Ukraine: Sown Area for 2020/2021 Winter Crops and Early Season Conditions

Winter wheat is the dominant winter crop in Ukraine. Winter wheat is grown in many oblasts but is clustered mostly in the Steppe Zone of Ukraine, which is in the southeastern region (See Figure 1 and 2). Additionally, Ukraine grows minimal amounts of spring wheat (accounting for about 3 percent of total production). Winter wheat for 2020/21 was planted on 6.41 million hectares (mha), down 16 percent from last year’s 7.59 mha, according to data from the State Statistical Committee of Ukraine (SSC). In addition to winter wheat, winter barley was planted on 1.05 mha and winter rye was planted on 0.13 mha. Winter barley grows mostly in the southern, Steppe region of Ukraine and winter rye grows mainly in the northern regions of Ukraine. Rapeseed is the only major winter oilseed crop and area was planted on 1.3 mha. Rapeseed is grown mostly in the central region of Ukraine. Rapeseed area has been increasing in recent years due to the increased profitability of the crop (See Figure 3). The SSC published the final fall-sown area for 2020/21 winter crops in December 2019 and these estimates from SSC do not include estimated area from Crimea (See Figure 4). USDA estimates for Ukraine, however, include Crimea.

Winter crops are sown in the fall, and the planting season occurred under dry weather conditions, especially during the main planting weeks in October and early November when some areas experienced 12 to 20 days without rain (See Figure 5). Due to the dry weather, farmers could easily get into the fields to plant so crops were quickly planted for the 2020/21 season (See Figure 6 for winter wheat planting progress) but conditions were not favorable for establishment.

In early November when planting was complete but before the crops went dormant for the winter, the satellite-derived MODIS Normalized Difference Vegetation Index (NDVI), shows crop establishment was mixed throughout the country for the winter crops (See Figure 7). Although favorable fall conditions benefit winter crops, spring conditions are by far the more important factor in determining final yield.

Beneficial snow cover throughout the season thus far has only helped improve soil moisture and improve the dry conditions from the fall (See Figure 8). The winter crops are currently dormant. Mild temperatures and sufficient snow cover thus far have reduced the likelihood of winterkill. Crops will resume vegetative growth around March and harvest will begin in July (See Figure 9 for an average crop calendar for southern Ukraine).

Initial USDA estimates of 2020/21 global crop production will be released on May 12, 2020. All USDA crop production estimates for Ukraine include estimated output from Crimea.

The contributions of Denys Sobolev and Robin Gray at the USDA FAS Office in Kyiv are gratefully acknowledged.
Figure 1: Wheat Production Map

Data Source: State Statistical Committee of Ukraine
Average Production of 2013-2017

Foreign Agriculture Service
Office of Global Analysis
International Production Assessment Division
Figure 2: Ukraine Agroclimatic Zones

Source: Hydromet Center of Ukraine
Figure 3: Average Profitability

Ukraine: Average Profitability of Major Crops, 2008-2018

Source: State Statistical Service
Figure 4: Sown Winter Crop Area

### Ukraine: Estimated Sown Winter-Grain Area
(Estimates do not include Crimea)

<table>
<thead>
<tr>
<th></th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
<th>19/20</th>
<th>20/21</th>
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<tbody>
<tr>
<td>Barley</td>
<td>0.98</td>
<td>0.88</td>
<td>0.83</td>
<td>1.06</td>
<td>1.05</td>
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<tr>
<td>Rye</td>
<td>0.15</td>
<td>0.17</td>
<td>0.15</td>
<td>0.12</td>
<td>0.14</td>
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<tr>
<td>Wheat</td>
<td>5.98</td>
<td>6.12</td>
<td>6.27</td>
<td>6.63</td>
<td>6.41</td>
</tr>
</tbody>
</table>

Source: State Statistical Service
Figure 5: Number of Days Since Last Rain for the Month of October 2019

UKRAINE: Number of Days Since Last Rain (October 2 - 31, 2019)

Source: USAF 557th WW
Figure 6: Winter Wheat Planting Progress

Ukraine Winter Wheat: Sowing Progress
(All years excluding estimated area for Crimea)

Source: Ministry of Agriculture
Figure 7: NDVI During Winter Crop Establishment

UKRAINE: NDVI Anomaly (November 1 - 8, 2019)

NASA MODIS imagery
USDA/NASA Global Agricultural Monitoring (GLAM) project
https://glam1.gsfc.nasa.gov/

Foreign Agriculture Service
Global Market Analysis
International Production Assessment Division
Figure 8: Snow Cover for January 20, 2020
Figure 9: Average Crop Calendar for Southern Ukraine

**Southern Ukraine (Southern Steppe)** *

Crop Calendar

<table>
<thead>
<tr>
<th>Crop</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
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<tr>
<td>Wheat (Winter)</td>
<td></td>
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<td>Rye</td>
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<tr>
<td>Earley (Spring)</td>
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<tr>
<td>Oats</td>
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<td>Corn</td>
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<tr>
<td>Millet</td>
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</tbody>
</table>

* Includes southern Odesa, southern Mykolaiv, Kherson, Krym, southern Zaporozhzhia

Source: FAS/OGA

For additional information contact Katie McGaughey, Katie.McGaughey@usda.gov, 202-720-9210

Current area and production estimates for grains and other agricultural commodities are available on IPAD's Agricultural Production page:
Crop Explorer https://ipad.fas.usda.gov/cropexplorer/or

Production, Supply and Distribution Database (PSD Online):

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Foreign Agricultural Service
Global Market Analysis
International Production Assessment Division Ag Box 1051, Room 4630, South Building
Washington, DC 20250-1051
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