World Wheat Supply and Demand Situation

December 2019

Major data source: USDA World Agricultural Supply and Demand Estimates released December 10, 2019, unless otherwise indicated. Projections will change over the course of the year depending on weather and other developments.
Highlights of USDA’s 2019/20 Supply and Demand Estimates

- **2019/20 global wheat production to jump to record high of 765 MMT**
  - Wheat production in Argentina and Australia to fall to from last year to 19.0 MMT and 16.1 MMT, respectively
  - European Union (EU) and Russian wheat production to rebound over last year to 154 MMT and 74.5 MMT, respectively
  - U.S. wheat production to rise 2% above 2018/19 levels to 52.3 MMT in 2019/20

- **Global consumption forecast at 754 MMT, the highest on record**
  - Indonesian domestic consumption to reach a record 10.7 MMT, up 12% from the 5-year average
  - Domestic consumption in Brazil to tie the 2016/17 record of 12.2 MMT
  - U.S. domestic consumption to total 31.5 MMT, up 5% year-over-year

- **World wheat trade to jump 4% year-over-year to 180 MMT, 3% above the 5-year average of 175 MMT**
  - Exports from the Ukraine to reach a record 20 MMT in 2019/20, 20% higher than last year
  - European Union (EU) wheat exports to rebound 20% over last year to 29.0 MMT in 2019/20
  - U.S. 2019/20 exports to increase to 26.5 MMT, 4% higher than last year and 8% higher than the 5-year average
Highlights of USDA’s 2019/20 Supply and Demand Estimates

• World beginning stocks fell 2% year-over-year to 278 MMT, still 15% higher than the 5-year average of 242 MMT
  • Major exporter beginning stocks fell 13% from 2018/19 to 67 MMT
  • U.S. 2019/20 beginning stocks of 29.4 MMT are down 2% from last year and account for 43% of total major exporter beginning stocks

• Global ending stocks projected at 290 MMT, 4% higher than last year and 12% higher than the 5-year average
  • Estimated Chinese ending stocks of 147 MMT are 5% higher than last year, 31% higher than the 5-year average and account for 51% of the world total
  • U.S. ending stocks are expected to total 26.5 MMT in 2019/20, the lowest in 5 years

• U.S. farm gate average price to fall 12% from 2018/19 average price
  • Projected average farm gate price to fall to $4.55/bu* ($167/MT) from last year’s average of $5.16/bu ($190/MT)

*Average U.S. farm gate price, marketing year weighted average
Supply and Demand

World Production and Use

Production and Use in MMT from 09/10 to 19/20.

- Production:
  - 09/10: 650 MMT
  - 10/11: 650 MMT
  - 11/12: 670 MMT
  - 12/13: 670 MMT
  - 13/14: 700 MMT
  - 14/15: 700 MMT
  - 15/16: 720 MMT
  - 16/17: 731 MMT
  - 17/18: 743 MMT
  - 18/19: 763 MMT
  - 19/20: 765 MMT

- Use:
  - 09/10: 650 MMT
  - 10/11: 650 MMT
  - 11/12: 670 MMT
  - 12/13: 670 MMT
  - 13/14: 700 MMT
  - 14/15: 700 MMT
  - 15/16: 720 MMT
  - 16/17: 731 MMT
  - 17/18: 743 MMT
  - 18/19: 763 MMT
  - 19/20: 765 MMT

U.S. Wheat Associates

Supply and Demand
Supplies in Top Exporting Countries*

*Includes U.S., Canada, Australia, Argentina, EU, Russia, Ukraine and Kazakhstan

Supply and Demand
### World Wheat Supply and Demand (MMT)

<table>
<thead>
<tr>
<th></th>
<th>17/18</th>
<th>18/19</th>
<th>19/20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUPPLY:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning Stock</td>
<td>263</td>
<td>283</td>
<td>278</td>
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<tr>
<td>Production</td>
<td>763</td>
<td>731</td>
<td>765</td>
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<tr>
<td>Supply Total</td>
<td>1026</td>
<td>1014</td>
<td>1043</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>283</td>
<td>278</td>
<td>290</td>
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<tr>
<td><strong>TRADE:</strong></td>
<td></td>
<td></td>
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<tr>
<td>Exports/Imports</td>
<td>182</td>
<td>173</td>
<td>180</td>
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<tr>
<td><strong>DEMAND:</strong></td>
<td></td>
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<tr>
<td>Food &amp; Seed</td>
<td>596</td>
<td>597</td>
<td>605</td>
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<tr>
<td>Feed &amp; Residual</td>
<td>146</td>
<td>139</td>
<td>149</td>
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<tr>
<td>Use Total</td>
<td>743</td>
<td>737</td>
<td>754</td>
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</table>
Historical Five Major Exporters include U.S., Canada, Australia, Argentina and EU. Black Sea includes Russia, Ukraine and Kazakhstan.
Global Stocks* - to - Use Ratio

*Ending stocks

Supply and Demand
Global Stocks*-to-Use Ratio w/o China

*Ending stocks

Supply and Demand
World Ending Stocks

Historical Five Major Exporters include U.S., Canada, Australia, Argentina and EU. Black Sea includes Russia, Ukraine and Kazakhstan.
World Ending Stocks by Position (MMT)

- Exporters, 65.9
- Importers, 76.2
Global Ending Stocks and Price

*Source: U.S. Wheat Associates Price Report, December 6, 2019

Supply and Demand
Major Exporters

Import Demand

U.S. Situation by Class

Outlook
Exportable Supplies in Top Exporting Countries

*Exportable Supplies = (Beginning Stocks + Production) – Domestic Consumption*
Canada Ending Stocks

<table>
<thead>
<tr>
<th>Year</th>
<th>MMT</th>
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<tbody>
<tr>
<td>09/10</td>
<td>7.8</td>
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<tr>
<td>11/12</td>
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<td>13/14</td>
<td>10.5</td>
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<tr>
<td>15/16</td>
<td>6.0</td>
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<tr>
<td>17/18</td>
<td>5.9</td>
</tr>
<tr>
<td>19/20</td>
<td>5.4</td>
</tr>
</tbody>
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Australia Situation

Beginning stocks
Production
Imports
Exports
Domestic use
Argentina Ending Stocks

<table>
<thead>
<tr>
<th>Year</th>
<th>MMT</th>
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<tbody>
<tr>
<td>09/10</td>
<td>2.3</td>
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<tr>
<td>11/12</td>
<td>0.8</td>
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<tr>
<td>13/14</td>
<td>2.5</td>
</tr>
<tr>
<td>15/16</td>
<td>4.7</td>
</tr>
<tr>
<td>17/18</td>
<td>0.5</td>
</tr>
<tr>
<td>19/20</td>
<td>1.6</td>
</tr>
</tbody>
</table>
EU-28 Situation

Beginning stocks, Production, Imports, Exports, Domestic use
EU-28 Ending Stocks

MMT

<table>
<thead>
<tr>
<th>Year</th>
<th>09/10</th>
<th>11/12</th>
<th>13/14</th>
<th>15/16</th>
<th>17/18</th>
<th>19/20</th>
</tr>
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<tbody>
<tr>
<td>Stock</td>
<td>13.9</td>
<td>10.0</td>
<td>12.5</td>
<td>13.9</td>
<td>10.0</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Russia Situation

Beginning stocks, Production, Imports, Exports, Domestic use
Ukraine Situation

Supply and Demand

- Beginning stocks
- Production
- Imports
- Exports
- Domestic use

MMT

09/10 10/11 11/12 12/13 13/14 14/15 15/16 16/17 17/18 18/19 19/20

30.0 29.0 27.0 25.1 17.8 16.0 20.0

9.8 8.8 9.4

0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0
Ukraine Ending Stocks

Supply and Demand
Russia, Ukraine and Kazakhstan are the most important wheat producers in the Black Sea Region.
Black Sea Ending Stocks

<table>
<thead>
<tr>
<th>Year</th>
<th>MMT</th>
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</thead>
<tbody>
<tr>
<td>09/10</td>
<td>25</td>
</tr>
<tr>
<td>11/12</td>
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<td>13/14</td>
<td>15</td>
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<tr>
<td>15/16</td>
<td>20</td>
</tr>
<tr>
<td>17/18</td>
<td>21.2</td>
</tr>
<tr>
<td>19/20</td>
<td>15.5</td>
</tr>
</tbody>
</table>
Major World Wheat Importers
(from all origins)

Egypt
Indonesia
Brazil
Philippines
Algeria
Bangladesh
Turkey
Japan
EU
Mexico

MMT
0 1 2 3 4 5 6 7 8 9 10 11 12 13

2018/19 2019/20
Top 10 Customers for U.S. Wheat

5-year average

Source: USDA FAS export sales data as of May 31, 2019
Top 10 Customers for U.S. Wheat

Year-to-date

Source: USDA FAS export sales data as of November 28, 2019
Trend in “other” importers denoted ( ← ➤)
U.S. Wheat Plantings by Class

*Source: USDA Acreage Report, June 28, 2019 and USDA Small Grains Summary, September 30, 2019*
U.S. Wheat Sales by Class
(year-to-date)

Source: USDA FAS export sales data as of November 28, 2019
U.S. White

**Beginning stocks**: 2.4

**Production**: 7.4

**Imports**: 5.3

**Exports**: 5.2

**Years**: 14/15, 15/16, 16/17, 17/18, 18/19, 19/20

**Legend**:
- Green: Beginning stocks
- Blue: Production
- Purple: Imports
- Orange: Exports
U.S. Wheat Ending Stocks by Class

- HRW
- HRS
- SRW
- White
- Durum

- MMT
- 14/15
- 15/16
- 16/17
- 17/18
- 18/19
- 19/20

Stock levels are measured in MMT (Million Metric Tons).
<table>
<thead>
<tr>
<th></th>
<th>HRW (18/19)</th>
<th>HRW (19/20)</th>
<th>HRS (18/19)</th>
<th>HRS (19/20)</th>
<th>SRW (18/19)</th>
<th>SRW (19/20)</th>
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</thead>
<tbody>
<tr>
<td>Beginning Stocks</td>
<td>15.8</td>
<td>14.0</td>
<td>5.20</td>
<td>7.16</td>
<td>5.58</td>
<td>4.30</td>
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<tr>
<td>Production</td>
<td>18.0</td>
<td>22.7</td>
<td>16.0</td>
<td>14.2</td>
<td>7.78</td>
<td>6.50</td>
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<tr>
<td>Supply Total</td>
<td>34.0</td>
<td>36.9</td>
<td>23.0</td>
<td>22.7</td>
<td>13.47</td>
<td>10.94</td>
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<tr>
<td>Domestic Use</td>
<td>10.9</td>
<td>13.1</td>
<td>8.82</td>
<td>8.33</td>
<td>5.69</td>
<td>5.20</td>
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<tr>
<td>Exports</td>
<td>9.0</td>
<td>10.6</td>
<td>7.05</td>
<td>7.08</td>
<td>3.48</td>
<td>2.72</td>
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<tr>
<td>Use Total</td>
<td>19.9</td>
<td>23.7</td>
<td>15.9</td>
<td>15.4</td>
<td>9.17</td>
<td>7.92</td>
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<tr>
<td>Ending Stocks</td>
<td>14.0</td>
<td>13.1</td>
<td>7.16</td>
<td>7.32</td>
<td>4.30</td>
<td>3.02</td>
</tr>
<tr>
<td>Stocks-to-Use</td>
<td>70%</td>
<td>55%</td>
<td>45%</td>
<td>48%</td>
<td>47%</td>
<td>38%</td>
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</table>
### U.S. Wheat Supply and Demand (MMT)

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th></th>
<th>Durum</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18/19</td>
<td>19/20</td>
<td>18/19</td>
<td>19/20</td>
<td>18/19</td>
<td>19/20</td>
</tr>
<tr>
<td><strong>Beginning Stocks</strong></td>
<td>2.37</td>
<td>2.40</td>
<td>0.95</td>
<td>1.50</td>
<td>29.9</td>
<td>29.4</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>7.40</td>
<td>7.40</td>
<td>2.12</td>
<td>1.47</td>
<td>51.3</td>
<td>52.3</td>
</tr>
<tr>
<td><strong>Supply Total</strong></td>
<td>9.9</td>
<td>9.93</td>
<td>4.49</td>
<td>4.06</td>
<td>84.9</td>
<td>84.5</td>
</tr>
<tr>
<td><strong>Domestic Use</strong></td>
<td>2.20</td>
<td>2.45</td>
<td>2.40</td>
<td>2.40</td>
<td>30.0</td>
<td>31.5</td>
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<tr>
<td><strong>Exports</strong></td>
<td>5.33</td>
<td>5.17</td>
<td>0.60</td>
<td>0.95</td>
<td>25.5</td>
<td>26.5</td>
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<tr>
<td><strong>Use Total</strong></td>
<td>7.54</td>
<td>7.62</td>
<td>2.99</td>
<td>3.35</td>
<td>55.5</td>
<td>58.0</td>
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<tr>
<td><strong>Ending Stocks</strong></td>
<td>2.40</td>
<td>2.31</td>
<td>1.50</td>
<td>0.71</td>
<td>29.4</td>
<td>26.5</td>
</tr>
<tr>
<td><strong>Stocks-to-Use</strong></td>
<td>32%</td>
<td>30%</td>
<td>50%</td>
<td>21%</td>
<td>53%</td>
<td>46%</td>
</tr>
</tbody>
</table>
U.S. FOB Gulf Prices

*Source: U.S. Wheat Associates Price Report, December 6, 2019*
U.S. FOB PNW Prices

*Source: U.S. Wheat Associates Price Report, December 6, 2019*
Soft White and SRW Prices

*Source: U.S. Wheat Associates Price Report, December 6, 2019
U.S. Gulf Basis Prices

*Source: U.S. Wheat Associates Price Report, December 6, 2019
U.S. PNW Basis Prices

*Source: U.S. Wheat Associates Price Report, December 6, 2019*
Major Exporters
Import Demand
U.S. Situation by Class
Outlook
U.S. Wheat Production, Area and Yield

Graph showing the production (MMT), harvested area (mh), and yield (MT/hectare) over the years 09/10 to 19/20.
World Corn
Production, Use and Trade

![Graph showing production, use, and trade of corn over time]

- **Production** (MMT)
- **Use** (MMT)
- **Trade** (MMT)

Year: 08/09, 10/11, 12/13, 14/15, 16/17, 18/19

Values:
- Production: 1080, 1092, 1109, 1129, 1124, 1128
- Use: 148, 120, 100, 80, 60, 40
- Trade: 180, 167, 150, 130, 110, 90
Ocean Freight Rates for Grains

*Source: U.S. Wheat Associates Price Report, December 6, 2019*
Summary

• **Global production to increase 5% year-over-year to 765 MMT**
  - EU wheat production to rebound 11% after the 2018/19 drought to 154 MMT in 2019/20
  - Australian wheat production forecast at 16.1 MMT, 7% lower than last year due to prolonged drought
  - Ukrainian wheat production to reach record of 29.0 MMT in 2019/20
  - Wheat production in the United States to total 52.3 MMT, 2% higher than last year

• **Global ending stocks to rise to 290 MMT, 4% above 2018/19 levels and 12% higher than the 5-year average of 258 MMT**
  - Estimated Chinese ending stocks of 147 MMT are 5% higher than last year and make up 51% of total global ending stocks
  - U.S. ending stocks to total 26.5 MMT, 11% lower than 2018/19 and 4% below the 5-year average

• **World consumption and trade both expected to exceed 2018/19 levels**
  - Total global wheat consumption to reach an all-time high of 754 MMT, 2% higher than last year and 4% higher than the 5-year average
  - Total global trade to reach 180 MMT, 4% higher than 2018/19 and 3% above the 5-year average
  - U.S. 2019/20 domestic consumption to increase 5% year-over-year to 31.5 MMT and exports to rise 4% above 2018/19 to 26.5 MMT