USDA Foreign Agricultural Service

Syria: Crop Progress Report

MY 2009/10

February Summary **February 26, 2009**

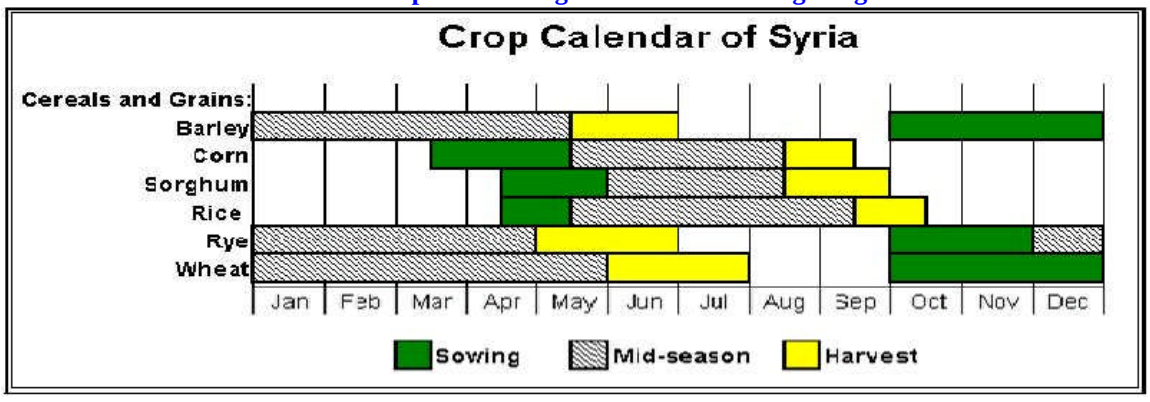
(1) Based on season-to-date conditions the winter grains (wheat and barley) production outlook for MY 2009/10 in Syria appears similar to last year's drought decimated MY 2008/09 crop. A few areas of the country are showing improved crop conditions, most notably in northern Al-Hasakah province, but much of the remainder of winter grain producing areas are as bad or worse than recorded at this time last year. Continued drought conditions during the current growing season over the majority of Syria's agricultural regions are responsible for either poor crop health and delayed emergence or a drop in cultivated area as farmers wait for conditions to improve. There is indication that some irrigated areas are performing better than last year, however overall moisture conditions are too poor to support near-normal rainfed crops. Extensive rainfed crop regions are essentially barren or have extremely poor vegetative cover at this time.

(2) Season-to-date cumulative precipitation for MY2009/10 is well below normal throughout Syria, with the exception of several minor producing provinces on the Mediterranean coast (Tartus, latakia, Idlib - which collectively produce only 13 percent of national wheat output) (Figure 2). Parts of Latakia, Idlib, and Aleppo provinces have received rainfall accumulations between 75 – 100% of normal levels, while all of southern and eastern Syria has received less than 50% of normal precipitation. Al-Hasakah, Ar Raqqah, Deir ez-Zor, Dar'a, and As-Suwayda provinces are most severely affected by poor seasonal rainfall and collectively account for 59% of total wheat production and 25% of national barley production. February rainfall events continued to favor the minor grain producing coastal provinces of Tartus and Latakia, while the major producing areas of southern and eastern Syria continued to experience drought conditions (Figure 3). Over 99% of all winter grain crop area in Syria is currently experiencing well-below normal rainfall, however 35% of those areas traditionally have access to irrigation and could potentially produce grain this year despite a continued lack of rainfall.

(3) NOAA weather forecasts predict significant precipitation events within the next three days over minor grain producing provinces of Dar'a and Quneitra as well as some lighter precipitation in Al-Hasakah along the Iraq border (Figure 4).

(4) NDVI comparison of current vegetation health and abundance over Syria compared to the previous five year average indicates that virtually the entire grain region of Syria is showing well-below normal crop vegetative vigor or abundance. Extremely small pockets of better than normal vegetation abundance can be seen in portions of Tartus and northern Aleppo where precipitation has been at least 75% of normal, and in some irrigated areas of Deir ez-Zor, Al-Hasakah and Ar-Raqqar (Figure 5). On the whole, however, both irrigated and rainfed agricultural regions currently seem to be performing poorly compared to what they should be under normal growing conditions at the end of February.

(5) NDVI conditions compared to last year, when drought conditions resulted in a major drop in national grain production, show that nearly 80% of all agricultural areas are performing at similarly poor levels to MY 2008/09. Almost 9% of total grain area is experiencing even worse vegetation conditions than last year, primarily affecting the rainfed crop areas of Aleppo, Ar-Raqqar, Al-Hasakah and Deir ez-Zor, Idlib, and Hama. Over 88% of national barley production and 22% of wheat production have traditionally been grown in non-irrigated rainfed fields of these six provinces. Given a severe shortfall of rainfall this year during the autumn planting season of October through December 2008, the decline in early crop emergence measured by the satellites this year could be a result of continued drought or the result of farmers refraining from sowing their crop until conditions improve. At the same time the satellites are also showing, over 11% of grains areas, that there are crop vegetation increases compared to last year occurring in the same six major grain provinces (most likely in irrigated fields). Irrigated land in these provinces typically accounts for 64% of national wheat production but only 6% of barley. It should be noted that if farmers did delay their sowing operations last autumn in favor of spring planting, there is little time left to get these delayed crops established. For the most part, any winter grains sown this late in the growing season would have inherently lower crop yields even under excellent moisture conditions owing to the abnormally shortened growing season. Harvest operations typically occur in June, which leaves 3 short months from now to get a crop established and matured.



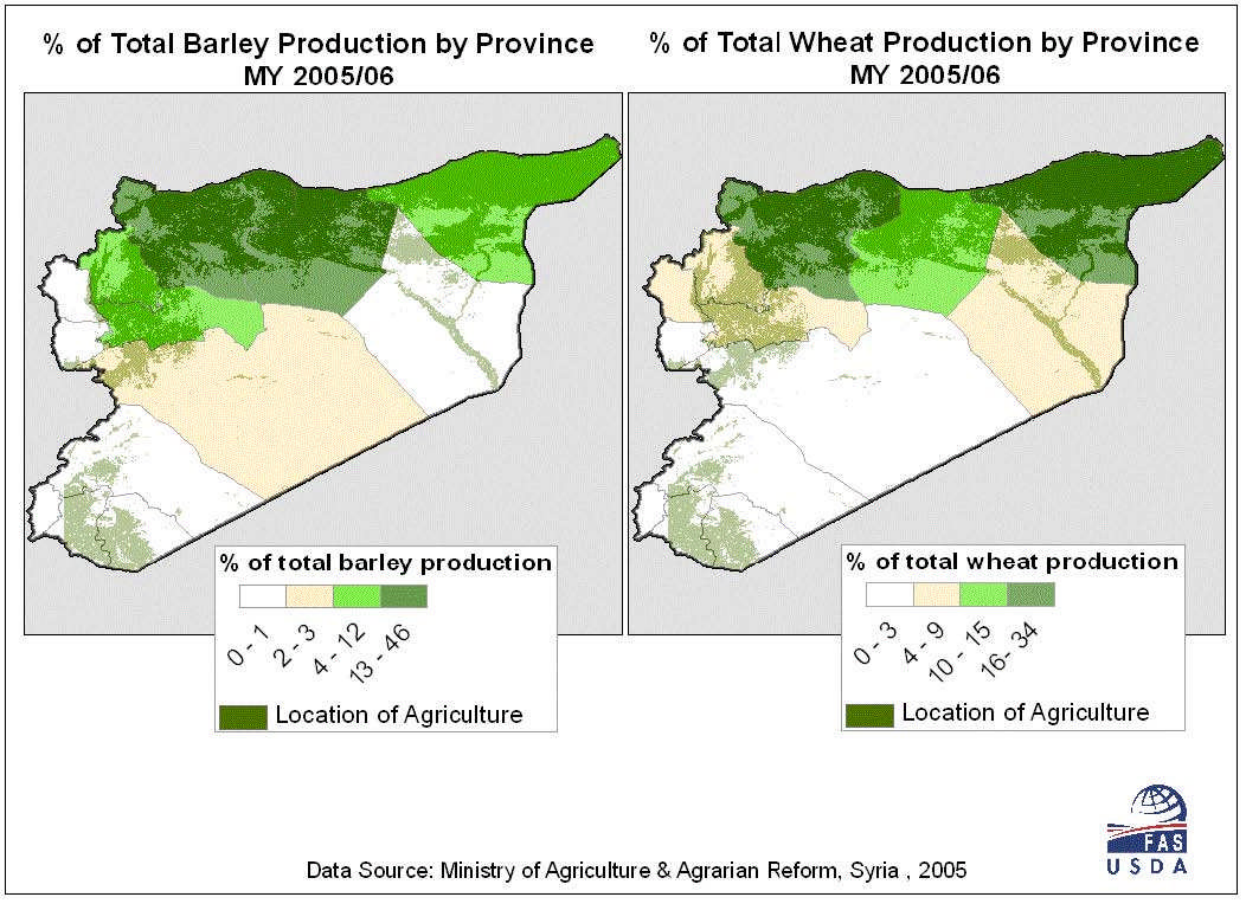


Figure 1. Breakdown by province, percent of total wheat and barley production in Syria.

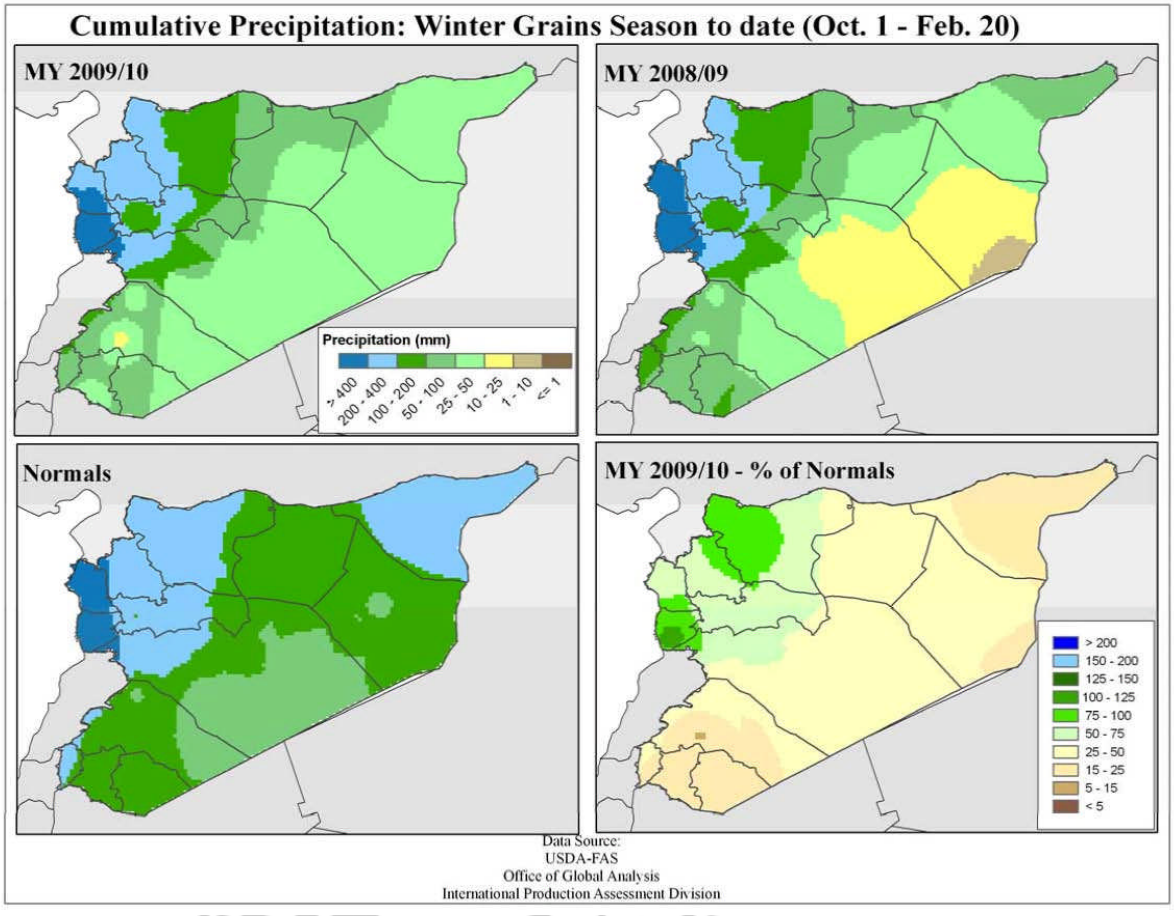


Figure 2. Cumulative precipitation since start of the current winter grains season, MY 2009/10, compared with the previous season, MY 2008/09, and precipitation normals.

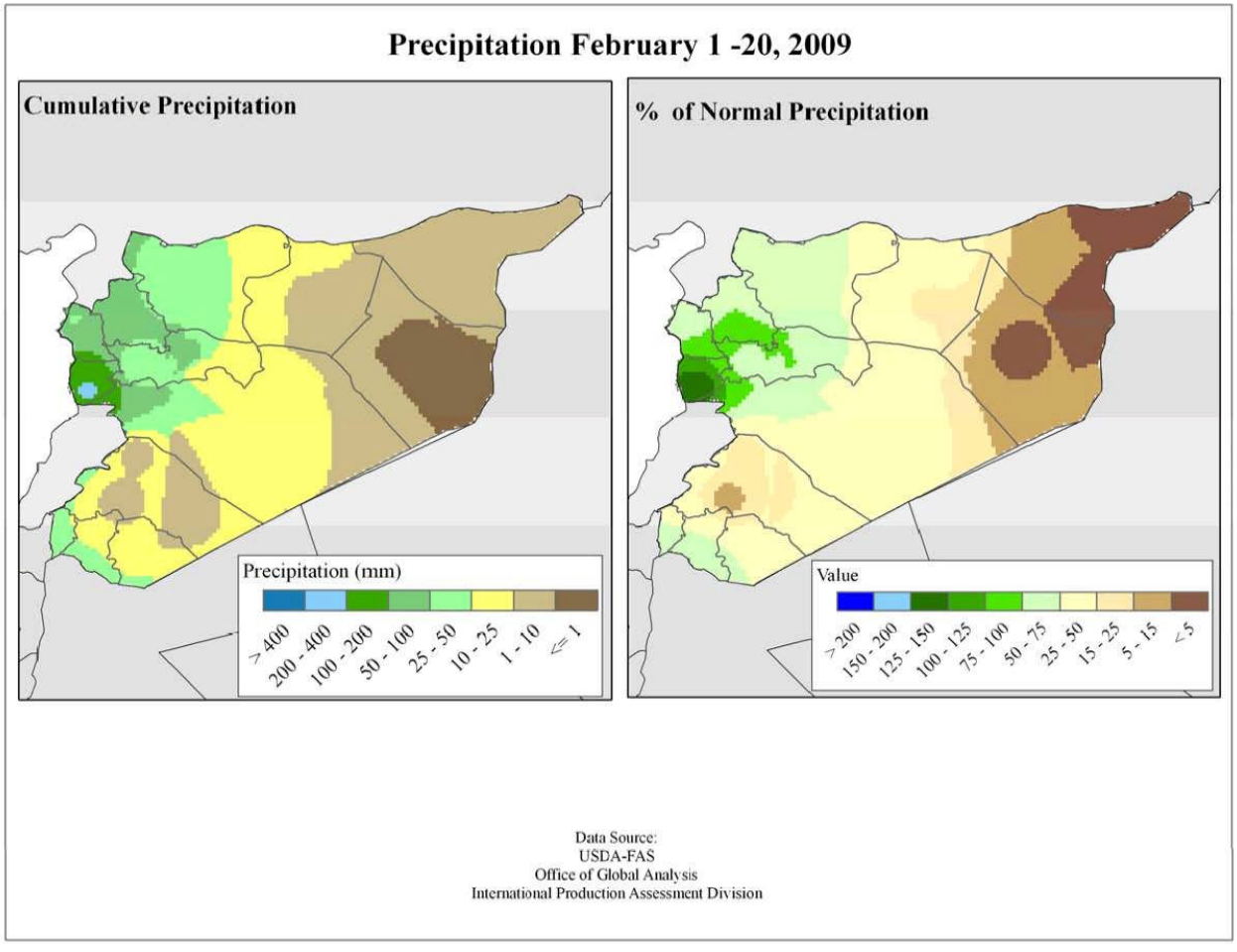


Figure 3. Cumulative precipitation during the first two decades of January, 2009.

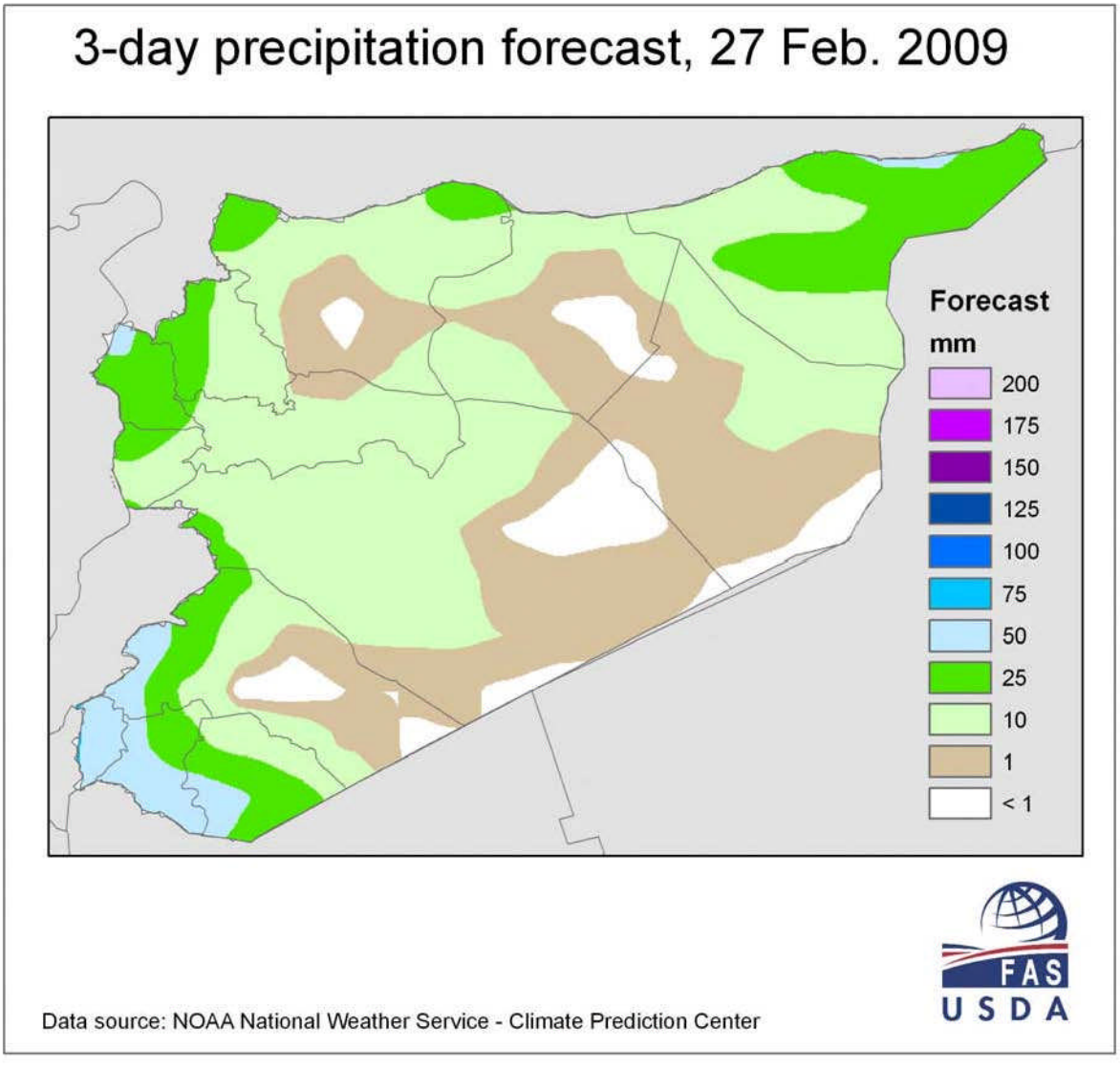


Figure 4. Precipitation forecast for Syria – February 27 to March 1

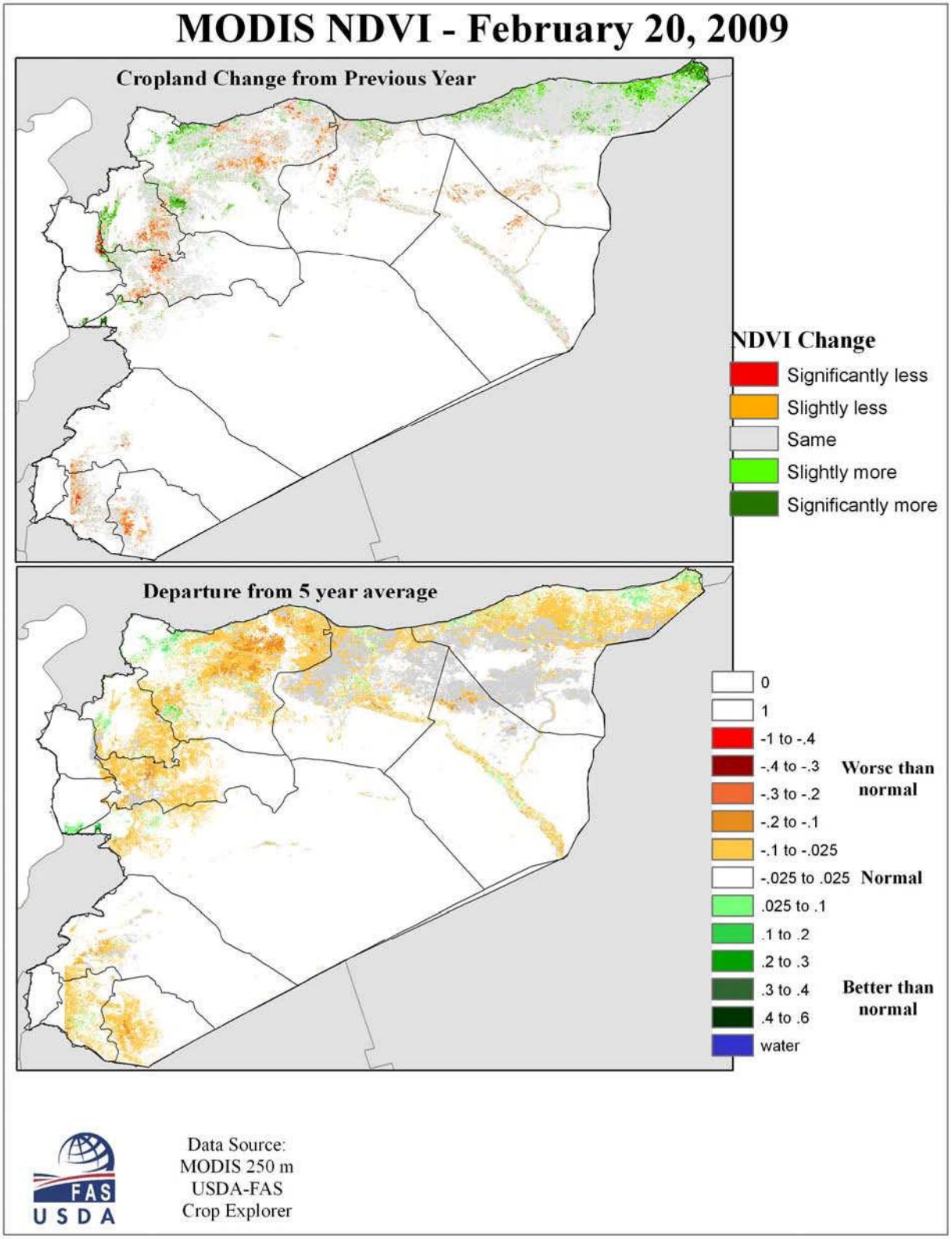


Figure 5. MODIS NDVI comparing vegetation abundance over agricultural lands to the previous year (MY2008/09), and comparing current vegetation abundance against the short term, 5 year, average.

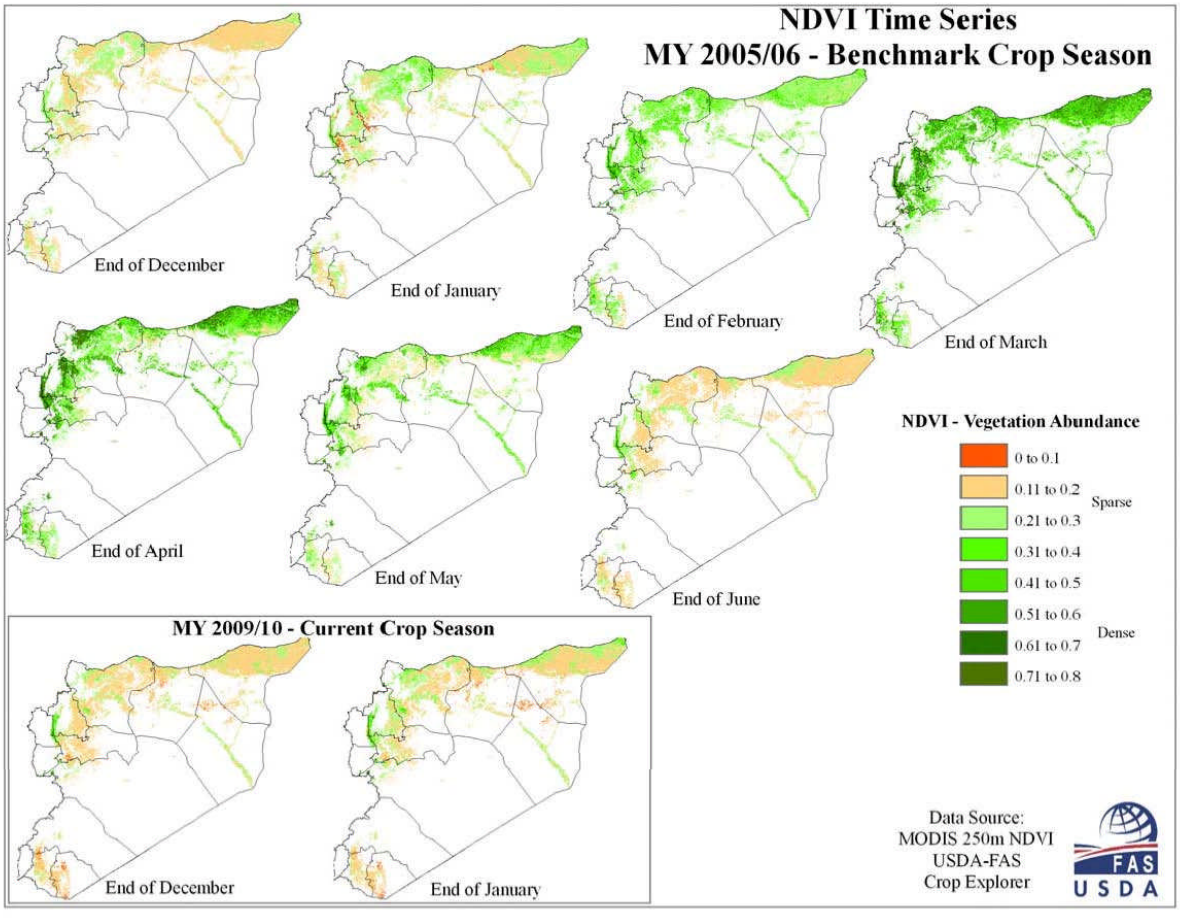
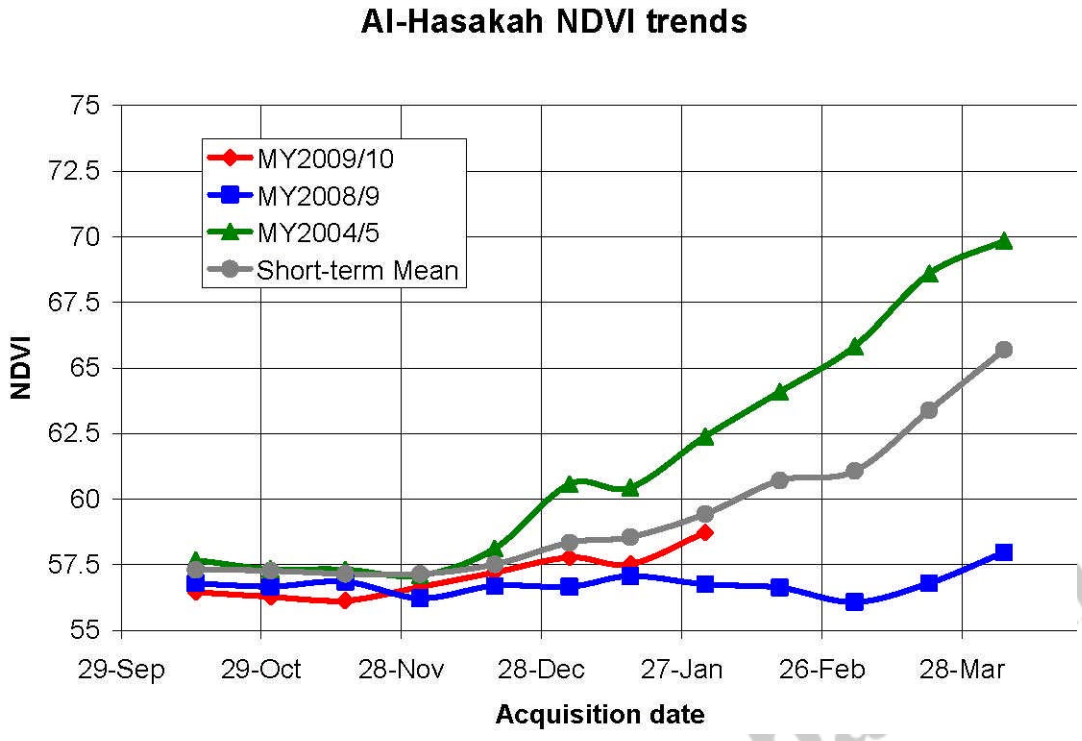


Figure 6. Time series of vegetation abundance through the winter grains season; MY 2005/06 vegetation represents a benchmark year for crop production in Syria, compared against the current conditions for MY 2009/10.



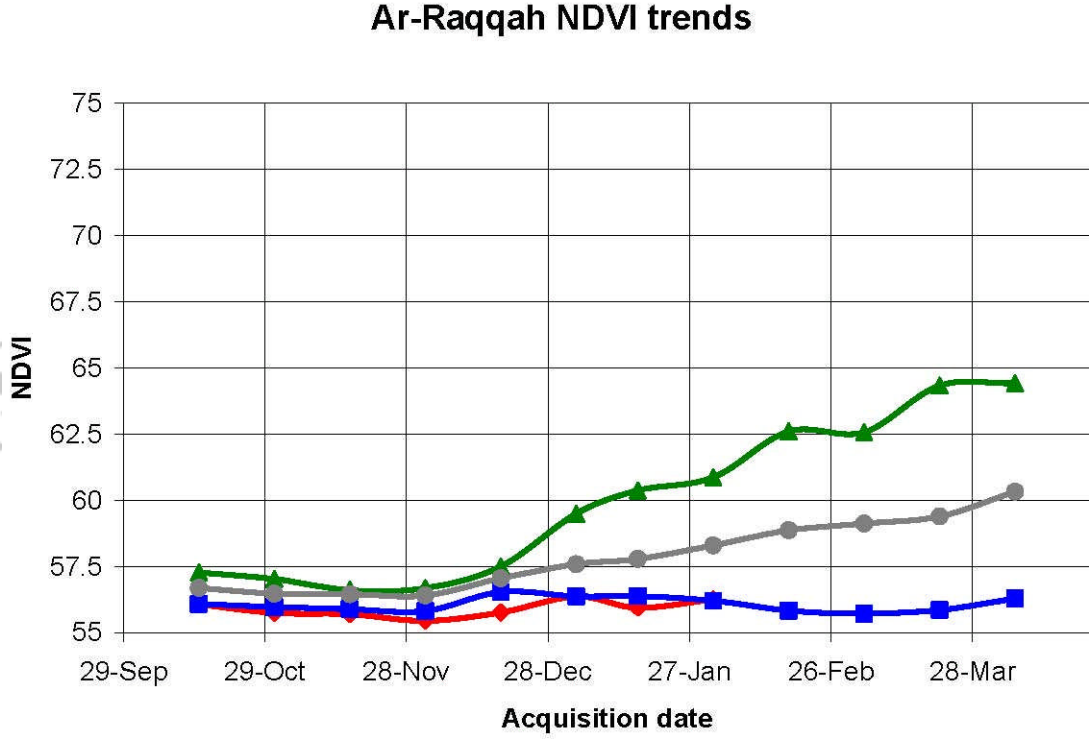
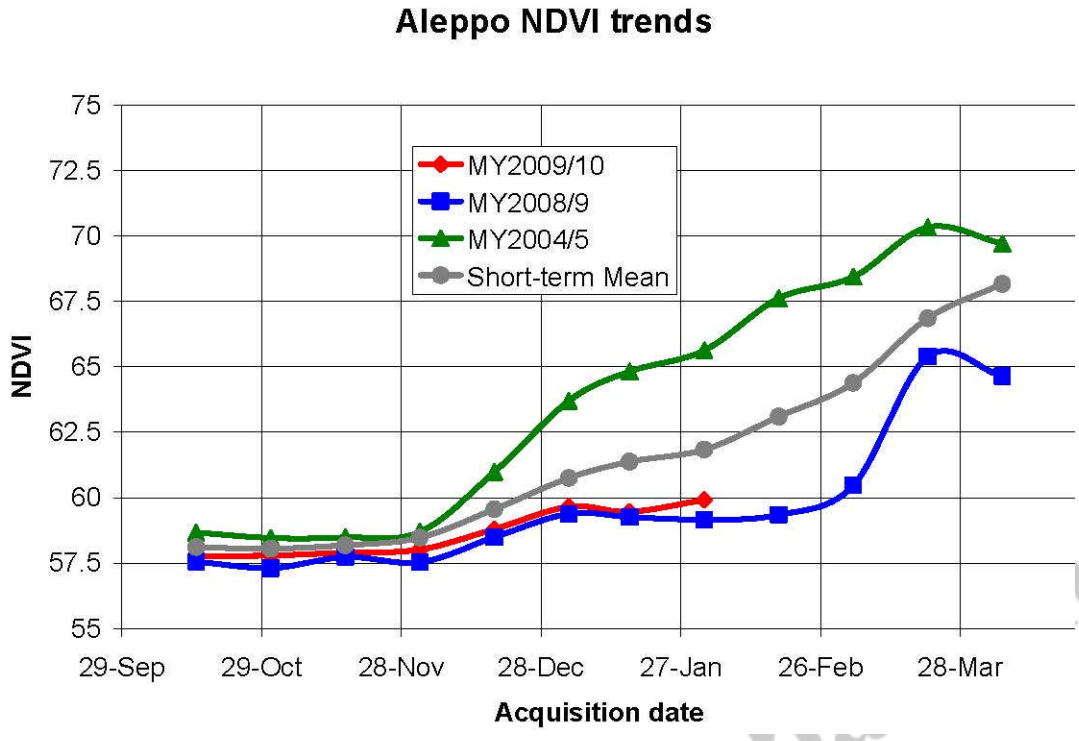


Figure 7: NDVI trends in Al-Hasakah and Ar-Raqqah provinces.



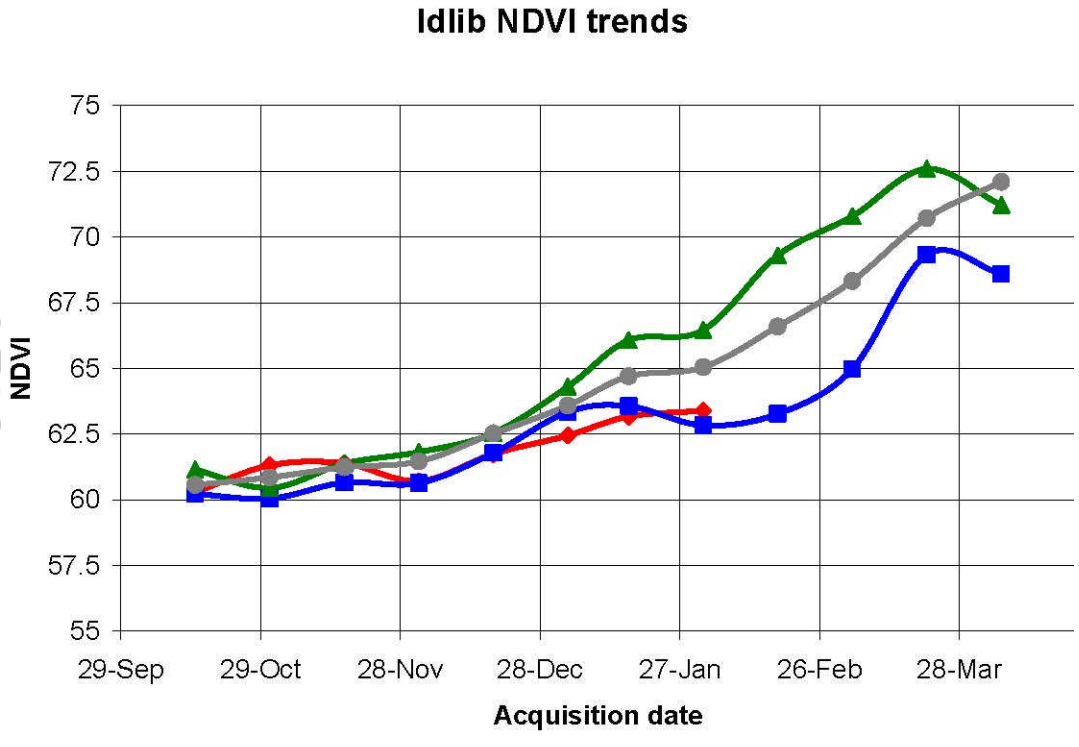


Figure 8: NDVI trends in Aleppo and Idlib provinces.

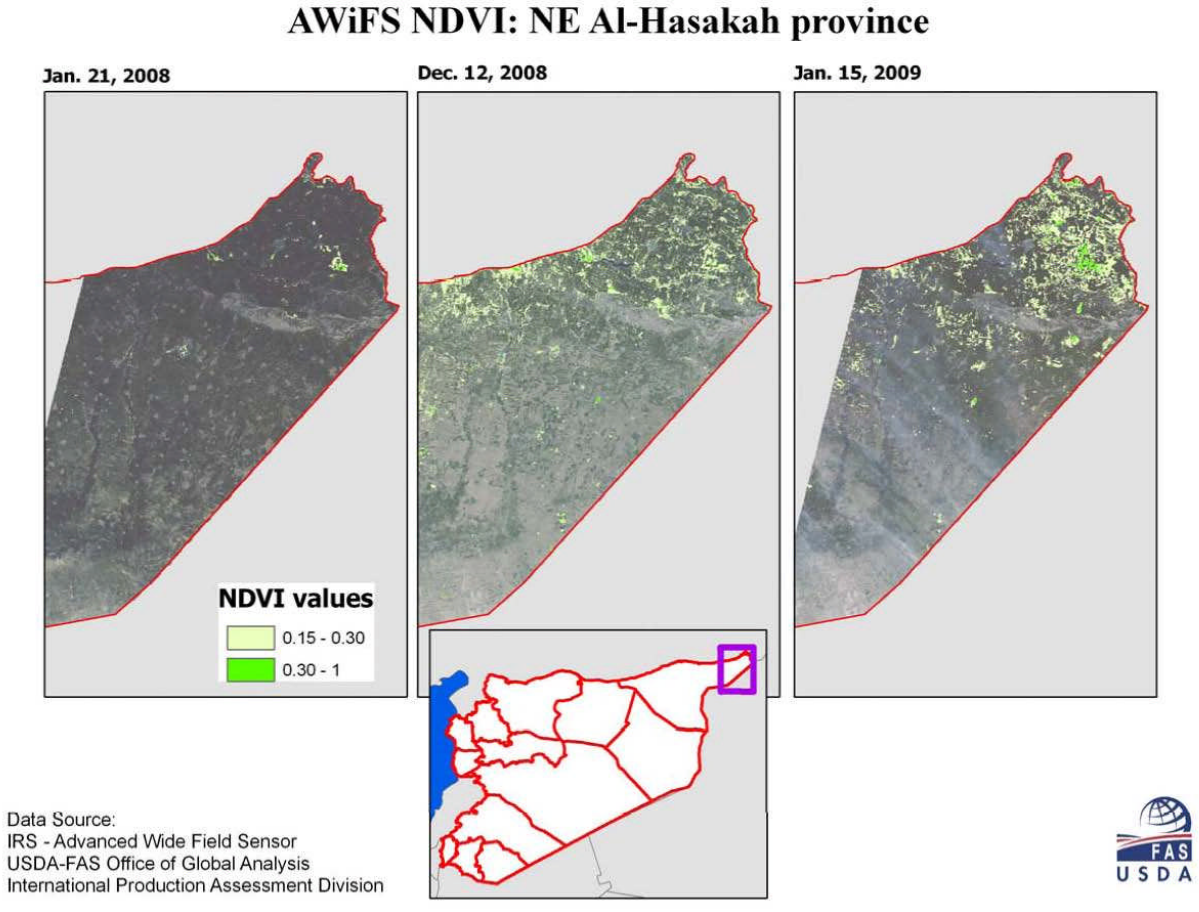


Figure 9. AWiFS NDVI comparison of vegetation abundance in agricultural areas of Al-Hasakah between current conditions and MY 2008/09.

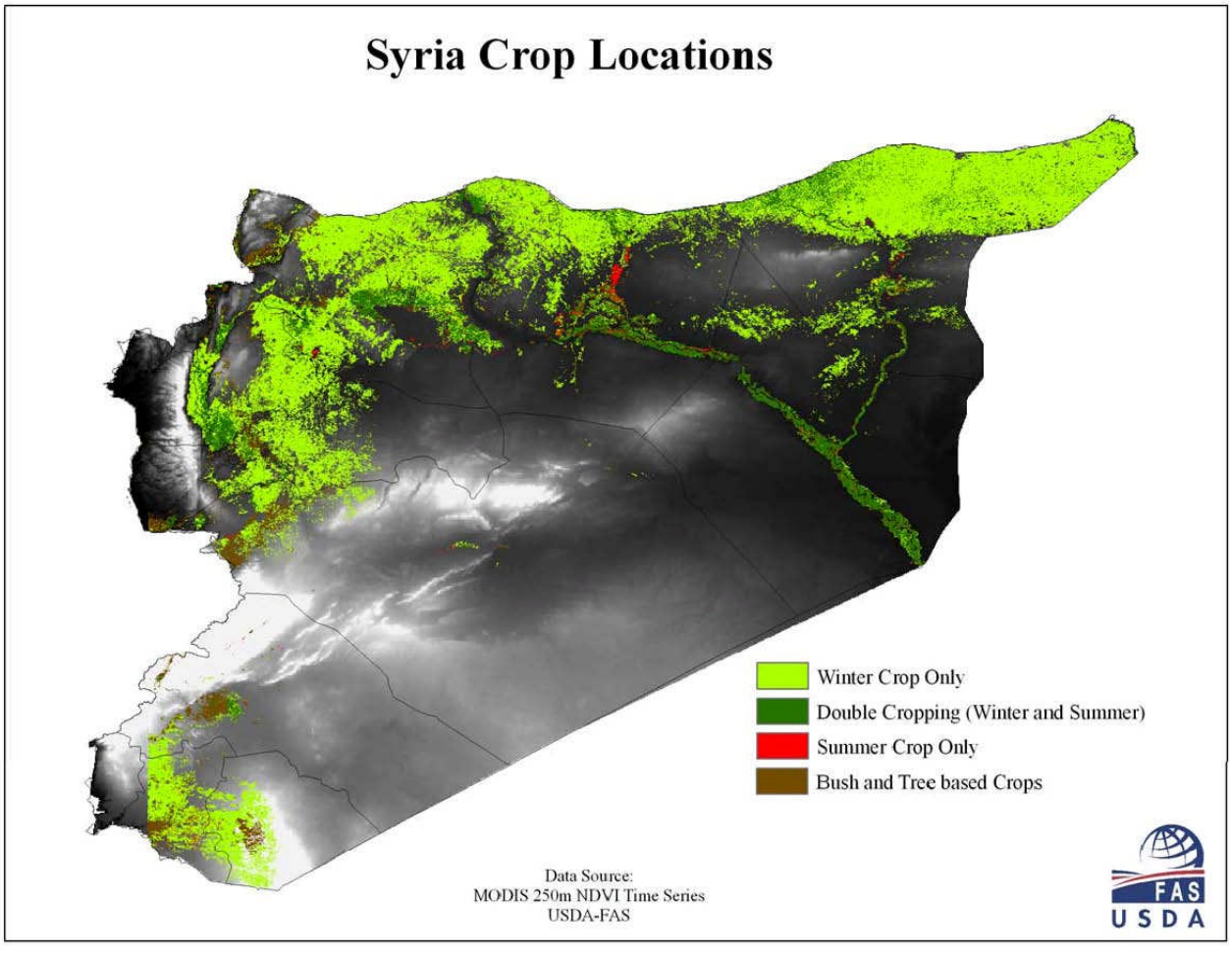


Figure 10. Traditional cropping patterns in agricultural regions of Syria according to the timing and location of peaks in vegetation abundance over the previous 5 year period using MODIS NDVI.

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