SYRIA: Dry Conditions Prevail Across the Breadbasket Region of Al Hasakah

The major winter grains production region is in northern Syria with the province of Al Hasakah being the breadbasket (Fig. 1). This region of Syria has experienced severe conflict since 2012 and farming resources such as labor, equipment, and materials to produce a crop would be expected to be limited. The planting window is from October until the end of December for the winter grain crops of wheat and barley.

During the winter grain planting and establishment period, precipitation was well below normal for this region (Fig. 2). Maps of satellite derived NDVI (Normalized Difference Vegetation Index) show values well below average indicating significantly below average crop conditions for the northern region (Fig. 3). Time-series NDVI analysis for Al Hasakah province indicates significantly below normal crop biomass, and near the severe drought levels observed in 2007-2008 (Fig. 4). The cumulative precipitation graph for Al Hasakah shows that this region has only received 100 mm of rainfall since planting began in October to mid-February (Fig. 5). The amount of rainfall is below normal and much lower than the previous two years. Recent rains, however, since mid-January likely resulted in the up-tick in the most recent Al Hasakah NDVI observation (Fig. 4). Temperatures have been mild and the crop would most likely respond to additional precipitation as dormancy has not been established (Fig. 6). Harvest begins in late May and there is still time for favorable conditions to help improve the crop situation. USDA will release its first estimates of Syria wheat and barley May 10, 2018.

Other related links at FAS for monitoring worldwide crop conditions and droughts are available at:

Crop Explorer (https://ipad.fas.usda.gov/cropexplorer/Default.aspx)
USDA and NASA’s GLAM (Global Agriculture Monitoring) System for MODIS-NDVI Time Series Graphs (https://glam1.gsfc.nasa.gov/)

FAS World Agricultural Production (WAP) circular (https://www.fas.usda.gov/data/world-agricultural-production)
Figure 3. Winter Grains Vegetation Index Anomaly Map Over Syria

FEB 2-9, 2018

Aqua EOS PM  MODIS NDVI 8-day composite
NASA Goddard Space Flight Center / GIMMS and USDA Office of Global Analysis
Figure 4. Vegetation Index for Winter Grains Over Al Hasakah, Syria

Aqua EOS PM MODIS NDVI 8-day composite
NASA Goddard Space Flight Center / GIMMS and USDA Office of Global Analysis
Figure 5. Cumulative Precipitation Over Al Hasakah, Syria
Figure 6. Average Temperature Over Al Hasakah, Syria
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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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