January Summary

(1) Based on season-to-date conditions winter grains (wheat and barley) production outlook for MY 2009/10 in Syria appears similar last year’s crop, MY 2008/09. Strained water resources and low available seed stocks help to explain low vegetation abundance in the agricultural provinces of Idlib, Hama, and Ar-Raqqar, which cumulatively produce 25% of all wheat and 38% of barley. Positive increases in vegetation are occurring, despite continued drought conditions, in Al-Hasakah province, which itself is responsible for 34% of national wheat production but only 9% of barley.

(2) Early season rainfall events provided above normal precipitation to the north-central grain producing provinces of Aleppo, Idlib and Hama, creating ideal planting conditions during October and November. December and January have seen subsequently lower precipitation in the northern provinces, but higher than normal precipitation along the Mediterranean coast where grain production is minimal. The south and eastern provinces, including major grain producers Ar-Raqqar and Al-Hasakah, have experienced extremely low rainfall, season-to-date between 15-50% of normal levels, which is a continuation of the previous year’s drought conditions (Figure 2).

(3) NDVI comparison of vegetation health and abundance over Syria indicates that areas remaining in drought conditions result in lower than average vegetation abundance, whereas areas with above normal seasonal rainfall, along the Mediterranean coast and northern Aleppo, have resulted in higher than normal vegetation (Figure 4).

(4) Comparing vegetation abundance between the current conditions and those of last year indicate similar to worse production in the rainfed agricultural areas which continue to see poor precipitation. This particularly affects agriculture in Ar-Raqqar province to the north and Dar’a, Suwayda, and Damascus in the southwest; cumulative production from these provinces account for 17% of national wheat and 16% of barley. Production in Aleppo appears lower than MY 2008/09 in the eastern section where rainfall has been lowest and higher than last year in portions of the west and north where rainfall was greatest. Decreased production in Idlib and Hama, which received high early season precipitation, may be a result of low available seed stocks and/or poor seed distribution, or a failure to sow the crops during the first months of the planting season when precipitation was at its peak. Production from these provinces amounts to 11% of all wheat and 24% of all barley in Syria.

(5) Al-Hasakah province produces 34% of all wheat and 9% of barley, and despite sustained drought conditions shows an increase in agricultural abundance over last year in both irrigated and rainfed crops (Figure 5). Distribution of drought resistant seed varieties is a possible explanation for this anomaly. If this trend continues it could make for slightly higher wheat production than last year, but not for barley, which is primarily grown in Aleppo and Ar-Raqqar.
Figure 1. Breakdown by province, percent of total wheat and barley production in Syria.
Figure 2. Cumulative precipitation since start of the current winter grains season, MY 2009/10, compared with the previous season, MY 2008/09, and precipitation normals.
Figure 3. Cumulative precipitation during the first two decades of January, 2009.
Figure 4. MODIS NDVI comparing vegetation abundance over agricultural lands to the previous year (MY2008/09), and comparing current vegetation abundance against the short term, 5 year, average.
Figure 5. AWiFS NDVI comparison of vegetation abundance in agricultural areas of Al-Hasakah between current conditions and MY 2008/09.