

Commodity Intelligence Report

February 28, 2018

United States Department of Agriculture

Foreign Agricultural Service

TURKEY: Early Dry Weather Hampers Establishment in Southern Anatolia Winter Grains Region

Dry weather is a concern for the winter grains in southeastern Turkey. The major area of concern is Southern Anatolia that typically produces 15 percent of the total winter wheat crop (Fig. 1). Winter grains planting in Turkey begins in early October and ends by late December for both wheat and barley. During the planting season, precipitation was near-to-above average over the majority of the winter grains area with the exception of the Southern Anatolia region. Precipitation over Southern Anatolia between October, and December 2017 was well below normal (Fig. 2). This was one of the driest seasons for planting in recent years.

The resulting low soil moisture conditions are evident in the vegetation anomaly map which indicates below average plant growth conditions in the Southern Anatolia region (Fig. 3). Pockets of "greenness", indicating above average areas, are due to the presence of irrigation; recent satellite imagery shows active pivot irrigation (Fig. 4). The satellite derived NDVI (Normalized Difference Vegetation Index) for the Harran plain region in Turkey confirms below normal crop conditions (Fig. 5). A slight up-tick of the most recent NDVI observation was due to a green up from recent rain events that have added nearly 140 mm of precipitation (Fig. 6). Soil moisture was dramatically improved by mid-January rains and was beneficial to the crop (Fig. 7). Temperatures have been mild and overall growing conditions have improved.

Last year the crop over the Central Anatolia region was beset with drought at planting. Mid-season precipitation improved leading to very favorable conditions which resulted in an abundant crop. Thus, if this year's mid-season precipitation improves the crop in the Southern Anatolia region still has time to recover and to be productive. Winter grains harvest will begin in June. USDA will release its first estimates of Turkey wheat and barley May 10, 2018.



Commodity Intelligence Report

February 28, 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 1. Turkey Wheat Producing Regions

Foreign Agricultural Service Office of Global Analysis IPA Division Turkey Ministry of Food, Agriculture and Livestock



Figure 2. Percent Normal Cumulative Precipitation Illustrating Below Normal Precipitation Over Southern Anatolia, Turkey During Planting







Figure 4. Satellite Image of Irrigated Winter Crops in Southwestern Turkey with High NDVI Anomaly Values

USDA Foreign Agricultural Service Office of Global Analysis IPA Division

European Space Agency Copernicus Sentinel-2 satellite



Figure 5. Vegetation Index for Winter Grains over the Harran Plain in Southern Anatolia, Turkey



Figure 6. Cumulative Precipitation over the Harran Plain in Southern Anatolia, Turkey



Figure 7. Percent Soil Moisture over the Harran Plain in Southern Anatolia, Turkey

For additional information contact William Baker, | William.Baker@fas.usda.gov | 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): http://apps.fas.usda.gov/psdonline/psdHome.aspx

U. S. Department of Agriculture Foreign Agricultural Service Office of Global Analysis International Production Assessment Division Ag Box 1051, Room 4630, South Building Washington, DC 20250-1051 Telephone: (202) 720-1662 Fax: (202) 720-1158