# Agricultural Markets Situation and Outlook

February 11, 2021



# Use the Q&A tool to ask questions

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### February 2021 USDA Report Farm Financial Forecasts and Data

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#### Get to know farms in North Dakota, 2019



Farm facts

\*\*Includes landlord capital consumption. Created by: The ERS Farm Income Team.

Source: https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx data as of February 5, 2021. Number of farms and acres of farmland are from USDA, National Agricultural Statistics Service, Farms and Land in Farms (https://usda.library.cornell.edu/concern/publications/5712m6524?locale=en).

#### FEB 2021 USDA Net Farm Income

#### Forecast

U.S. net farm income and net cash farm income, 2000-21F



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#### USDA Government Payments

	2019	2020F	2021F
Net government transactions	8,303,485	31,106,123	9,961,810
Direct government payments	22,447,200	46,265,518	25,294,082
Property taxes and fees 1/	14,143,715	15,159,395	15,332,272
Motor vehicle registration and licensing fees	717,575	748,770	757,323

#### Nominal Cash Receipts for Selected Crops



#### Nominal Cash Receipts for Selected Animal Products 2017 - 2021



#### USDA Forecasted Production Expenses in Billions



#### Direct Payments 2015 - 2021



### Farm Financial Solvency 2021





Created by: The ERS Farm Income Team.

Data source: https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx as of February 5, 2021.

#### Direct government farm payments by State in 2019



Created by: The ERS Farm Income Team.

Data source: https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx as of February 5, 2021.

# Regional Changes in Net Cash Farm

#### Income

Farm business average net cash farm income by resource region, 2021F compared with 2020F





USDA 2020 vs. 2021 forecast



#### General Take-aways

Farm Payments will be a key factor in the higher 2020 NFI numbers

Even with better than expected crop and livestock commodity prices in the fall, leftover MFP 2.0 and CFAP payments will make up a large share of NFI in 2020

- The loss of any Ad Hoc farm program payments will likely affect the Northern Plains less than some other areas of the country
  - Smaller ad hoc payments in places like ND or SD relative to the South/Southeast
  - Improved non-specialty crop commodity prices

# Implications of the February USDA Reports

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#### U.S. Corn Supply & Demand Table

U.S. Corn	2018/2019	2019/2020 (Est.)	2020/2021 (Feb.)		
Planted A.	88.9 Mill. A.	89.7 Mill. A.	90.8 Mill. A.		
Harvested A.	81.3 Mill. A.	81.3 Mill. A.	82.5 Mill. A.		
Yield/Harvest A.	176 4 bu	167.5 bu.	172.0 bu.		
Beginning Ave	erage pre-repor	t 221 Mill. Bu.	1,919 Mill. Bu.		
Produce	stry octimate w	till. Bu.	14,182 Mill. Bu.		
In	stry estimate w	dS	25 Mill. Bu.		
	.,392 mill. bu.	hill.Bu.	16,127 Mill. Bu.		
Feed & R. (range	e is 1,108 to 1,5	15) 03 Mill. Bu.	5,650 Mill. Bu.		
Food, Seed, Ind.	с,, со тупп. DU.	6,282 Mill. Bu.	6,375 Mill. Bu.		
Ethanol	5,378 Mill. Bu.	4,852 Mill. Bu.	4,950 Mill. Bu.		
Exports	2,066 Mill. Bu.	1,778 Mill. Bu.	2,600 Mill. Bu.		
Total Use	14,288 Mill. Bu.	13,963 Mill. Bu.	14,625 Mill. Bu.		
Ending Stocks	2,221 Mill. Bu.	1,919 Mill. Bu.	1,502 Mill. Bu.		

#### U.S. Soybean Supply & Demand Table

U.S. Soybean	2018/2	2019/2020 (Est.)			2020/2021 (Feb.)					
Planted A.	89.2 Mi	89.2 Mill. A.			76.1 Mill. A.			83.1 Mill. A.		
Harvested A.	87.6 Mi	II. A.	74.9 Mill. A.			82.3 Mill. A.				
Yield/Harvest A.	FOG			47.4	bu.	50.2 bu.				
Beginning Ave	erage pre	-repor	t	909	Mill. Bu.		525	Mill. Bu.		
Pro	stry octin	noto w			Mill. Bu.		4,135	Mill. Bu.		
	stry estir		dS		ll. Bu.		35	Mill. Bu.		
	123 mill.	bu.			iill.Bu.		4,695	Mill. Bu.		
Crushings (ran	ge is 105	to 14	)	-05	Mill. Bu.		2,200	Mill. Bu.		
Exports	<u> -,</u>			1,682	Mill. Bu.		2,250	Mill. Bu.		
Seed	88	Mill. Bu.		96	Mill. Bu.		103	Mill. Bu.		
Residual	39	Mill. Bu.		9	Mill. Bu.		22	Mill. Bu.		
Total Use	3,971	Mill. Bu.		3,952	Mill. Bu.		4,575	Mill. Bu.		
Ending Stocks	909	Mill. Bu.		525	Mill. Bu.		120	Mill. Bu.		

#### U.S. All Wheat Supply & Demand Table

U.S. All Wheat	2018/2019	2019/2020 (Est.)	2020/2021 (Feb.)		
Planted A.	47.8 Mill. A.	45.5 Mill. A.	44.3 Mill. A.		
Harvested A.	39.6 Mill. A.	37.4 Mill. A.	36.7 Mill. A.		
Yield/Harvest A.	47.6 bu	51.7 bu.	49.7 bu.		
Begin Stock	erage pre-repor	• 080 Mill. Bu.	1,028 Mill. Bu.		
Prod	ctry actimate y	Vill. Bu.	1,826 Mill. Bu.		
Indus	stry estimate w	ll. Bu.	120 Mill. Bu.		
	834 mill. bu.	iill.Bu.	2,974 Mill. Bu.		
Food (ran	ge is 807 to 864	<b>4) 5</b> 2 Mill. Bu.	965 Mill. Bu.		
Seed		60 Mill. Bu.	63 Mill. Bu.		
Feed & Residual	88 Mill. Bu.	101 Mill. Bu.	125 Mill. Bu.		
Exports	1,102 Mill. Bu.	965 Mill. Bu.	985 Mill. Bu.		
Total Use	2,039 Mill. Bu.	2,089 Mill. Bu.	2,138 Mill. Bu.		
Ending Stocks	1,080 Mill. Bu.	1,028 Mill. Bu.	836 Mill. Bu.		

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#### **Pre-report Industry Estimates**

#### 2020/21 South American Production (Million Metric Tons)

	Arge	ntina	Brazil		
	Corn	Corn Soybean		Soybean	
Average Trade Estimate	47.03	47.64	108.40	132.46	
Highest Trade Estimate	47.50	48.50	110.22	134.50	
Lowest Trade Estimate	44.50	46.00	105.00	129.00	
USDA 2019/20 Estimate	51.00	49.00	102.00	126.00	
USDA January 12, 2021	47.50	48.00	109.00	133.00	
USDA February 9, 2021	47.50	48.00	109.00	133.00	

Reuters News and Feb. 9, 2021 USDA-WASDE

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#### **Brazil: Soybean Production**



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#### USDA Crop Explorer

#### **Argentina: Soybean Production**



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#### USDA Crop Explorer



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#### Nov. Soybean / Dec. Corn Futures Sep. 1, 2010 to Feb. 11, 2021



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DTN ProphetX - 02/11/2021 am

#### Historical U.S. Planted Acreage

100,000,000 90,000,000 80,000,000 70,000,000 60,000,000 50,000,000 40,000,000 30,000,000 20,000,000 10,000,000



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USDA-Quick Stats Custom Query

#### **Quality Loss Adjustment Program** Farm Service Agency

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Provide assistance for crop quality losses that were a consequence of hurricanes, excessive moisture, floods, qualifying drought, tornadoes, typhoons, volcanic activity, snowstorms, or wildfires occurring in calendar years 2018 and 2019.

Sign up deadline: March 5, 2021

## Eligible Crops

- Crops for which Federal crop insurance is available or
- Crops eligible for coverage in the Noninsured Crop Disaster Assistance Program (NAP), <u>excluding</u>:
  - value loss crops
  - honey
  - maple sap.
- Crops that suffered a quality loss due to qualifying disaster event
- Crops that incurred a five percent or greater quality discount due to the qualifying disaster event
- Crops that incurred a nutrient loss (forage crops)
- Crops that may have been sold, fed on-farm to livestock, or may be in storage at the time of application.

### Ineligible Crops

Ineligible crops include:

- crops not grown commercially
- crops intended for grazing
- crops not intended for harvest
- subsequent crops that do not meet double cropping provisions
- volunteer crops

#### Ineligible Crops (continued)

Ineligible crops include:

- prevented planting crops
- first-year seeding of forage crops
- crops that were destroyed, other than by an eligible cause of loss
- immature fruit crops

### Qualifying Disaster Events

Qualifying Disaster Event	Related Conditions
Qualifying Drought	Heat, excessive wind, hot wind
Excessive Moisture	
Flooding	Silt, Debris
Hurricane	Excessive wind, Excessive rain, Flooding, Storm surges, Tornado, Tropical storm, Tropical depression
Snowstorm	Blizzard
Tornado	Excessive Wind
Typhoon	Hurricanes, Excessive wind, Excessive rain, Flooding, Storm surges, Tornado, Tropical storm, Tropical depression
Volcanic Activity	Ash, Fire, Vog, Lava, Earthquake
Wildfire	Heavy Smoke

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#### Qualifying Disaster Events

- Eligible counties with:
- D3 and D4 extreme Drought designations
- Presidential Emergency Disaster
   Declarations or Secretarial Disaster
   Designations in 2018 and 2019
- Listed under the Qualifying Disaster events section of: <a href="http://www.farmers.gov/quality-loss">www.farmers.gov/quality-loss</a>
- Note: If a county is not listed the County FSA Committee will require evidence of the qualifying disaster event that affected the crops.

### Ineligible Causes of Loss

Losses:

- NOT due to a qualifying disaster event
- occurring after harvest
- occurring in storage
- due to insect infestation
- drifting herbicide
- failure to follow good farming practices

#### Example 1:

- Producer suffered a quality loss on 10,000 bushels of corn for grain due to excessive moisture. The grain suffered additional quality losses prior to harvest from a subsequent hailstorm.
- All 10,000 bushels are eligible.

#### Example 2:

- Producer suffered a quality loss on 10,000 bushels of corn for grain. Only 1,000 bushels were affected by a qualifying disaster event (excessive moisture). The remaining 9,000 bushels only suffered a loss from hail.
- Only the 1,000 bushels affected by a qualifying disaster event are eligible for QLA.

# Eligibility

Adjusted Gross Income and Farm Adjusted Gross Income:

 A person or legal entity is ineligible for QLA Program benefits if their AGI exceeds \$900,000, unless at least 75 percent of the AGI is derived from farming, ranching or forestry activities.

#### Payment Limitations

\$125,000 per person and legal entity Limitation applies to each of the program years applied for, 2018 and/or 2019.

Rules for Legal Entities:

- Notification of interest
- Substantive Changes

### Linkage Requirement

- As a condition for QLA benefits, producers are required to purchase crop insurance, or obtain NAP coverage, on the crop for the 2022 and 2023 crop years.
- coverage must be purchased at the 60/100 level or equivalent.
- linkage applies to all crops receiving a QLA payment.
- Producers who agreed to obtain crop insurance or NAP coverage with the requirements for WHIP+ are considered to have met the requirements.

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### Quality Discounts

 Quality discounts that are associated with a loss that could have been mitigated, such as high moisture and insect infestation, are NOT eligible.

• FSA's County Committees (COCs) are responsible for determining whether a loss could have been mitigated.

# Verifying Quality Loss

Verifiable documentation includes records that:

- can be verified by FSA through an independent source
- will be used to substantiate the amount of quality loss.
- be dated
- show final disposition
- be seasonal or crop-specific for the commodities produced more than once in a calendar year.

# Verifying Quality Loss (continued)

Crops other than Forage:

 Verifiable documentation must come from tests/analyses conducted within 30 days of harvest.

#### Exception:

For grain crops that were sold, verifiable documentation at time of sale is acceptable, provided the crop was maintained using best management practices.

# Verifying Quality Loss (continued)

- Forage Crops Nutritional Value
- Forage quality tests, or analysis of nutritional value, must have been completed within 30 days of harvest.
- Quality losses for hay and forage crops must be documented with an analysis from either of the following:
  - a State University laboratory
  - other laboratories approved by State FSA Committee (STC)

#### Payment Based on Producer Loss

Crops other than Forage	Forage Crops
<ul> <li>Grading Factors (such as low-test weight, broken kernels)</li> </ul>	<ul> <li>Nutrient Value for year of application (such as RFV, TDN)</li> </ul>
And	And
Total Dollar Value Loss	<ul> <li>Nutrient values for 3 prior years</li> </ul>

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#### Non-Forage Crops Verifiable Documentation Records

- sales receipts from buyers
- settlement sheets
- truck or warehouse scale tickets
- actual measurements or appraisals by FSA, RMA or reinsured companies, LA's, other USDA employees, if performed as part of their work duties, feed company representatives, or STC-approved consultants

#### Non-Forage Crops Acceptable Records

- The <u>quantity</u> of affected production claimed on the application must be supported with non-verifiable records of production, which may include:
- Copies of receipts
- Ledgers of income
- Income statements of deposit slips
- Cash register tapes
- Invoices for custom harvesting

#### Non-Forage Crops Acceptable Records Categories

Producers that suffered a quality loss will fall into two categories regarding verifiable documentation:

- Grading factors <u>and</u> a total dollar value loss based on their own, individual loss.
- Grading factors <u>but</u> no total dollar value loss amount of the discount they received.

#### Non-Forage Crops – Verifiable Documentation of Total Dollar Value Loss Payment Example

Example: Producer certifies to 100,000 bushels of affected corn due to drought in 2019. Corn price before discount is \$4/bushel. The discounted price received was \$3/bushel due to low test weight (\$1/bushel discount).

Therefore, the total dollar value loss amount is \$100,000 calculated as follows:

	100,000 X \$4 =	\$400,000
minus	100,000 X \$3 =	<u>\$300,000</u>
		\$100,000

#### Non-Forage Crops – Verifiable Documentation of Total Dollar Value Loss Payment Example

Payment will be based on producer's loss if verifiable documentation has both Grading Factors (such as low-test weight, broken kernels) and Total Dollar Value Loss. The payment calculation will be:

Total dollar value loss x 70% (QLA program factor)

Example: To the producer's payment, we would multiply total dollar value loss by 70% (\$100,000 x 70%) to get a QLA program payment of \$70,000.

Note: The payment may be further reduced if sufficient funds are not available.

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#### Non-Forage Crops – Without Verifiable Documentation of Total Dollar Value Loss

Payments for Non-Forage Crops without Total Dollar Value Loss are determined using the following calculation:

- Total Affected Production, multiplied by,
- County Weighted Average Dollar Value on Affected Production,
- Loss Amount, multiplied by
- 70% payment factor, multiplied by
- 50%

Forage Crops with Application Year and Historical Nutritional Values

QLA Payment = Total Affected Production x Verifiable % Loss x Average Market Price x 0.7

Note: The payment may be further reduced if sufficient funds are not available.

#### How to apply

- One application for entire operation nationwide in recording county office.
- Application includes all eligible crops suffering a quality loss.
- Losses sustained in more than one crop year require a separate application for each crop year.

# After you sign

- Producers have 14 days from signing their QLA application to submit verifiable documentation to support their quality loss. Have 60 days to submit remaining producer eligibility forms.
- QLA payments will not being to be issued to producers until after the application period ends March 5.
- If the total amount of needed QLA payments exceeds the amount of funding available, FSA will prorate payments to all producers by a national factor.

#### More Information

QLA FSA webinar recording at:

https://www.ag.ndsu.edu/farmmanagement/qla-webinar

Also refer to: <u>www.farmers.gov/quality-loss</u>



#### LIVESTOCK PRICE SITUATION AND OUTLOOK

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#### USDA United States Department of Agriculture National Agricultural Statistics Service





Livestock Marketing Information Center Data Source: USDA-NASS

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Data Source: ÚSDA-NASS



HEIFERS HELD AS BEEF COW REPLACEMENTS January 1, ND





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North Dakota Weekly Cattle Auction Summary

AMS Livestock, Poultry, & Grain Market News

North Dakota Dept of Ag Mrkt News

Mon Feb 8, 2021

STEERS	- Medium and Lar	ge 1 (Per Cw	t / Actual Wt)		HEIFERS -	Medium and La	arge 1 (Per Cv	vt / Actual Wt)		
Used	W/t Dense	Au=14/4	Dalas Danas	Aug Dalas	Head	Wt Range	Avg Wt	Price Range	Avg Price	
Head	wt kange	AVg Wt	Price Kange	AVg Price	25	308-311	310	168.00-174.00	171.61	
1	285	285	212.50	212.50	60	356-390	379	166.50-169.50	166.92	
9	328-347	343	198.00-206.00	199.70	55	424-449	439	153.00-166.00	162.03	
17	360-380	373	190.00-199.00	195.93	215	456-496	469	146.00-167.00	160.23	
F.1	400 400	400	103 50 304 50	107.11	219	<del>503</del> -546	525	140.00-159.00	153.08	
51	400-426	409	182.50-204.50	197.11	393	551-597	571	136.00-155.00	148.61	
226	452-491	479	175.00-194.00	182.82	1252	600-647	619	129.00-148.00	139.91	
222	503-544	532	163.25-183.50	174.98	53	640-649	645	139.50-142.00	140.72	Replacement
505	551 507	6.76	100.00 100.00	107.70	401	650-693	667	122.00-136.00	130.37	
525	551-597	5/5	156.50-175.75	167.75	62	656-695	679	132.00-162.00	139.01	Replacement
268	600-648	629	145.00-158.00	152.17	372	702-749	730	118.00-127.50	125.14	
762	653-696	680	136.50-152.50	148.25	142	701-734	719	127.00-135.50	128.08	Replacement
962	701-749	715	131.25-149.75	145.42	347	751-795	774	118.00-131.00	125.27	
1240	750 700	776	100 50 141 50	125.07	6	790	790	116.00	116.00	Fleshy
1240	102-199	//0	129.50-141.50	155.97	121	753-766	762	128.00-149.00	143.43	Replacement
376	800-846	829	125.00-135.75	132.43	165	803-826	811	120.00-126.00	123.83	
287	861-892	874	125.00-133.00	128.92	103	862-893	872	118.00-122.00	119.38	
382	905-942	917	120.00-134.50	130.44	8	876	876	110.50	110.50	Fleshy
502	005 542		120.00 101.00	105.05	14	926	926	137.50	137.50	Replacement
62	994-999	998	121.50-126.50	125.86	28	951	951	115.50	115.50	

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1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021





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### Energy Outlook

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#### Key Factors/News

High corn and vegetable oil prices continue to pressure biofuel margins.

Ethanol production and use are holding steady at 90% of last year's numbers.

2021 RVOs

2022 RFS

WTI prices have been in the upper 50's.

Keystone has been shelved in response to an Executive Order

DAPL hearing scheduled for yesterday has been postponed.

ND rig counts are rising, slowly

#### US Corn-Ethanol Production & Margin



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#### **Breakeven Prices for New Wells**

# Dallas Fed Energy Survey—In the top two areas in which your firm is active: What WTI oil price does your firm need to profitably drill a new well?

**Dollars per barrel** 





NOTES: Line shows the mean, and bars show the range of responses. 92 E&P firms answered this question from March 11-19, 2020. SOURCE: Federal Reserve Bank of Dallas.

# Please use the Q&A tool to ask questions

#### The next webinar is scheduled for 1 pm CT Thursday, March 11<sup>th</sup>

# For the slides and recording of this webinar please visit ag.ndsu.edu/farmmanagement/outlook

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