023. Now note, on this chart the discussion is all in nominal dollars and the values are not adjust inflation. But in my charts later on in the presentation, especially ones that are showing multiple years of data, they will be presented in inflation adjusted dollars. So, taking the data and putting it in 2023 dollars. So, that we can better compare trends across time.

Following strong growth in 2021 and 2022 farm income is forecast to fall in 2023. Note, this chart is in inflation adjusted dollars, so we're adjusting prior years to account for inflation. We have two primary measures of farm sector income, or profits. The first is net cash farm income, that's the yellow or orange line, and it includes cash receipts from farming, or sales, from farm commodities, as well as cash farm related income and government payments to farm operators less cash expenses. Or the costs that farmers incur to produce their agricultural commodities. And by cash it just mean that there's some sort of market transaction for the exchange. In 2022, net cash farm income increased 25 percent, or $42 billion, from 2021 putting it at its highest level on record in the inflation adjusted series and we have this data back to 1929. In 2023, net cash farm income is forecast to decrease nearly 24 percent, or $49 billion. Net farm income is the blue line and it's a broader measure of income that also incorporates non-cash items, like economic depreciation, and it accounts for changes in commodity inventories. Net farm income increased 22 percent, or $34 billion, in 2022 to its highest level on record. And in 2023 net farm income is forecast to fall 20 percent to our $38 billion. Despite these expected declines, both measures in 2023 are forecast to remain above their 20 year average.

To forecast net farm income, we first estimate it from the bottom up, or from its component parts. And this allows us to identify what is driving the change in income from 2023. Now this chart is a nominal dollars, so no adjustment for inflation. Several factors are contributing to the forecasted decline in net income in 2023. In this chart, we have on the far left the net farm income estimate for 2022 at $182.8 billion. Excuse me. And then on the right, we have the forecast for 2023 at $151.1 billion. The bars in red indicate which items would contribute to a decline in income, while the bars in blue which items would contribute to growth. So, if we work our way from left to right, crop cash receipts are forecast to decrease $12 billion when combined with the change in inventory adjustment for crops, the value of crop production for 2023 is forecast to decrease 3.4 billion from 2022. Now we remove sales from inventories as net farm income represents income from current production only. In 2022, about 1 point- sorry $11.5 billion in crop receipts or sales were from inventories. In 2023, we are forecasting sales from inventories to also be occurring but at a much lower amount, about 3 billion compared to the 11.5 billion. Next, receipts for animal and animal products, labeled here as livestock, are forecast to decrease $13 billion. Further reducing income in 2023 are production expenses which are forecast to increase $14.9 billion in 2023. And these higher expenses with lower income additionally direct government payments to farm operators are forecast to decrease by $3.5 billion in 2023. So, overall we're looking at net farm income declining 31.8 billion, or 17 percent, in 2023 in nominal dollars.

The trends in farm income are often similar to the trends in cash receipts, which are the largest component of gross income. This chart looks at the totals for cash receipts since 1970 in inflation adjusted dollars In 2022, total cash receipts reached an all-time high at $553 billion even when these prior years are adjusted for inflation. Interestingly, neither crop, total crop, or total animal product receipts were at a record high in 2022. Crops reached their peak in 2012 and animal products in 2014, but combined they were high enough to result in the record high for total commodities in 2022. In 2023, total cash receipts are forecast to fall just under 8 percent yet remain above its 2021 level. Crop cash receipts are forecast to fall about to 7.5 percent and total animal product receipts to fall about 8.1 percent.

We can also look at cash receipts by commodity. Note, these are calendar year forecasts and the data here is in inflation adjusted dollars. We forecast receipts for about 25 different commodity or commodity groupings for crops. This chart focuses on some of the major crops. Receipts for corn, soybean, vegetable, melons, wheat, and cotton are all forecast to fall in 2023 relative to 2022. The largest percent decline is forecast for cotton at about 20 percent and corn receipts are forecasted to see the largest dollar decline at $12 billion, or about 13.5 percent. Receipts for fruits and nuts are forecast to increase 1 percent after adjusting for inflation. That's the only commodity on this chart where we expect an increase.

Cash receipts for most animal and animal products are also forecast a decline in 2023. Dairy, broiler, and egg receipts each are expected to fall after increasing notably in 2022. The largest decline is forecast for milk, or dairy, at $12 billion, or 21 percent, due to an expected drop in milk prices in 2023. The one outlier on this chart are receipts for cattle and calves which are forecast to increase almost 13 percent in 2023. And this would be the third consecutive annual increase in cattle and calves receipts.

The primary factor behind the expected decline in cash receipts in 2023 is lower prices received by farmers for their commodity production, relative to 2022. Through a simulation, we can deconstruct the change in cash receipts into a price effect and into a quantity effect, or a price change and a quantity change. In other words, we can identify whether changes in prices or quantities sold are driving the change in cash receipts. So, starting from the left, in 2023 total cash receipts are forecast to fall $24.6 billion, just due to lower prices, that's the red bar. With a smaller change due to lower quantities sold, that's the purple bar. And these are on net, so in aggregate. In total, cash receipts are forecast to decrease $25.2 billion, that's the green bar, and this is in nominal or unadjusted dollars. For crops, all of the decline in aggregate cash receipts is due to lower prices as quantities sold are forecast to increase a little bit in 2023. For animal and animal products, both lower prices and lower quantities sold are contributing to the forecast decline in the total.

Government payments are another source of income to farmers. We define government payments as payments made directly to farm operations by the federal government with without any intermediaries and they're generally from farm programs. We record them in the year in which they were received by farmers. Government payments reached a record high in 2020 at $45.6 billion in nominal dollars. And they have decreased each year since as COVID-19 related assistance, as shown by the purple bars here, has dropped off. In 2022 and in 2023, more than half of the government payment total was from other supplemental and ad hoc disaster assistance, which is included in that gray bar for all other. This includes payments from programs such as the Emergency Relief Program, Livestock Forage Program, and the Wildfire, Hurricane, and Indemnity Programs. These supplemental and ad hoc payments total $11 billion in 2022 and our forecast to decrease to $6 billion in 2023. Payments that are a function of commodity prices, which are represented by the orange bar segment, are expected to increase in 2023, yet remain relatively low. In recent years, this category largely represents payments from the Agricultural Risk Coverage Program, Price Loss Coverage Program, and the Dairy Margin Coverage Program. Conservation payments, that's the green bar at the bottom, are forecast to increase 4 percent in 2023. The gray Line in this chart shows inflation adjusted total direct government payments. Payments across 2003-2022, so the past prior 20 years, averaged nearly $21 billion. In 2023, government payments are forecast at $12 billion, which would be below that average but near the levels that we saw before 2019.

This chart looks at government payments relative to the rest of net farm income. It also includes another source of income to farmers which are commodity insurance indemnities. These are payments to farmers for losses that are covered by insurance and for this chart we mean just federal insurance. This chart is an inflation adjusted dollars. The top peach bar segment shows indemnity payments paid to farmers less premiums paid by the farmers for federal commodity insurance. Or I might refer to these as net insurance payments. Net insurance payments are forecast to increase 6 percent in 2023. The darker orange bar segment shows direct- total direct government payments which we talked about in the previous slide, and those are forecast to fall about 20 percent in inflation adjusted dollars. The gray bar represents net farm income excluding net insurance and direct government payments. In 2023, net farm income less net Insurance and government payments is forecast to fall 21 percent yet remain above the levels that we saw across 2014 through 2021.

Next, let's look at production expenses which are the costs incurred by farmers to produce their agricultural output. These include items such as seed, pesticides, and hired labor. This chart shows total production expenses, cash and non-cash, in both nominal and inflation adjusted 2023 dollars. In 2022, total production expenses increased a record 56.5 billion, or 15 percent, relative to 2021 in nominal terms. In 2023, we're projecting that total expenses will increase another 14.9 billion, or 3.5 percent, which is near the projected rate of inflation for 2023 So, when adjusted for inflation expenses are forecast remain relatively stable in 2023, increasing just .1 percent.

When we look at expenditures by category, the outlook is mixed but there are a lot of categories we're spending is forecast to increase. This chart compares expenditures by category in 2022 and 2023, with those above the dotted line expected to see increases and those below decreases. So, starting at the top interest expenses are projected to see the largest dollar and percentage increase in 2023, with an increase of 10 billion or 43 percent. This is follows interest rates and debt levels which are both expected to increase in 2023. The next largest forecast increase is for livestock and poultry purchases. At nearly 20 percent. Below the line, feed is the single largest expense category and in nominal dollars, seed expenses are forecast to fall 2.5 percent. The largest decline is expected for spending on fertilizer. As fertilizer prices have fallen throughout the year.

Despite expectations that income will be lower in 2023, the farm sector balance sheet is forecast to improve or strengthen by some measures in 2023. The balance sheet provides information on the value of assets, both physical and financial, and the level of debt in the U.S. agriculture sector over time. And it is another tool we can use to measure or gauge the health of the farm sector. Farm equity, the value of assets less debt, as shown by the green area has increased every year after 2019. It increased 3 percent in 2022 and is forecast to increase another 3 percent in 2023. Overall, equity forecast to have increased 15 percent since 2019 in inflation adjusted dollars. Largely, this is reflecting annual increases in the value of farm sector real estate assets, or the value of farmland and buildings, which represent about 80 percent of the total farm sector assets. Farm real estate assets are forecast to grow 4 percent in 2023, in inflation adjusted dollars.

The amount of debt held by the farm sector which is shown by the blue area at the bottom of the chart has grown every year from 2013 through 2021. But in 2022, it fell 2 percent, or about $12 billion when inflation adjusted. In 2023, it is forecast to rise just a little under 2 percent following higher real estate debt levels. I skipped it, or I moved farther than I- sorry want to go. This is this is another way to look at the farm sector balance sheet. By looking at the amount of debt relative to assets in relative to equity as shown as a percentage. These are solvency ratios which provide a measure of the sector's ability to repay financial liability, such debts or loans, through the sale of assets and it can be another indicator of financial stress. These ratios started to improve in 2021 as indicated by the declining values and are forecast to continue to improve in 2023, putting them at nearly at their 10-year average. It is important to note that these solvency ratios are for the sector as a whole like if they were a single entity. There's a lot of variation in the amount of debt held by individual farms. Additional financial ratios including liquidity and efficiency ratios are available on our website.

But here is a couple more indicators of financial stress in the sector and they are the bankruptcy rates and debt service ratio. In recent years, the farm bankruptcy rate has trended down. In 2021, chapter 12 bankruptcies fell about 50 percent and then fell another 42 percent in 2022 according to data from the U.S. courts. That put them at less than one farm bankruptcy per 10,000 farms. In 2023, we're projecting bankruptcies to fall even further based on filings through September. The debt service ratio, as shown by the blue line on this chart, describes the share of production income, or gross income, needed for debt payments and is one measure of the liquidity of the sector, or the amount of capital readily available as cash. This ratio has also been trending down in recent years, and lower is better, suggesting improved liquidity but it is forecast to rise in 2023 as the value of agricultural production, or production income, is forecast to decline in 2023 and interest expenses are forecast to rise. Which means that we expect that more production income is going to go need to go towards making debt payments in 2023.

So far, we've been discussing the forecast for the farm sector as a whole. Now let's look at farm businesses which are an important subset of all farms. A farm business, we define as all farms where the primary occupation of the operator is farming plus those farms that had $350,000 or more in gross cash farm income before expenses. These are represented by the orange and blue bars on these charts for commercial and intermediate farms. According to data from the 2022 Agricultural Resource Management Survey, or ARMS, just under half of all farms meet this definition. While resident farms, that's the barn purple, and are those farms where the operator is retired or whose primary occupation is not farming well, they make up 52 percent of all farms. However, it's the commercial and intermediate farms or the farm businesses that account for over 90 percent of all agricultural production and hold most of the sector's assets and debt. Using farm level data from the 2022 ARMS, we are able to do a micro simulation and project how average income levels in 2023 based on the forecast for the sector as a whole. We- we'll do a simulation to predict how the levels might change. We can then break down the forecasts for farm business income by commodity specialization and geographic region. Excuse me. So, we're shifting our perspective here a bit to look only at farm businesses and to look at average net cash farm income levels.

So, let's start by looking at farm businesses that specialize in crops. These charts are in inflation adjusted dollars. Using ARMS, we can categorize farms by commodity specialization which means that at least 50 percent of the value of production is coming from a particular commodity. On average, farm businesses regardless of their specialization or their geographic region are expected to see cash receipts decline and production expenses rise in 2023. Just like we're forecasting for the sector. And this is expected to result in lower average net cash farm income in 2023 for most types of farm businesses specializing in crops. The largest declines are forecast for farm businesses specializing in cotton and corn. With receipts for these commodities forecast to see the largest declines in 2023, as I showed you in an earlier slide. Farm businesses specializing in wheat and specialty crops, specialty crops being fruits, nuts, vegetables, and nurseries are forecast to see average net cash farm income increase in 2023.

For Farm businesses specializing in animal and animal products we project that farm businesses across nearly all specializations will see average net cash farm income drop in 2023. Dairy farm businesses are forecast to see the largest decrease in average net cash farm income at about 60 percent decline and this is after increasing in each of the prior four years. The decline in 2023 reflects expectations that milk receipts will fall significantly in 2023. The one exception on this chart, to declining income in 2023, is for farms that specialize in cattle and calves. Average net cash farm income for farm businesses specializing in cattle is forecast to increase 43 percent in 2023, as prices received for cattle or- and cash receipts for cattle, are expected to be higher in 2023.

We can project how average net cash farm income for farm businesses can be expected to change in 2023 by resource region by looking at how agricultural production is distributed geographically. So, where certain commodities may be concentrated across the country. Across all farm businesses, average net cash farm income is forecast to decrease 9 percent, not adjusted for inflation, so nominal dollars. Six out of the nine resource regions are projected to see lower average net cash farm income in 2023. Farm businesses in the Northern Crescent are projected to see the largest decline in 2023 at 26 percent. This region leads the nation in milk production so the forecast decline in milk receipts would affect this region the most. In the Eastern Uplands, average net cash farm income is forecast to increase 9 percent, so the only region where we're expecting an increase. And this follows the expected growth in cattle and calf receipts. The Eastern Uplands has a lot of smaller farms, a lot of cattle and most- a lot of those are cattle, and it also has the lowest average net cash farm income of all of these nine resource regions.

Up to this point, we've discussed the financial performance of farm operations, but this isn't necessarily equivalent to the well-being of the households that operate and own those farms. Farm profits are often shared with other stakeholders, like landlords and contractors, and the well-being of the household is determined by a combination of off- farm and on-farm activities. With the majority of farm household income coming from off the farm, on average or at the median. So, now we're going to look at all family farms, which accounted for about 97 percent of all farms in 2022, and the households of farm operators.

There are nearly 5 million people that live in households attached to a farm. One measure of their financial well-being is household income. Farm households typically receive income from both farm and off-farm sources and this chart looks at median farm income, off farm income, and total household income. The median represents the income level at which half of all households have lower incomes and half have higher. Note, this chart is an inflation adjusted dollars. At the median, income earned on the farm is low and is forecast to rise to $550 in 2023. That's a negative $550. Meaning that the median farm household is operating at a loss. But recall that slightly more than half of all farms are residential farms, and these are small farms where the primary occupation of the operator is not farming. So, the results are that we get low and usually negative farm income at the median because it's usually resident farm. Therefore, many households- farm households rely primarily on off farm income. Off farm income sources include off-farm wage income, non-farm business earnings, dividends, and transfer payments. Median off farm income decreased in 2022 and has forecast to increase slightly about 1 percent in 2023 when adjusted for inflation. And then total farm household income, at the median, is also forecast to increase in 2023. It's an increase of 4.6 percent in nominal dollars, or 1.2 percent inflation adjusted. Because farm and off farm income are not equally distributed or distributed identically for every farm the median total income will not generally equal the sum of median off farm and farm income.

This chart looks at farm household income by the type of farm the household operates. For households attached to a resident, residential, or intermediate farm, median total household income is shown by the gray line, tracks very closely with off farm income, that's the orange, and is forecast to increase slightly in 2023. And off farm income accounts for essentially all of the household’s income at the median for these residents and intermediate farms. For households attached to commercial farms, on farm income is more important. On farm income, that's the blue line, for commercial farms is expected to decrease 10 percent in 2023 and is driving the forecast 5 percent decrease in total household income.

The information I presented today, and more is available on our website. We have data tables, charts, maps, and a written summary of findings. We also have state level estimates through 2022. Our next release is scheduled for February 7th at which time we will update our 2023 forecast again and put out our first forecast for 2024.

Also in February, USDA will be hosting its 100th Agricultural Outlook Forum. Since you are attending this webinar, I think you'll find much to interest you at this forum. I will be there to present the farm income and wealth sector forecast for 2024 and there will also be more than 30 sessions on the latest trends and developments in agriculture. It will be a hybrid event, so you can join in person or online. Unfortunately, I didn't include a link here, but it should be easy to find out more information about the event and how to register on the internet.

So, with that I'm going to pause and pass it back over to Liz to lead us in any- with any questions or discussions.

Thanks so much Carrie, that was a great presentation. We'll go ahead now and open the floor up for questions. As a reminder, questions can be submitted through the chat feature located at the bottom left-hand corner of your screen.

All right, for your first question Carrie: Are cattle-calf receipts forecast to be at their highest level ever in 2023?

Almost, but not quite. They were a little bit higher, about 2 percent higher, in 2014. Which, I think, is also when total livestock, or animal- animal product cash receipts peaked.

Great, thank you. For your next question: why is the average net cash farm income for farms in the Fruitful Rim forecast to fall in 2023 if the receipts for fruits and nuts are forecast to increase?

Yeah, thank you for the question. Um yes, we call it the Fruitful Rim, so it does have a lot of fruits, but it also has vegetables and another thing it has a lot of is dairy. I think it's the second largest region in term of dairy receipts. So, that's what's really driving the decline in average net cash income for this- for the fruitful Rim in 2023 is that they expect lower dairy receipts in 2023.

Great. Next question: do you forecast state level income or expenses?

No, we do not forecast anything at the state level, just the U.S.

Got it. All right, next question: Does the government payments line item include payments defined in the farm bill?

Yes, it includes a lot of farm bill programs like it includes Agricultural Risk Coverage Program, the Price Loss Coverage Program (PLC), as well as the Dairy Margin Coverage Program. Those are three of the biggest. But yes, it is- as long as they are direct payments to the farmer, and they are financial assistance. So, there is some like technical assistance in farm bill programs where the USDA offers to like to give them training, for instance, that's not counted because that's not financial that's not money or a check going to a farm operator. But yes, the farm bill programs are included in indirect government payments.

Great. Your next question is: Is organic considered in your data such as row crops, dairy livestock, specialty crop?

Yes. Organic production is part of farm sector production so it is included but we only but we don't attempt to forecast or estimate in this data product organic separately from the non-organic if that makes sense. So, it's included in the total. So, when we report fruits and nuts and vegetables, for example, cash receipts it includes organic fruits, nuts, and vegetables but we don't separate out the organic from the inorganic. ERS does do research on organic farming, and I believe we have an organic topic page on the ERS website where we go into more depth on organic farming in the U.S.

Thanks Carrie. Our next question is: Earlier in the year we had heard a lot about fertilizer prices, what is your current outlook for expenses? Are they being driven by input prices or quantities? Can you tell?

Well for our- when we model or forecast fertilizer- fertilizer expenses we do- we do have a quantity and a price component. And so, for prices we are look at the NASS puts out- National Agricultural Statistics Service of USDA, they put out data on monthly prices paid for fertilizer, so our model considers that, and those prices have been declining in 2023 relative to 2022 which is driving this. Primarily the reason that we're forecasting expenses, total expense expenses, are spending on fertilizer to decline in 2023 we have a slight quantity component in that we also consider you know how much farmers have planted, their acres planted, as an indicator of how much fertilizer they may have to put down in that year. And so, with that combined it's really you know, so far, the forecast is really for lower fertilizer expenses because of the lower prices. But when we get the next data from the 2023 ARMS, we'll have a more complete picture of how farmers may have adjusted quantities of fertilizer used in 2023.

All right. For your next question: Why is the gross and average income for the Northern Great Plains region forecast at zero?

Yeah, it's not often that we actually have a zero on the map but obviously it can happen. In the Northern Great Plains region, this region has a lot of cattle and a lot of grains so we are projecting that this region will see higher receipts from cattle but that they're going to largely be offset by lower receipts for grains, in particular, and we think that production expenses remain stable. So, we just kind of got some offsetting changes in cash receipts with cattle and crops in this region. So that the forecast for this region comes out to be about zero, relatively unchanged from 2022.

Thanks Carrie. Your next question is: Is the Crop Insurance Program included in direct government payments?

No. Crop Insurance is not a direct government payment, but we do account for it in our- both in our net farm income and in our net cash farm income. If you go if you were to look at our tables online you would see insurance indemnities, or insurance payments, to farmers are recorded under farm related income and then we also account for the premiums paid by the farmers as an expense item. So, we're accounting for it, but we just don't it's not a government payment because it's actually an insurance product that, you know, you to buy in in order to get a payment. So, we don't classify it as a direct government payment.

Thanks, Carrie. Our next question is: why are livestock and poultry purchases expected to see the largest spending increase in 2023?

Yeah, the- it's largely due to cattle and calf. You know, livestock and poultry purchases are, you know, all animals but we think much of the increase in 2023 is coming from cattle and calves as cattle prices, especially cattle feeder prices, have gone up in 2023 and again we're looking at the NASS data on the prices paid for these feeder cattle to help inform our forecast for 2023. So, you know, livestock operations are continually buying and selling animals and we just think the cost for buying these animals in 2023 is going to increase.

Got it, thanks Carrie. Our next question is: The Eastern Uplands region is the only region with the forecasted increase in average net cash income. Why is this?

Yes, it is the only region with an increase and that is largely because of the composition of farms in this region. There are a lot of small farms, in fact, you know, like I said before, you know, they have the lowest average net cash farm income, and a lot of these small farms are cattle and calve operations and we're forecasting cattle and calve receipts to increase in 2023. Also, this region wasn't as affected by some other regions by the drought so that also played to their favor.

Thanks Carrie. Your next question is: Do your projections for the poultry cash receipts take into account the resurgence in avian flu cases that we've seen lately?

To some extent. I am not a poultry expert, so I rely on the other experts on poultry in USDA for our forecast. So, in specifically for the poultry cash receipt forecast we are looking at the projections from the World Agricultural Supply and Demand Estimate report, from the WASDE report, that came out in November. So, you know, to get you know I refer you to that publication if you want to see more about what they may have considered in their forecast for poultry, but I would- I would imagine that that is one thing that they are considering because they're forecasting out. You know, the amount the amount and price of poultry for uh throughout the end of the year.

Thanks Carrie. We have a couple more questions for you. Your next one is: What data sources do you have that would give a more detailed level of analysis either by like commodity specialization or by different regions or locations?

Well, we have a lot more detail on our farm income and wealth data product than I was able to present today. So, you could start there because there you'll be able to see all the commodities that we have data on and all of the like expense items we have data on. And on the balance sheet as well there's more detail. But then another really good tool, especially if you want to get down into the kind of analysis that I presented on farm businesses, so by looking at commodity specialization, looking at farms by region, or by sales class is our Agricultural Resource Management Survey the ARMS survey, we have a web tool on our website where you can take the income statement or you can take the balance sheet statement and then, you know, subset it or tabulate it by commodity specialization or by region. You can even get it for 14 individual states, it goes down that far into that- 15, in that much detail and it’s really kind of a fun tool to web- a fun tool to play with. And you can find that on our website if you just like type in ARMS it should take you right to the ARMS landing page where it will have a link to what we call our tailored reports. But that would be a good starting point but if you- you know, we've got all kinds of other ideas for you and feel free to reach out to us if you have really specific interests that we can help you with.

Great thanks for sharing those resources and tools, Carrie. We have one more question for you today and I think you touched on this one but: could you remind us when you'll have the forecast for 2024?

Yes, so our first forecast for 2024 is going to be released on February 7th. So, we'll also revise our 2023 forecast at that point and we'll have a webinar just like we're having today, and all the data will be posted on our website on that day, the 7th, February 7th.

All right that's all we have for today. Carrie, thank you so much for giving this great presentation on the farm income and financial forecast for November 2023. And thank you to all of our listeners for taking time out of your day to join us, we hope that this has been helpful.

If you enjoyed this webinar or interested in learning more about ERS research and data, we have another webinar coming up in a couple of weeks. This webinar will be on *America's Farms and Ranches at a Glance, 2023 Edition* and this will take place on Tuesday, December 12th at 1 p.m. Eastern Time registration for this webinar will be available beginning next week on our- on our website.

Before closing, I'd like to just share a couple ways to stay up to date on ERS research. In addition to our website, we also have the chart of note mobile app which delivers digital snapshots of ERS research straight to your mobile device. ERS is also on social media, and you can follow our accounts on LinkedIn and X formerly known as Twitter. Thank you all for joining us today and this concludes our webinar.