

# Baseline Update for U.S. Agricultural Markets

*August 2018*

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Any opinion, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture nor the University of Missouri.

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## Summary

Trade disputes and the expectation of high U.S. corn and soybean yields are weighing on the prices of many agricultural commodities. This report provides an update of the 2018 FAPRI-MU baseline.

This update was prepared the week of August 20, 2018. Policies in place at that time, including the 2014 farm bill and China's tariffs on U.S. agricultural products, are assumed to continue. The estimates do not incorporate the market facilitation payments and other trade compensation policies announced on August 27. The update uses 2018 acreage, yield and production estimates included in USDA's August 2018 *Crop Production* report. The economy is assumed to evolve as forecast by IHS Markit in July 2018.

Given all of the assumptions of the analysis, here are a few highlights of the results:

- China's tariffs reduce U.S. soybean exports. Projected record soybean production in 2018 also contributes to a sharp increase in ending stocks. The marketing year average (MYA) price for soybeans falls to \$8.73 per bushel in 2018/19, the lowest level since 2006/07.
- In 2018/19, corn MYA prices increase to \$3.62 per bushel and wheat prices increase to \$5.12 per bushel. A reduced South American corn harvest in early 2018 boosts short-term U.S. corn exports, and smaller wheat crops in Europe, Australia and other countries support wheat prices.
- Soybean area falls by almost 5 million acres in 2019, as soybean returns drop relative to those for competing crops. Corn and wheat area each increase by about 2 million acres in 2019.
- For the 2019/20-2023/24 period, projected soybean prices average a little over \$9 per bushel, wheat a little over \$5 per bushel, and corn a little under \$4 per bushel.
- Reduced U.S. production and continued strong export demand cause the 2018/19 upland cotton MYA price to reach \$0.75 per pound.
- Projected ethanol production is relatively stable, given the assumption that implementation of the Renewable Fuel Standard follows recent practice, including small refinery waivers.
- Cattle prices decline from 2018 to 2020 as production continues to increase. Live hog prices remain below \$45 per hundredweight for three straight years, as production continues to expand and tariffs slow growth in U.S. exports.
- Milk prices drop below \$17 per hundredweight in 2018, as U.S. milk production increases and international markets weaken.
- Consumer food price inflation increases to 1.6% in 2018, as the index of prices for food consumed at home increases for the first time in three years.

Markets will continue to evolve as we get more information about the size of the 2018 crop and as trade and farm policies change. For more detail on the livestock, poultry and dairy sectors and on consumer food prices, see a companion report by the MU Agricultural Markets and Policy team, at <http://amap.missouri.edu/>.

## Macroeconomic assumptions\*

| Calendar year              | 2016  | 2017  | 2018  | 2019                  | 2020  | 2021  | 2022  | 2023  |
|----------------------------|-------|-------|-------|-----------------------|-------|-------|-------|-------|
| <b>Real GDP growth</b>     |       |       |       |                       |       |       |       |       |
|                            |       |       |       | (Percent)             |       |       |       |       |
| United States              | 1.5   | 2.3   | 3.0   | 2.7                   | 1.7   | 1.4   | 1.7   | 1.8   |
| China                      | 6.7   | 6.9   | 6.7   | 6.3                   | 6.1   | 6.0   | 6.0   | 6.0   |
| World                      | 2.6   | 3.3   | 3.3   | 3.1                   | 2.9   | 2.9   | 3.1   | 3.1   |
| <b>U.S. CPI inflation</b>  | 1.3   | 2.1   | 2.5   | 2.1                   | 2.3   | 2.2   | 2.3   | 2.4   |
| <b>U.S. interest rates</b> |       |       |       |                       |       |       |       |       |
| Federal funds rate         | 0.4   | 1.0   | 1.8   | 2.8                   | 3.4   | 3.4   | 3.4   | 3.3   |
| Prime rate                 | 3.5   | 4.1   | 4.9   | 5.9                   | 6.4   | 6.5   | 6.5   | 6.4   |
| <b>Exchange rates</b>      |       |       |       | (Currency per dollar) |       |       |       |       |
| Canadian dollar            | 1.33  | 1.30  | 1.28  | 1.27                  | 1.23  | 1.23  | 1.23  | 1.23  |
| Chinese yuan               | 6.64  | 6.76  | 6.55  | 6.79                  | 6.84  | 6.95  | 6.98  | 6.89  |
| Euro                       | 0.90  | 0.89  | 0.84  | 0.87                  | 0.87  | 0.86  | 0.85  | 0.84  |
| Mexican peso               | 18.69 | 18.92 | 18.86 | 19.40                 | 19.83 | 19.76 | 20.03 | 20.42 |

\*Source: IHS Markit forecast, July 2018

## Policy assumptions

| Year                             | 2016 | 2017 | 2018 | 2019                                  | 2020 | 2021 | 2022 | 2023 |
|----------------------------------|------|------|------|---------------------------------------|------|------|------|------|
| <b>Reference prices</b>          |      |      |      | (Dollars per bushel)                  |      |      |      |      |
| Corn                             | 3.70 | 3.70 | 3.70 | 3.70                                  | 3.70 | 3.70 | 3.70 | 3.70 |
| Soybeans                         | 8.40 | 8.40 | 8.40 | 8.40                                  | 8.40 | 8.40 | 8.40 | 8.40 |
| Wheat                            | 5.50 | 5.50 | 5.50 | 5.50                                  | 5.50 | 5.50 | 5.50 | 5.50 |
| <b>Conservation reserve area</b> |      |      |      | (Million acres)                       |      |      |      |      |
|                                  | 23.9 | 23.4 | 22.6 | 22.6                                  | 22.6 | 22.6 | 22.6 | 22.6 |
| <b>Biodiesel tax credit</b>      |      |      |      | (Dollars per gallon)                  |      |      |      |      |
|                                  | 1.00 | 0.00 | 0.00 | 0.00                                  | 0.00 | 0.00 | 0.00 | 0.00 |
| <b>Renewable fuel standard</b>   |      |      |      | (Billion gallons, ethanol equivalent) |      |      |      |      |
| Overall                          | 17.9 | 18.7 | 19.0 | 18.2                                  | 18.3 | 18.3 | 18.4 | 18.5 |
| Advanced biofuels                | 3.7  | 4.4  | 4.2  | 4.6                                   | 4.6  | 4.7  | 4.7  | 4.8  |
| Biomass-based diesel             | 3.3  | 3.9  | 3.1  | 2.9                                   | 3.0  | 3.0  | 3.1  | 3.1  |
| Conventional biofuel "gap"       | 14.2 | 14.4 | 14.7 | 13.7                                  | 13.7 | 13.7 | 13.7 | 13.7 |

## U.S. soybean supply and use

| September-August year             | 16/17                        | 17/18  | 18/19  | 19/20  | 20/21  | 21/22  | 22/23  | 23/24  |
|-----------------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Area</b>                       | (Million acres)              |        |        |        |        |        |        |        |
| Planted area                      | 83.4                         | 90.1   | 89.6   | 85.0   | 85.2   | 85.6   | 85.6   | 85.4   |
| Harvested area                    | 82.7                         | 89.5   | 88.9   | 84.3   | 84.5   | 84.9   | 84.9   | 84.8   |
| <b>Yield</b>                      | (Bushels per harvested acre) |        |        |        |        |        |        |        |
|                                   | 52.0                         | 49.1   | 51.6   | 48.4   | 48.8   | 49.2   | 49.7   | 50.1   |
| <b>Supply</b>                     | (Million bushels)            |        |        |        |        |        |        |        |
| Beginning stocks                  | 197                          | 302    | 430    | 683    | 513    | 452    | 456    | 464    |
| Production                        | 4,296                        | 4,392  | 4,586  | 4,077  | 4,125  | 4,183  | 4,216  | 4,249  |
| Imports                           | 22                           | 22     | 22     | 22     | 22     | 22     | 22     | 22     |
| <b>Domestic use</b>               | 2,047                        | 2,175  | 2,240  | 2,235  | 2,221  | 2,224  | 2,236  | 2,251  |
| Crush                             | 1,901                        | 2,040  | 2,098  | 2,102  | 2,087  | 2,088  | 2,098  | 2,111  |
| Seed and residual                 | 146                          | 135    | 142    | 133    | 134    | 136    | 138    | 139    |
| <b>Exports</b>                    | 2,166                        | 2,110  | 2,116  | 2,033  | 1,987  | 1,977  | 1,994  | 2,015  |
| <b>Total use</b>                  | 4,214                        | 4,285  | 4,355  | 4,269  | 4,208  | 4,201  | 4,230  | 4,266  |
| <b>Ending stocks</b>              | 302                          | 430    | 683    | 513    | 452    | 456    | 464    | 470    |
| Under loan                        | 14                           | 15     | 20     | 17     | 16     | 16     | 18     | 19     |
| Other stocks                      | 288                          | 415    | 662    | 496    | 436    | 439    | 446    | 450    |
| <b>Prices, program provisions</b> | (Dollars per bushel)         |        |        |        |        |        |        |        |
| Farm price                        | 9.47                         | 9.35   | 8.73   | 8.95   | 9.29   | 9.39   | 9.23   | 9.14   |
| Illinois processor price          | 9.77                         | 9.55   | 8.96   | 9.18   | 9.52   | 9.61   | 9.45   | 9.37   |
| Loan rate                         | 5.00                         | 5.00   | 5.00   | 5.00   | 5.00   | 5.00   | 5.00   | 5.00   |
| Reference price                   | 8.40                         | 8.40   | 8.40   | 8.40   | 8.40   | 8.40   | 8.40   | 8.40   |
| <b>Market returns</b>             | (Dollars)                    |        |        |        |        |        |        |        |
| Gross market revenue/a.           | 491.97                       | 458.67 | 450.29 | 432.73 | 453.41 | 462.27 | 458.43 | 458.17 |
| Variable expenses/a.              | 163.50                       | 162.43 | 162.31 | 164.02 | 166.64 | 169.65 | 172.71 | 175.29 |
| Market net return/a.              | 328.47                       | 296.24 | 287.98 | 268.71 | 286.77 | 292.61 | 285.72 | 282.88 |
| <b>Other indicators</b>           |                              |        |        |        |        |        |        |        |
| Soybean/corn price ratio          | 2.82                         | 2.75   | 2.41   | 2.34   | 2.41   | 2.43   | 2.40   | 2.41   |
| 48% soymeal price, \$/ton         | 316.88                       | 350.00 | 314.65 | 319.72 | 327.53 | 330.50 | 326.51 | 323.86 |
| Soybean oil price, cents/lb.      | 32.55                        | 30.00  | 29.61  | 31.21  | 32.37  | 32.77  | 32.44  | 32.34  |
| Crushing margin, \$/bu.           | 1.49                         | 2.22   | 1.92   | 2.01   | 1.99   | 2.02   | 2.04   | 2.05   |

## U.S. corn supply and use

| September-August year             | 16/17                        | 17/18  | 18/19  | 19/20  | 20/21  | 21/22  | 22/23  | 23/24  |
|-----------------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Area</b>                       | (Million acres)              |        |        |        |        |        |        |        |
| Planted area                      | 94.0                         | 90.2   | 89.1   | 91.1   | 92.4   | 92.2   | 92.3   | 92.1   |
| Harvested area                    | 86.7                         | 82.7   | 81.8   | 83.7   | 84.9   | 84.7   | 84.8   | 84.7   |
| <b>Yield</b>                      | (Bushels per harvested acre) |        |        |        |        |        |        |        |
|                                   | 174.6                        | 176.6  | 178.4  | 173.0  | 174.8  | 176.4  | 178.0  | 179.8  |
| <b>Supply</b>                     | (Million bushels)            |        |        |        |        |        |        |        |
| Beginning stocks                  | 1,737                        | 2,293  | 2,027  | 1,717  | 1,622  | 1,700  | 1,751  | 1,815  |
| Production                        | 15,148                       | 14,604 | 14,586 | 14,485 | 14,839 | 14,945 | 15,091 | 15,220 |
| Imports                           | 57                           | 40     | 40     | 40     | 40     | 40     | 40     | 40     |
| <b>Domestic use</b>               | 12,355                       | 12,510 | 12,612 | 12,535 | 12,573 | 12,590 | 12,624 | 12,676 |
| Feed and residual                 | 5,470                        | 5,450  | 5,546  | 5,534  | 5,610  | 5,631  | 5,651  | 5,688  |
| Ethanol and coproducts            | 5,432                        | 5,600  | 5,606  | 5,538  | 5,483  | 5,465  | 5,466  | 5,469  |
| HFCS                              | 466                          | 460    | 450    | 445    | 447    | 447    | 446    | 443    |
| Seed                              | 29                           | 29     | 30     | 31     | 31     | 31     | 31     | 32     |
| Food and other                    | 957                          | 971    | 979    | 989    | 1,002  | 1,016  | 1,030  | 1,044  |
| <b>Exports</b>                    | 2,294                        | 2,400  | 2,326  | 2,084  | 2,228  | 2,344  | 2,443  | 2,507  |
| <b>Total use</b>                  | 14,649                       | 14,910 | 14,937 | 14,620 | 14,801 | 14,934 | 15,066 | 15,183 |
| <b>Ending stocks</b>              | 2,293                        | 2,027  | 1,717  | 1,622  | 1,700  | 1,751  | 1,815  | 1,892  |
| Under loan                        | 181                          | 150    | 142    | 127    | 128    | 128    | 130    | 135    |
| Other stocks                      | 2,112                        | 1,877  | 1,575  | 1,495  | 1,572  | 1,623  | 1,685  | 1,757  |
| <b>Prices, program provisions</b> | (Dollars per bushel)         |        |        |        |        |        |        |        |
| Farm price                        | 3.36                         | 3.40   | 3.62   | 3.83   | 3.85   | 3.87   | 3.85   | 3.79   |
| Loan rate                         | 1.95                         | 1.95   | 1.95   | 1.95   | 1.95   | 1.95   | 1.95   | 1.95   |
| Reference price                   | 3.70                         | 3.70   | 3.70   | 3.70   | 3.70   | 3.70   | 3.70   | 3.70   |
| <b>Market returns</b>             | (Dollars)                    |        |        |        |        |        |        |        |
| Gross market revenue/a.           | 586.73                       | 600.39 | 646.04 | 661.82 | 673.22 | 682.00 | 685.65 | 682.23 |
| Variable expenses/a.              | 349.91                       | 341.18 | 339.84 | 344.82 | 348.14 | 352.41 | 358.40 | 363.89 |
| Market net return/a.              | 236.82                       | 259.21 | 306.20 | 317.00 | 325.08 | 329.59 | 327.25 | 318.34 |

## U.S. wheat supply and use

| June-May year                     | 16/17                        | 17/18  | 18/19  | 19/20  | 20/21  | 21/22  | 22/23  | 23/24  |
|-----------------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Area</b>                       | (Million acres)              |        |        |        |        |        |        |        |
| Planted area                      | 50.1                         | 46.0   | 47.8   | 50.1   | 47.7   | 47.4   | 47.3   | 47.2   |
| Harvested area                    | 43.9                         | 37.6   | 39.6   | 42.2   | 40.2   | 40.0   | 39.8   | 39.7   |
| <b>Yield</b>                      | (Bushels per harvested acre) |        |        |        |        |        |        |        |
|                                   | 52.7                         | 46.3   | 47.4   | 47.5   | 47.7   | 48.1   | 48.5   | 48.8   |
| <b>Supply</b>                     | (Million bushels)            |        |        |        |        |        |        |        |
| Beginning stocks                  | 976                          | 1,181  | 1,100  | 956    | 961    | 931    | 923    | 928    |
| Production                        | 2,309                        | 1,741  | 1,877  | 2,005  | 1,917  | 1,922  | 1,929  | 1,939  |
| Imports                           | 118                          | 157    | 141    | 150    | 150    | 151    | 150    | 151    |
| <b>Domestic use</b>               | 1,171                        | 1,077  | 1,142  | 1,158  | 1,162  | 1,161  | 1,164  | 1,162  |
| Feed and residual                 | 161                          | 48     | 107    | 124    | 126    | 123    | 123    | 118    |
| Seed                              | 61                           | 64     | 67     | 63     | 63     | 63     | 62     | 62     |
| Food and other                    | 949                          | 964    | 968    | 971    | 973    | 975    | 979    | 982    |
| <b>Exports</b>                    | 1,051                        | 901    | 1,020  | 991    | 935    | 919    | 911    | 920    |
| <b>Total use</b>                  | 2,222                        | 1,978  | 2,162  | 2,149  | 2,096  | 2,080  | 2,075  | 2,083  |
| <b>Ending stocks</b>              | 1,181                        | 1,100  | 956    | 961    | 931    | 923    | 928    | 935    |
| Under loan                        | 34                           | 15     | 19     | 20     | 19     | 19     | 19     | 19     |
| Other stocks                      | 1,147                        | 1,085  | 937    | 940    | 912    | 905    | 909    | 916    |
| <b>Prices, program provisions</b> | (Dollars per bushel)         |        |        |        |        |        |        |        |
| Farm price                        | 3.89                         | 4.73   | 5.12   | 5.11   | 5.16   | 5.21   | 5.16   | 5.16   |
| Loan rate                         | 2.94                         | 2.94   | 2.94   | 2.94   | 2.94   | 2.94   | 2.94   | 2.94   |
| Reference price                   | 5.50                         | 5.50   | 5.50   | 5.50   | 5.50   | 5.50   | 5.50   | 5.50   |
| <b>Market returns</b>             | (Dollars)                    |        |        |        |        |        |        |        |
| Gross market revenue/a.           | 204.81                       | 219.04 | 242.83 | 242.69 | 246.43 | 250.59 | 250.25 | 251.49 |
| Variable expenses/a.              | 110.19                       | 109.53 | 112.05 | 115.30 | 116.14 | 117.49 | 119.41 | 121.21 |
| Market net return/a.              | 94.62                        | 109.51 | 130.78 | 127.39 | 130.29 | 133.10 | 130.84 | 130.28 |



## U.S. upland cotton supply and use

| August-July year                  | 16/17                       | 17/18  | 18/19  | 19/20  | 20/21  | 21/22  | 22/23  | 23/24  |
|-----------------------------------|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Area</b>                       | (Million acres)             |        |        |        |        |        |        |        |
| Planted area                      | 9.88                        | 12.36  | 13.28  | 12.91  | 12.72  | 12.55  | 12.44  | 12.40  |
| Harvested area                    | 9.32                        | 10.85  | 9.90   | 10.88  | 10.71  | 10.56  | 10.46  | 10.43  |
| <b>Yield</b>                      | (Pounds per harvested acre) |        |        |        |        |        |        |        |
|                                   | 855                         | 895    | 895    | 854    | 861    | 869    | 877    | 885    |
| <b>Supply</b>                     | (Million bales)             |        |        |        |        |        |        |        |
| Beginning stocks                  | 3.66                        | 2.69   | 4.30   | 4.59   | 5.20   | 5.35   | 5.42   | 5.44   |
| Production                        | 16.60                       | 20.22  | 18.46  | 19.35  | 19.21  | 19.11  | 19.11  | 19.23  |
| Imports                           | 0.01                        | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| <b>Domestic use</b>               |                             |        |        |        |        |        |        |        |
| Mill use                          | 3.22                        | 3.22   | 3.37   | 3.51   | 3.60   | 3.68   | 3.73   | 3.77   |
| <b>Exports</b>                    | 14.30                       | 15.21  | 14.80  | 15.24  | 15.45  | 15.36  | 15.37  | 15.40  |
| <b>Total use</b>                  | 17.52                       | 18.43  | 18.17  | 18.74  | 19.06  | 19.04  | 19.10  | 19.17  |
| <b>Unaccounted</b>                | 0.06                        | 0.18   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| <b>Ending stocks</b>              | 2.69                        | 4.30   | 4.59   | 5.20   | 5.35   | 5.42   | 5.44   | 5.50   |
| <b>Prices, program provisions</b> | (Cents per pound)           |        |        |        |        |        |        |        |
| Farm price                        | 68.0                        | 68.0   | 75.2   | 71.2   | 71.0   | 69.8   | 70.2   | 70.0   |
| Adjusted world price              | 63.9                        | 69.7   | 74.1   | 70.5   | 70.6   | 69.1   | 69.4   | 69.2   |
| Loan rate                         | 49.5                        | 49.5   | 52.0   | 52.0   | 52.0   | 52.0   | 52.0   | 52.0   |
| User payment                      | 3.0                         | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    |
| <b>Market returns</b>             | (Dollars)                   |        |        |        |        |        |        |        |
| Gross market revenue/a.           | 693.73                      | 690.64 | 761.31 | 694.05 | 700.23 | 696.43 | 705.13 | 708.90 |
| Variable expenses/a.              | 442.87                      | 440.89 | 444.84 | 455.33 | 460.56 | 469.59 | 480.24 | 492.33 |
| Market net return/a.              | 250.86                      | 249.75 | 316.48 | 238.72 | 239.67 | 226.84 | 224.89 | 216.58 |

## U.S. rice supply and use

| August-July year                  | 16/17                       | 17/18  | 18/19  | 19/20  | 20/21  | 21/22  | 22/23  | 23/24  |
|-----------------------------------|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Area</b>                       | (Million acres)             |        |        |        |        |        |        |        |
| Planted area                      | 3.15                        | 2.46   | 2.84   | 2.77   | 2.80   | 2.78   | 2.77   | 2.78   |
| Harvested area                    | 3.10                        | 2.37   | 2.80   | 2.70   | 2.74   | 2.71   | 2.71   | 2.71   |
|                                   | (Pounds per harvested acre) |        |        |        |        |        |        |        |
| <b>Yield</b>                      | 7,237                       | 7,507  | 7,525  | 7,820  | 7,880  | 7,947  | 8,014  | 8,078  |
|                                   | (Million hundredweight)     |        |        |        |        |        |        |        |
| <b>Supply</b>                     | 294.1                       | 251.3  | 271.9  | 279.9  | 286.4  | 288.1  | 290.3  | 293.5  |
| Beginning stocks                  | 46.5                        | 46.0   | 34.8   | 41.8   | 43.4   | 45.2   | 45.7   | 46.1   |
| Production                        | 224.1                       | 178.2  | 210.9  | 211.2  | 215.9  | 215.5  | 216.9  | 219.3  |
| Imports                           | 23.5                        | 27.0   | 26.2   | 26.9   | 27.1   | 27.5   | 27.8   | 28.1   |
| <b>Domestic use</b>               | 131.4                       | 130.0  | 131.5  | 131.1  | 132.0  | 132.5  | 133.1  | 134.0  |
| <b>Exports</b>                    | 116.7                       | 86.5   | 98.6   | 105.4  | 109.2  | 110.0  | 111.1  | 112.7  |
| <b>Total use</b>                  | 248.0                       | 216.5  | 230.1  | 236.4  | 241.2  | 242.4  | 244.2  | 246.7  |
| <b>Ending stocks</b>              | 46.0                        | 34.8   | 41.8   | 43.4   | 45.2   | 45.7   | 46.1   | 46.8   |
| <b>Prices, program provisions</b> | (Dollars per hundredweight) |        |        |        |        |        |        |        |
| Farm price                        | 10.40                       | 12.50  | 12.25  | 12.64  | 12.55  | 12.32  | 12.36  | 12.34  |
| Long grain                        | 9.61                        | 11.70  | 10.98  | 11.67  | 11.66  | 11.68  | 11.83  | 11.89  |
| Japonica                          | 13.70                       | 16.60  | 18.47  | 17.79  | 17.65  | 16.61  | 16.39  | 16.11  |
| Other medium, short grain         | 10.10                       | 12.00  | 12.39  | 12.46  | 12.40  | 11.99  | 11.98  | 11.90  |
| Loan rate                         | 6.50                        | 6.50   | 6.50   | 6.50   | 6.50   | 6.50   | 6.50   | 6.50   |
| Reference price                   |                             |        |        |        |        |        |        |        |
| Long grain                        | 14.00                       | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  |
| Japonica                          | 16.10                       | 16.10  | 16.10  | 16.10  | 16.10  | 16.10  | 16.10  | 16.10  |
| Other medium, short grain         | 14.00                       | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  |
| <b>Market returns</b>             | (Dollars)                   |        |        |        |        |        |        |        |
| Gross market revenue/a.           | 752.70                      | 938.44 | 921.87 | 988.28 | 989.14 | 978.75 | 990.67 | 996.77 |
| Variable expenses/a.              | 545.44                      | 551.01 | 563.46 | 572.19 | 578.99 | 586.97 | 597.22 | 608.01 |
| Market net return/a.              | 207.26                      | 387.43 | 358.41 | 416.09 | 410.14 | 391.78 | 393.45 | 388.76 |

## Other U.S. feed grains supply and use

| Marketing year  | 16/17                        | 17/18 | 18/19 | 19/20 | 20/21 | 21/22 | 22/23 | 23/24 |
|-----------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| <b>Sorghum</b>  |                              |       |       |       |       |       |       |       |
|                 | (Million acres)              |       |       |       |       |       |       |       |
| Planted area    | 6.69                         | 5.63  | 6.04  | 5.97  | 6.18  | 6.11  | 6.09  | 6.10  |
| Harvested area  | 6.16                         | 5.05  | 5.29  | 5.37  | 5.56  | 5.50  | 5.48  | 5.49  |
|                 | (Bushels per harvested acre) |       |       |       |       |       |       |       |
| Yield           | 77.9                         | 72.1  | 70.9  | 68.4  | 68.8  | 69.0  | 69.1  | 69.3  |
|                 | (Million bushels)            |       |       |       |       |       |       |       |
| Production      | 480                          | 364   | 375   | 367   | 382   | 379   | 379   | 380   |
| Imports         | 2                            | 2     | 2     | 2     | 2     | 2     | 2     | 2     |
| Domestic use    | 245                          | 145   | 206   | 187   | 196   | 196   | 195   | 194   |
| Exports         | 241                          | 210   | 178   | 186   | 185   | 185   | 185   | 187   |
| Ending stocks   | 33                           | 44    | 38    | 34    | 37    | 37    | 38    | 40    |
|                 | (Dollars per bushel)         |       |       |       |       |       |       |       |
| Farm price      | 2.79                         | 3.20  | 3.34  | 3.68  | 3.60  | 3.58  | 3.55  | 3.51  |
| Reference price | 3.95                         | 3.95  | 3.95  | 3.95  | 3.95  | 3.95  | 3.95  | 3.95  |
| <b>Barley</b>   |                              |       |       |       |       |       |       |       |
|                 | (Million acres)              |       |       |       |       |       |       |       |
| Planted area    | 3.06                         | 2.48  | 2.55  | 2.37  | 2.58  | 2.56  | 2.53  | 2.50  |
| Harvested area  | 2.57                         | 1.95  | 2.05  | 1.94  | 2.10  | 2.09  | 2.07  | 2.04  |
|                 | (Bushels per harvested acre) |       |       |       |       |       |       |       |
| Yield           | 77.9                         | 72.6  | 76.3  | 76.2  | 76.2  | 76.9  | 77.8  | 78.7  |
|                 | (Million bushels)            |       |       |       |       |       |       |       |
| Production      | 200                          | 142   | 156   | 148   | 160   | 161   | 161   | 160   |
| Imports         | 10                           | 9     | 21    | 21    | 22    | 18    | 18    | 18    |
| Domestic use    | 201                          | 158   | 176   | 170   | 173   | 172   | 172   | 171   |
| Exports         | 4                            | 5     | 4     | 4     | 5     | 5     | 6     | 6     |
| Ending stocks   | 106                          | 95    | 91    | 85    | 89    | 90    | 91    | 92    |
|                 | (Dollars per bushel)         |       |       |       |       |       |       |       |
| Farm price      | 4.96                         | 4.47  | 4.61  | 4.75  | 4.80  | 4.79  | 4.76  | 4.70  |
| Reference price | 4.95                         | 4.95  | 4.95  | 4.95  | 4.95  | 4.95  | 4.95  | 4.95  |
| <b>Oats</b>     |                              |       |       |       |       |       |       |       |
|                 | (Million acres)              |       |       |       |       |       |       |       |
| Planted area    | 2.83                         | 2.59  | 2.89  | 2.72  | 2.75  | 2.76  | 2.77  | 2.79  |
| Harvested area  | 0.98                         | 0.80  | 1.01  | 0.97  | 0.99  | 0.99  | 0.99  | 1.00  |
|                 | (Bushels per harvested acre) |       |       |       |       |       |       |       |
| Yield           | 66.0                         | 61.7  | 65.1  | 65.9  | 66.3  | 66.7  | 67.1  | 67.5  |
|                 | (Million bushels)            |       |       |       |       |       |       |       |
| Production      | 65                           | 49    | 66    | 64    | 65    | 66    | 67    | 68    |
| Imports         | 90                           | 89    | 93    | 90    | 90    | 89    | 88    | 87    |
| Domestic use    | 158                          | 146   | 153   | 154   | 153   | 152   | 152   | 152   |
| Exports         | 3                            | 2     | 2     | 2     | 2     | 2     | 2     | 2     |
| Ending stocks   | 50                           | 41    | 44    | 42    | 41    | 41    | 41    | 42    |
|                 | (Dollars per bushel)         |       |       |       |       |       |       |       |
| Farm price      | 2.06                         | 2.58  | 2.82  | 2.58  | 2.67  | 2.67  | 2.67  | 2.65  |
| Reference price | 2.40                         | 2.40  | 2.40  | 2.40  | 2.40  | 2.40  | 2.40  | 2.40  |

## Other U.S. oilseeds supply and use

| Marketing year       | 16/17                        | 17/18 | 18/19 | 19/20 | 20/21 | 21/22 | 22/23 | 23/24 |
|----------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| <b>Peanuts</b>       |                              |       |       |       |       |       |       |       |
|                      | (Million acres)              |       |       |       |       |       |       |       |
| Planted area         | 1.67                         | 1.87  | 1.50  | 1.57  | 1.54  | 1.58  | 1.60  | 1.60  |
| Harvested area       | 1.54                         | 1.78  | 1.46  | 1.49  | 1.47  | 1.50  | 1.52  | 1.52  |
|                      | (Pounds per harvested acre)  |       |       |       |       |       |       |       |
| Yield                | 3,634                        | 4,074 | 4,167 | 4,067 | 4,126 | 4,186 | 4,241 | 4,295 |
|                      | (Million pounds)             |       |       |       |       |       |       |       |
| Production           | 5,582                        | 7,234 | 6,089 | 6,066 | 6,075 | 6,285 | 6,459 | 6,534 |
| Imports              | 162                          | 170   | 100   | 100   | 100   | 100   | 100   | 100   |
| Domestic use         | 4,765                        | 4,941 | 4,914 | 5,019 | 5,080 | 5,138 | 5,210 | 5,270 |
| Exports              | 1,328                        | 1,275 | 1,213 | 1,276 | 1,300 | 1,304 | 1,320 | 1,340 |
| Ending stocks        | 1,442                        | 2,629 | 2,691 | 2,562 | 2,356 | 2,299 | 2,328 | 2,352 |
|                      | (Cents per pound)            |       |       |       |       |       |       |       |
| Farm price           | 19.70                        | 23.25 | 22.12 | 20.91 | 21.18 | 22.07 | 22.07 | 22.03 |
| Reference price      | 26.75                        | 26.75 | 26.75 | 26.75 | 26.75 | 26.75 | 26.75 | 26.75 |
| <b>Sunflowerseed</b> |                              |       |       |       |       |       |       |       |
|                      | (Million acres)              |       |       |       |       |       |       |       |
| Planted area         | 1.60                         | 1.40  | 1.46  | 1.36  | 1.41  | 1.41  | 1.40  | 1.40  |
| Harvested area       | 1.53                         | 1.34  | 1.41  | 1.25  | 1.30  | 1.30  | 1.29  | 1.29  |
|                      | (Pounds per harvested acre)  |       |       |       |       |       |       |       |
| Yield                | 1,731                        | 1,613 | 1,623 | 1,643 | 1,652 | 1,660 | 1,666 | 1,675 |
|                      | (Million pounds)             |       |       |       |       |       |       |       |
| Production           | 2,652                        | 2,169 | 2,283 | 2,048 | 2,152 | 2,156 | 2,152 | 2,161 |
| Imports              | 176                          | 205   | 205   | 205   | 205   | 205   | 205   | 205   |
| Domestic use         | 2,453                        | 2,200 | 2,236 | 2,099 | 2,114 | 2,115 | 2,118 | 2,128 |
| Exports              | 198                          | 176   | 322   | 176   | 235   | 246   | 237   | 235   |
| Ending stocks        | 589                          | 586   | 516   | 495   | 503   | 504   | 506   | 509   |
|                      | (Cents per pound)            |       |       |       |       |       |       |       |
| Farm price           | 17.40                        | 17.50 | 16.45 | 16.94 | 17.35 | 17.57 | 17.26 | 17.18 |
| Reference price      | 20.15                        | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 |
| <b>Canola</b>        |                              |       |       |       |       |       |       |       |
|                      | (Million acres)              |       |       |       |       |       |       |       |
| Planted area         | 1.71                         | 2.08  | 2.05  | 1.97  | 2.01  | 2.01  | 2.02  | 2.02  |
| Harvested area       | 1.69                         | 2.00  | 2.02  | 1.92  | 1.96  | 1.97  | 1.97  | 1.97  |
|                      | (Bushels per harvested acre) |       |       |       |       |       |       |       |
| Yield                | 1,824                        | 1,558 | 1,564 | 1,792 | 1,805 | 1,816 | 1,826 | 1,839 |
|                      | (Million pounds)             |       |       |       |       |       |       |       |
| Production           | 3,086                        | 3,119 | 3,153 | 3,440 | 3,545 | 3,571 | 3,593 | 3,623 |
| Imports              | 1,537                        | 1,426 | 1,653 | 1,514 | 1,601 | 1,694 | 1,733 | 1,745 |
| Domestic use         | 4,477                        | 4,252 | 4,492 | 4,624 | 4,797 | 4,915 | 4,979 | 5,022 |
| Exports              | 262                          | 337   | 306   | 326   | 349   | 350   | 347   | 344   |
| Ending stocks        | 239                          | 195   | 202   | 205   | 206   | 206   | 207   | 209   |
|                      | (Cents per pound)            |       |       |       |       |       |       |       |
| Farm price           | 16.60                        | 17.50 | 16.44 | 16.48 | 16.95 | 17.10 | 17.07 | 16.92 |
| Reference price      | 20.15                        | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 |

## U.S. hay supply and use

| May-April year | 16/17  | 17/18  | 18/19  | 19/20                       | 20/21  | 21/22  | 22/23  | 23/24  |
|----------------|--------|--------|--------|-----------------------------|--------|--------|--------|--------|
| Area harvested | 53.5   | 53.8   | 55.1   | (Million acres)<br>55.6     | 55.9   | 55.9   | 55.8   | 55.8   |
| Yield          | 2.52   | 2.44   | 2.33   | (Tons per acre)<br>2.42     | 2.43   | 2.44   | 2.45   | 2.46   |
| Production     | 135.0  | 131.5  | 128.5  | (Million tons)<br>134.5     | 135.8  | 136.5  | 136.8  | 137.2  |
| Disappearance  | 135.7  | 140.2  | 133.0  | 134.2                       | 135.4  | 136.1  | 136.5  | 136.8  |
| Ending stocks  | 24.4   | 15.7   | 11.2   | 11.5                        | 11.9   | 12.3   | 12.6   | 13.0   |
| All hay price  | 129.00 | 140.00 | 165.55 | (Dollars per ton)<br>167.41 | 167.46 | 167.01 | 166.37 | 165.23 |

## U.S. planted and idled area

| Marketing year                    | 16/17  | 17/18  | 18/19  | 19/20           | 20/21  | 21/22  | 22/23  | 23/24  |
|-----------------------------------|--------|--------|--------|-----------------|--------|--------|--------|--------|
| <b>Planted area</b>               |        |        |        | (Million acres) |        |        |        |        |
| Corn                              | 94.00  | 90.17  | 89.13  | 91.08           | 92.38  | 92.21  | 92.27  | 92.14  |
| Soybeans                          | 83.43  | 90.14  | 89.56  | 84.97           | 85.21  | 85.60  | 85.55  | 85.42  |
| Wheat                             | 50.12  | 46.01  | 47.82  | 50.12           | 47.66  | 47.43  | 47.28  | 47.18  |
| Upland cotton                     | 9.88   | 12.36  | 13.28  | 12.91           | 12.72  | 12.55  | 12.44  | 12.40  |
| Sorghum                           | 6.69   | 5.63   | 6.04   | 5.97            | 6.18   | 6.11   | 6.09   | 6.10   |
| Barley                            | 3.06   | 2.48   | 2.55   | 2.37            | 2.58   | 2.56   | 2.53   | 2.50   |
| Oats                              | 2.83   | 2.59   | 2.89   | 2.72            | 2.75   | 2.76   | 2.77   | 2.79   |
| Rice                              | 3.15   | 2.46   | 2.84   | 2.77            | 2.80   | 2.78   | 2.77   | 2.78   |
| Sunflower seed                    | 1.60   | 1.40   | 1.46   | 1.36            | 1.41   | 1.41   | 1.40   | 1.40   |
| Peanuts                           | 1.67   | 1.87   | 1.50   | 1.57            | 1.54   | 1.58   | 1.60   | 1.60   |
| Canola                            | 1.71   | 2.08   | 2.05   | 1.97            | 2.01   | 2.01   | 2.02   | 2.02   |
| Sugar beets                       | 1.16   | 1.13   | 1.12   | 1.12            | 1.16   | 1.18   | 1.20   | 1.21   |
| Sugarcane harvested               | 0.90   | 0.90   | 0.91   | 0.90            | 0.91   | 0.92   | 0.92   | 0.93   |
| <b>13-crop planted</b>            | 260.21 | 259.22 | 261.15 | 259.81          | 259.33 | 259.09 | 258.84 | 258.46 |
| <b>Hay area harvested</b>         | 53.48  | 53.78  | 55.07  | 55.61           | 55.91  | 55.91  | 55.85  | 55.81  |
| <b>13 crops + hay</b>             | 313.69 | 313.01 | 316.22 | 315.42          | 315.23 | 315.01 | 314.69 | 314.27 |
| <b>Conservation reserve (CRP)</b> | 23.88  | 23.43  | 22.63  | 22.60           | 22.60  | 22.60  | 22.60  | 22.60  |
| <b>13 crops + hay + CRP</b>       | 337.57 | 336.44 | 338.85 | 338.02          | 337.83 | 337.61 | 337.29 | 336.87 |
| <b>Double crop area</b>           | 3.86   | 3.71   | 3.49   | 3.70            | 3.53   | 3.56   | 3.55   | 3.52   |
| <b>Total minus double crop</b>    | 333.71 | 332.74 | 335.36 | 334.32          | 334.30 | 334.05 | 333.74 | 333.34 |

## U.S. soybean product supply and use

| October-September year   | 16/17  | 17/18  | 18/19  | 19/20             | 20/21  | 21/22  | 22/23  | 23/24  |  |
|--------------------------|--------|--------|--------|-------------------|--------|--------|--------|--------|--|
| <b>Soybean meal</b>      |        |        |        | (Thousand tons)   |        |        |        |        |  |
| Production               | 44,787 | 48,499 | 49,727 | 49,832            | 49,482 | 49,497 | 49,742 | 50,050 |  |
| Imports                  | 350    | 500    | 500    | 500               | 500    | 500    | 500    | 500    |  |
| Domestic use             | 33,420 | 34,900 | 36,553 | 37,238            | 37,357 | 37,512 | 37,872 | 38,160 |  |
| Exports                  | 11,580 | 14,100 | 13,652 | 13,094            | 12,626 | 12,485 | 12,366 | 12,386 |  |
| Ending stocks            | 401    | 400    | 421    | 421               | 420    | 421    | 425    | 429    |  |
| <b>Soybean oil</b>       |        |        |        | (Million pounds)  |        |        |        |        |  |
| Production               | 22,123 | 23,495 | 24,258 | 24,309            | 24,138 | 24,146 | 24,265 | 24,416 |  |
| Imports                  | 319    | 315    | 315    | 315               | 315    | 315    | 315    | 315    |  |
| Domestic use             | 19,862 | 20,900 | 21,958 | 22,163            | 22,271 | 22,426 | 22,569 | 22,697 |  |
| Biodiesel                | 6,200  | 6,907  | 7,800  | 7,934             | 8,008  | 8,114  | 8,175  | 8,225  |  |
| Food and other           | 13,662 | 13,993 | 14,158 | 14,229            | 14,263 | 14,311 | 14,394 | 14,472 |  |
| Exports                  | 2,556  | 2,450  | 2,779  | 2,319             | 2,116  | 2,039  | 1,983  | 2,006  |  |
| Ending stocks            | 1,711  | 2,171  | 2,008  | 2,149             | 2,215  | 2,211  | 2,239  | 2,267  |  |
| <b>Decatur prices</b>    |        |        |        | (Dollars per ton) |        |        |        |        |  |
| Soybean meal 48% protein | 316.88 | 350.00 | 314.65 | 319.72            | 327.53 | 330.50 | 326.51 | 323.86 |  |
|                          |        |        |        | (Cents per pound) |        |        |        |        |  |
| Soybean oil              | 32.55  | 30.00  | 29.61  | 31.21             | 32.37  | 32.77  | 32.44  | 32.34  |  |

## U.S. biomass-based diesel supply and use

| Calendar year                | 2016  | 2017  | 2018  | 2019                 | 2020  | 2021  | 2022  | 2023  |  |
|------------------------------|-------|-------|-------|----------------------|-------|-------|-------|-------|--|
| <b>Supply and use</b>        |       |       |       | (Million gallons)    |       |       |       |       |  |
| Production                   | 1,935 | 2,138 | 2,315 | 2,440                | 2,477 | 2,502 | 2,520 | 2,532 |  |
| Biodiesel                    | 1,568 | 1,734 | 1,920 | 2,020                | 2,046 | 2,079 | 2,105 | 2,123 |  |
| From soybean oil             | 794   | 809   | 926   | 1,042                | 1,027 | 1,045 | 1,057 | 1,063 |  |
| From corn oil                | 170   | 205   | 303   | 280                  | 310   | 326   | 342   | 354   |  |
| From other fats and oils     | 604   | 720   | 691   | 698                  | 709   | 709   | 707   | 705   |  |
| Cellulosic diesel            | 0     | 0     | 0     | 0                    | 0     | 0     | 0     | 0     |  |
| Renewable diesel             | 367   | 404   | 395   | 420                  | 432   | 423   | 415   | 409   |  |
| Net imports                  | 621   | 301   | 91    | 125                  | 121   | 143   | 157   | 169   |  |
| Domestic disappearance       | 2,453 | 2,508 | 2,439 | 2,581                | 2,606 | 2,649 | 2,679 | 2,702 |  |
| Ending stocks                | 269   | 199   | 166   | 150                  | 143   | 139   | 137   | 137   |  |
| <b>Prices and RIN values</b> |       |       |       | (Dollars per gallon) |       |       |       |       |  |
| Biodiesel rack, Des Moines   | 3.22  | 3.16  | 3.19  | 3.05                 | 3.21  | 3.32  | 3.37  | 3.37  |  |
| #2 diesel, refiner sales     | 1.37  | 1.69  | 2.06  | 2.04                 | 1.98  | 1.95  | 1.97  | 2.02  |  |
| Biodiesel RIN (per RIN gal.) | 0.91  | 1.01  | 0.50  | 0.52                 | 0.62  | 0.70  | 0.69  | 0.62  |  |

## U.S. ethanol supply and use

| Calendar year                   | 2016    | 2017    | 2018    | 2019                 | 2020    | 2021    | 2022    | 2023    |
|---------------------------------|---------|---------|---------|----------------------|---------|---------|---------|---------|
| <b>Petroleum fuel prices</b>    |         |         |         |                      |         |         |         |         |
|                                 |         |         |         | (Dollars per barrel) |         |         |         |         |
| Petroleum, W. Texas interm.     | 43.21   | 50.96   | 66.21   | 64.70                | 68.83   | 67.18   | 67.06   | 67.92   |
| Petroleum, refiners acquisition | 40.60   | 50.69   | 66.37   | 66.23                | 63.29   | 61.38   | 61.66   | 62.87   |
|                                 |         |         |         | (Dollars per gallon) |         |         |         |         |
| Unl. gasoline, FOB Omaha        | 1.56    | 1.81    | 2.18    | 2.16                 | 2.10    | 2.07    | 2.10    | 2.14    |
| Unleaded gasoline, retail       | 2.14    | 2.41    | 2.77    | 2.74                 | 2.69    | 2.66    | 2.69    | 2.73    |
|                                 |         |         |         | (Million gallons)    |         |         |         |         |
| <b>Motor gasoline supplied</b>  | 143,222 | 142,855 | 142,695 | 143,757              | 144,033 | 144,781 | 145,712 | 146,600 |
| <b>Ethanol supply and use</b>   |         |         |         |                      |         |         |         |         |
| Production                      | 15,413  | 15,845  | 15,866  | 15,759               | 15,555  | 15,457  | 15,466  | 15,501  |
| From corn                       | 15,085  | 15,691  | 15,713  | 15,609               | 15,417  | 15,326  | 15,338  | 15,371  |
| From other feedstocks           | 325     | 144     | 141     | 137                  | 124     | 114     | 111     | 111     |
| Cellulosic                      | 4       | 10      | 12      | 13                   | 15      | 16      | 18      | 19      |
| Imports                         | 36      | 77      | 67      | 78                   | 82      | 84      | 84      | 83      |
| Domestic disappearance          | 14,356  | 14,404  | 14,361  | 14,233               | 13,994  | 13,914  | 13,934  | 13,972  |
| In low-level blends             | 14,084  | 14,081  | 13,899  | 13,797               | 13,569  | 13,502  | 13,536  | 13,589  |
| In mid-level blends             | 82      | 132     | 213     | 208                  | 202     | 197     | 192     | 188     |
| In flex fuel vehicles           | 190     | 192     | 250     | 229                  | 223     | 214     | 205     | 196     |
| Exports                         | 1,170   | 1,379   | 1,555   | 1,590                | 1,632   | 1,617   | 1,607   | 1,604   |
| Ending stocks                   | 830     | 968     | 985     | 999                  | 1,011   | 1,021   | 1,030   | 1,039   |
| <b>Ethanol prices</b>           |         |         |         | (Dollars per gallon) |         |         |         |         |
| Conventional rack, Omaha        | 1.55    | 1.45    | 1.47    | 1.53                 | 1.50    | 1.49    | 1.51    | 1.53    |
| Other advanced rack             | 1.63    | 1.75    | 1.74    | 1.97                 | 2.05    | 2.12    | 2.13    | 2.10    |
| Effective retail                | 1.31    | 1.35    | 1.82    | 2.04                 | 2.02    | 2.00    | 2.03    | 2.07    |
| Ethanol/gasoline retail ratio   | 61%     | 56%     | 66%     | 74%                  | 75%     | 75%     | 76%     | 76%     |
| <b>RIN values</b>               |         |         |         | (Dollars per gallon) |         |         |         |         |
| Conventional ethanol            | 0.82    | 0.70    | 0.24    | 0.07                 | 0.07    | 0.07    | 0.07    | 0.05    |
| Other advanced ethanol          | 0.90    | 1.00    | 0.50    | 0.52                 | 0.62    | 0.70    | 0.69    | 0.62    |

## U.S. beef sector

| Calendar year                             | 2016   | 2017   | 2018   | 2019                        | 2020   | 2021   | 2022   | 2023   |  |
|---|--------|--------|--------|-----------------------------|--------|--------|--------|--------|--|
|   |        |        |        | (Million head)              |        |        |        |        |  |
| <b>Beef cows (Jan. 1)</b>                 | 30.2   | 31.2   | 31.7   | 31.8                        | 31.7   | 31.4   | 31.1   | 30.8   |  |
| <b>Dairy cows (Jan. 1)</b>                | 9.3    | 9.3    | 9.4    | 9.4                         | 9.3    | 9.3    | 9.3    | 9.3    |  |
| <b>Cattle and calves (Jan. 1)</b>         | 91.9   | 93.7   | 94.4   | 94.6                        | 94.1   | 93.2   | 92.3   | 91.4   |  |
|   |        |        |        | (Million pounds)            |        |        |        |        |  |
| <b>Beef supply and use</b>                |        |        |        |                             |        |        |        |        |  |
| Production                                | 25,288 | 26,250 | 27,205 | 27,923                      | 28,300 | 28,323 | 28,203 | 28,068 |  |
| Imports                                   | 3,012  | 2,993  | 3,037  | 3,072                       | 3,098  | 3,114  | 3,119  | 3,129  |  |
| Domestic use                              | 25,669 | 26,492 | 27,105 | 27,732                      | 28,071 | 28,120 | 28,053 | 28,013 |  |
| Exports                                   | 2,557  | 2,860  | 3,110  | 3,246                       | 3,311  | 3,312  | 3,270  | 3,186  |  |
| Ending stocks                             | 757    | 649    | 676    | 693                         | 709    | 713    | 712    | 711    |  |
|   |        |        |        | (Dollars per hundredweight) |        |        |        |        |  |
| <b>Prices</b>                             |        |        |        |                             |        |        |        |        |  |
| Total all grades, 5-area direct steers    | 120.86 | 121.52 | 116.59 | 111.43                      | 110.19 | 111.58 | 115.37 | 119.99 |  |
| 600 - 650 lb. Oklahoma City feeder steers | 153.44 | 155.82 | 158.51 | 145.90                      | 141.06 | 144.29 | 152.49 | 162.14 |  |
| Boxed beef cutout                         | 206.68 | 209.74 | 213.45 | 204.75                      | 203.35 | 208.37 | 216.94 | 226.71 |  |
|   |        |        |        | (Dollars per pound)         |        |        |        |        |  |
| Beef retail                               | 5.96   | 5.91   | 5.97   | 5.89                        | 5.85   | 5.96   | 6.15   | 6.40   |  |

## U.S. pork sector

| Calendar year   | 2016   | 2017   | 2018   | 2019                        | 2020   | 2021   | 2022   | 2023   |  |
|---|--------|--------|--------|-----------------------------|--------|--------|--------|--------|--|
|   |        |        |        | (Million head)              |        |        |        |        |  |
| <b>Breeding herd (Dec. 1*)</b>                        | 6.00   | 6.11   | 6.18   | 6.33                        | 6.28   | 6.15   | 6.03   | 5.95   |  |
| <b>Market hogs (Dec. 1*)</b>                          | 62.9   | 65.4   | 67.5   | 68.7                        | 69.5   | 69.5   | 68.9   | 68.6   |  |
|   |        |        |        | (Million pounds)            |        |        |        |        |  |
| <b>Pork supply and use</b>                            |        |        |        |                             |        |        |        |        |  |
| Production  | 24,957 | 25,598 | 26,660 | 27,603                      | 27,948 | 28,005 | 27,985 | 28,107 |  |
| Imports   | 1,091  | 1,116  | 1,137  | 1,162                       | 1,133  | 1,124  | 1,108  | 1,104  |  |
| Domestic use  | 20,892 | 21,035 | 21,863 | 22,648                      | 22,811 | 22,735 | 22,626 | 22,633 |  |
| Exports   | 5,239  | 5,632  | 5,922  | 6,099                       | 6,263  | 6,397  | 6,474  | 6,575  |  |
| Ending stocks   | 507    | 554    | 567    | 585                         | 592    | 589    | 583    | 586    |  |
|   |        |        |        | (Dollars per hundredweight) |        |        |        |        |  |
| <b>Prices</b>   |        |        |        |                             |        |        |        |        |  |
| Barrows & gilts, national base 51-52% lean equivalent | 46.16  | 50.48  | 44.24  | 41.33                       | 44.49  | 48.36  | 52.33  | 53.72  |  |
| Pork cutout value                                     | 78.36  | 84.02  | 72.32  | 67.58                       | 73.13  | 80.19  | 87.55  | 90.33  |  |
|   |        |        |        | (Dollars per pound)         |        |        |        |        |  |
| Pork retail   | 3.75   | 3.78   | 3.71   | 3.60                        | 3.70   | 3.86   | 4.05   | 4.18   |  |

\* Preceding year



## U.S. poultry supply and use

| Calendar year                           | 2016              | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|---|-------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Broiler</b>                          |                   |        |        |        |        |        |        |        |
|   | (Million pounds)  |        |        |        |        |        |        |        |
| Production                              | 40,261            | 41,217 | 42,128 | 43,009 | 43,604 | 44,152 | 44,795 | 45,530 |
| Imports                                 | 131               | 126    | 133    | 136    | 134    | 136    | 138    | 140    |
| Domestic use                            | 33,802            | 34,473 | 35,345 | 36,084 | 36,523 | 36,910 | 37,379 | 37,924 |
| Exports                                 | 6,645             | 6,791  | 6,916  | 7,049  | 7,209  | 7,377  | 7,549  | 7,738  |
| Ending stocks                           | 778               | 856    | 856    | 867    | 874    | 875    | 880    | 888    |
| <b>Turkey</b>                           |                   |        |        |        |        |        |        |        |
| Production                              | 5,981             | 5,981  | 5,933  | 5,931  | 5,991  | 6,066  | 6,144  | 6,224  |
| Imports                                 | 50                | 25     | 25     | 28     | 29     | 29     | 30     | 30     |
| Domestic use                            | 5,384             | 5,352  | 5,320  | 5,328  | 5,363  | 5,418  | 5,480  | 5,543  |
| Exports                                 | 569               | 622    | 630    | 640    | 659    | 675    | 691    | 707    |
| Ending stocks                           | 279               | 310    | 317    | 308    | 305    | 307    | 309    | 313    |
| <b>Prices</b>                           |                   |        |        |        |        |        |        |        |
|   | (Cents per pound) |        |        |        |        |        |        |        |
| National composite<br>wholesale broiler | 84.33             | 93.54  | 99.30  | 94.20  | 93.67  | 95.46  | 96.91  | 98.09  |
| Broiler retail                          | 189.73            | 187.56 | 188.89 | 188.07 | 187.89 | 191.38 | 195.29 | 199.11 |
| 8-16 lb. national turkey hens           | 117.11            | 96.08  | 81.94  | 88.14  | 92.51  | 94.34  | 96.15  | 97.11  |
| Turkey retail                           | 155.27            | 158.21 | 151.56 | 154.11 | 160.86 | 165.46 | 169.32 | 172.73 |

## U.S. per-capita meat consumption

| Calendar year | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  | 2022  | 2023  |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| (Pounds)      |       |       |       |       |       |       |       |       |
| Beef          | 55.5  | 56.9  | 57.8  | 58.7  | 59.0  | 58.7  | 58.2  | 57.7  |
| Pork          | 50.1  | 50.1  | 51.7  | 53.1  | 53.2  | 52.6  | 52.0  | 51.7  |
| Broiler       | 89.7  | 90.8  | 92.5  | 93.7  | 94.2  | 94.5  | 95.1  | 95.8  |
| Turkey        | 16.6  | 16.4  | 16.2  | 16.1  | 16.1  | 16.2  | 16.2  | 16.3  |
| Sum           | 211.9 | 214.2 | 218.2 | 221.7 | 222.5 | 222.0 | 221.5 | 221.5 |

## U.S. dairy sector

| Calendar year                   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Milk supply</b>              |        |        |        |        |        |        |        |        |
| Dairy cows (thou. head)         | 9,325  | 9,392  | 9,397  | 9,346  | 9,302  | 9,278  | 9,278  | 9,292  |
| Milk yield (lbs. per cow)       | 22,779 | 22,941 | 23,170 | 23,529 | 23,835 | 24,151 | 24,456 | 24,748 |
| Milk production (bil. lbs.)     | 212.4  | 215.5  | 217.7  | 219.9  | 221.7  | 224.1  | 226.9  | 230.0  |
| (Dollars per hundredweight)     |        |        |        |        |        |        |        |        |
| <b>All milk price</b>           | 16.34  | 17.69  | 16.11  | 16.53  | 17.15  | 17.76  | 18.19  | 18.37  |
| <b>Wholesale prices</b>         |        |        |        |        |        |        |        |        |
| (Dollars per pound)             |        |        |        |        |        |        |        |        |
| Butter, CME                     | 2.08   | 2.33   | 2.25   | 2.14   | 2.13   | 2.14   | 2.14   | 2.16   |
| Cheese, Am., 40#, CME           | 1.58   | 1.61   | 1.52   | 1.57   | 1.61   | 1.66   | 1.70   | 1.71   |
| Nonfat dry milk, AA             | 0.85   | 0.88   | 0.79   | 0.86   | 0.95   | 1.01   | 1.07   | 1.08   |
| <b>Dairy product production</b> |        |        |        |        |        |        |        |        |
| (Million pounds)                |        |        |        |        |        |        |        |        |
| American cheese                 | 4,769  | 5,072  | 5,135  | 5,212  | 5,271  | 5,335  | 5,404  | 5,480  |
| Other cheese                    | 7,413  | 7,587  | 7,699  | 7,819  | 7,923  | 8,035  | 8,150  | 8,274  |
| Butter                          | 1,839  | 1,847  | 1,890  | 1,914  | 1,941  | 1,980  | 2,017  | 2,055  |
| Nonfat dry milk                 | 2,312  | 2,365  | 2,477  | 2,504  | 2,525  | 2,569  | 2,639  | 2,712  |

## U.S. consumer food price inflation

| Calendar year                   | 2016  | 2017  | 2018  | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------------------------|-------|-------|-------|------|------|------|------|------|
| (Change from the previous year) |       |       |       |      |      |      |      |      |
| <b>Food</b>                     | 0.3%  | 0.9%  | 1.6%  | 2.2% | 2.5% | 2.7% | 2.7% | 2.7% |
| <b>Food at home</b>             | -1.3% | -0.2% | 0.8%  | 2.0% | 2.4% | 2.6% | 2.6% | 2.6% |
| Cereal and bakery               | -0.3% | -0.5% | 0.4%  | 2.8% | 2.5% | 2.4% | 2.4% | 2.4% |
| Meat                            | -4.9% | -0.7% | 1.6%  | 0.8% | 2.0% | 2.9% | 3.1% | 3.0% |
| Dairy                           | -2.3% | 0.1%  | -0.3% | 2.4% | 3.1% | 3.1% | 2.9% | 2.8% |
| Fruits and vegetables           | 0.8%  | -0.2% | 1.0%  | 2.2% | 2.4% | 2.4% | 2.3% | 2.3% |
| Other food at home              | 0.1%  | 0.2%  | 0.2%  | 2.2% | 2.2% | 2.2% | 2.2% | 2.2% |
| <b>Food away from home</b>      | 2.6%  | 2.3%  | 2.6%  | 2.4% | 2.5% | 2.7% | 2.8% | 2.7% |