USDA Foreign Agricultural Service

Iraq: Crop Progress Report

MY 2009/10

December Report – Week 2 **December 12th, 2008**

1. The winter grains sowing season is nearing to a close, typically by mid-December. The planting season was marked by two significant rain events that occurred during the last days of October and November (Figure 1). The event in October delivered between 50mm and 75mm of rain to provinces such as Arbil and As Sulaymaniyah, but given evapotranspiration rates of +2mm/day, much of the soil moisture may have been depleted before the follow-up rain in late November (Figure 2).

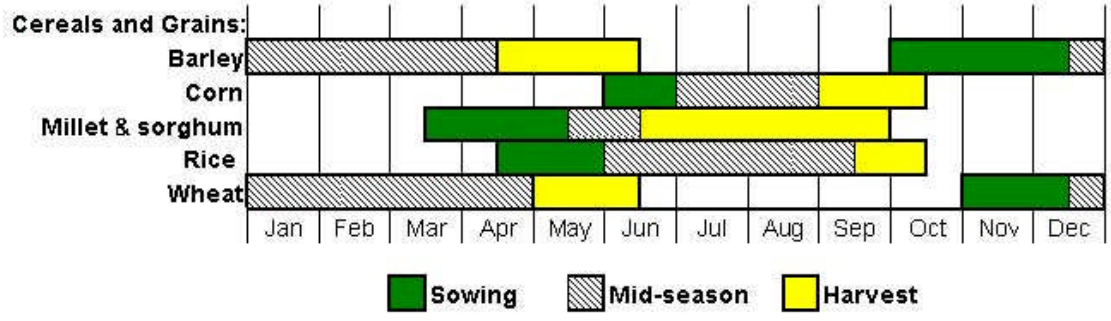
2. The potentially largest producing province of Ninawa* reportedly delayed sowing after the rains in October. Assuming that farmers waited for the follow-up event in November, there is concern that soil moisture reserves were less than adequate this late in the season for strong seed establishment, especially given that the month of December has been relatively dry and temperatures remain slightly above normal (Figures 3). Further remote sensing analysis during crop emergence will aid in understanding and quantifying how well the winter crop was initially established.

3. High resolution Quickbird imagery acquired over At Ta'min on December 4th, 2008 was compared to the previous year on December 15th, 2007. Change analysis showed similar areal coverage of pre-harvested crop; given the time of year it is assumed that the crop is cotton. Although NDVI values seem higher in 2008, this could be attributed to differences in the harvest period (Figure 4).

4. High resolution Quickbird imagery acquired near the Baghdad airport on December 9th, 2008 was compared to imagery acquired on December 12th, 2006. The area showed evidence of canal clearing since 2006, particularly around the coordinates of (33.2174N, 44.2425E), (33.2155N, 44.2086E), (33.2368N, 44.1926E), (33.2787N, 44.1825E). A systematic random sample was used to compare vegetative health between the two years. Results showed slightly higher biomass values for the current year. Given that 2006 was an overall better crop year, the higher biomass values in 2008 could be attributed to improvements and maintenance in the irrigation infrastructure (Figure 5). This is a preliminary analysis and further evidence will be collected as the winter grains season progresses.

*Start of season status for other important rainfed governorates such as At Ta'min and Arbil is unknown.

Crop Calendar of Iraq



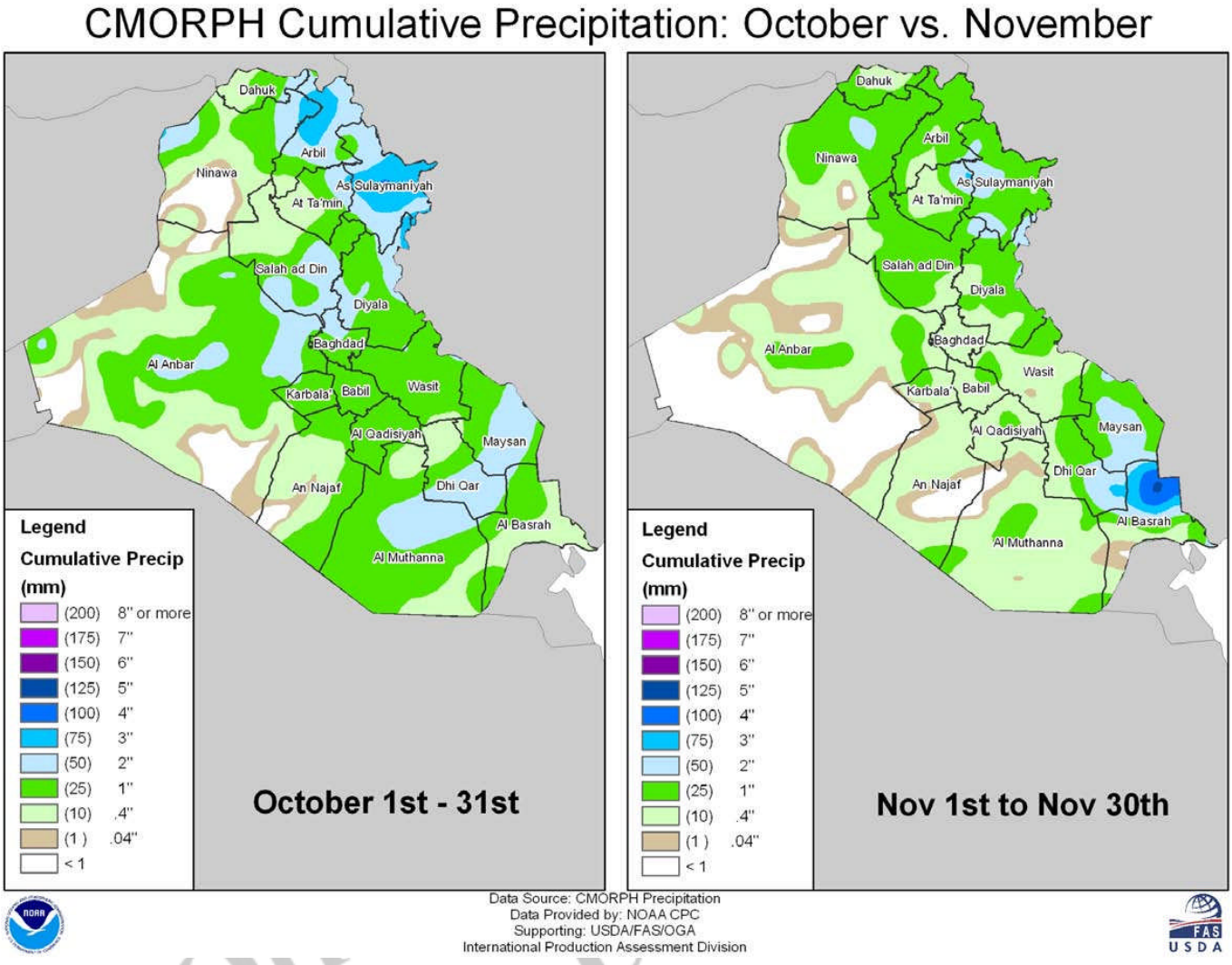
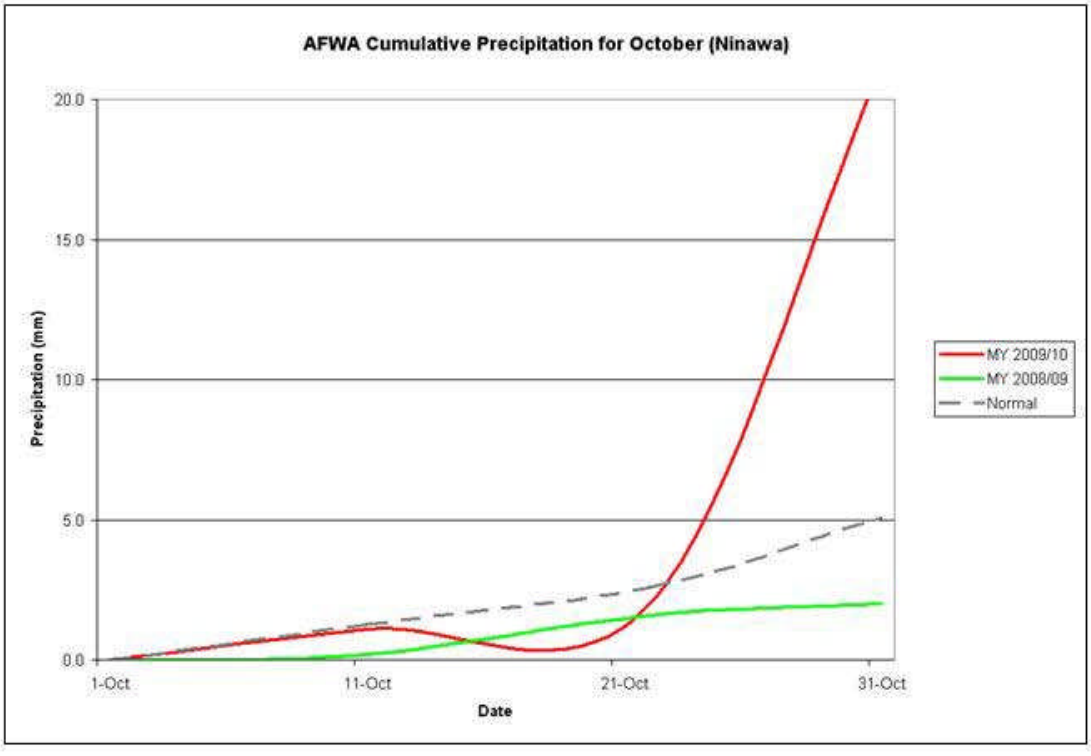


Figure 1: CMORPH monthly cumulative precipitation comparison for the month of November 2008.



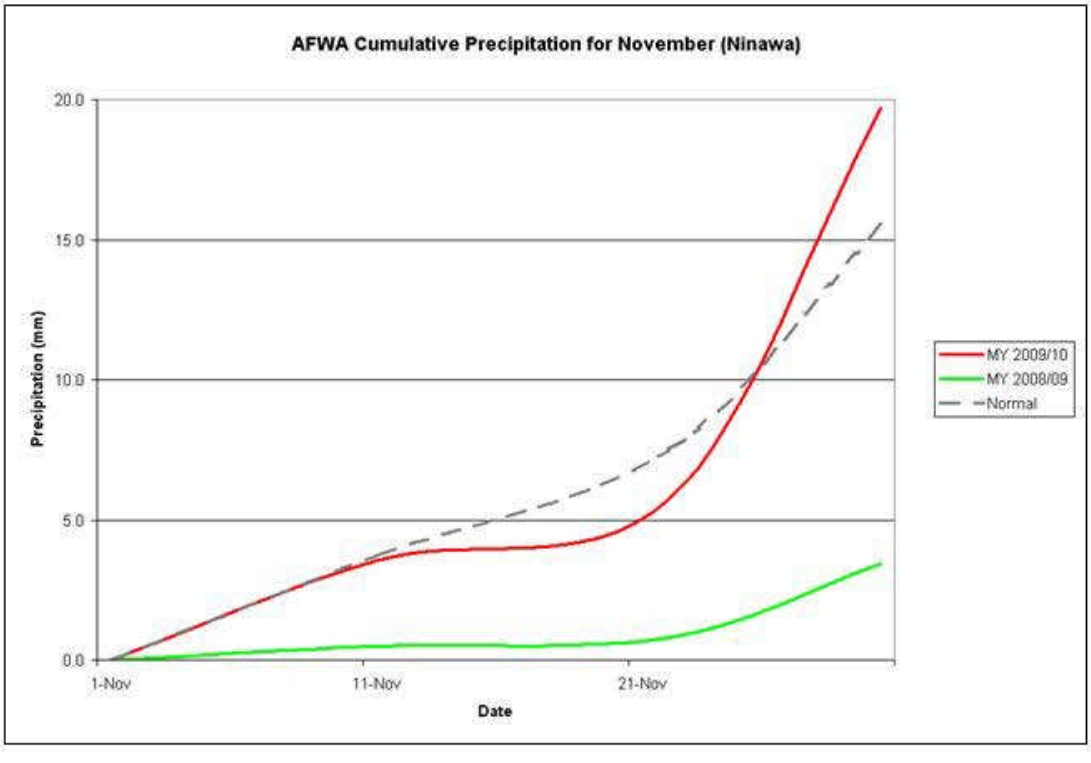


Figure 2: MY 2009/10 cumulative precipitation compared to previous year and normal: October and November.

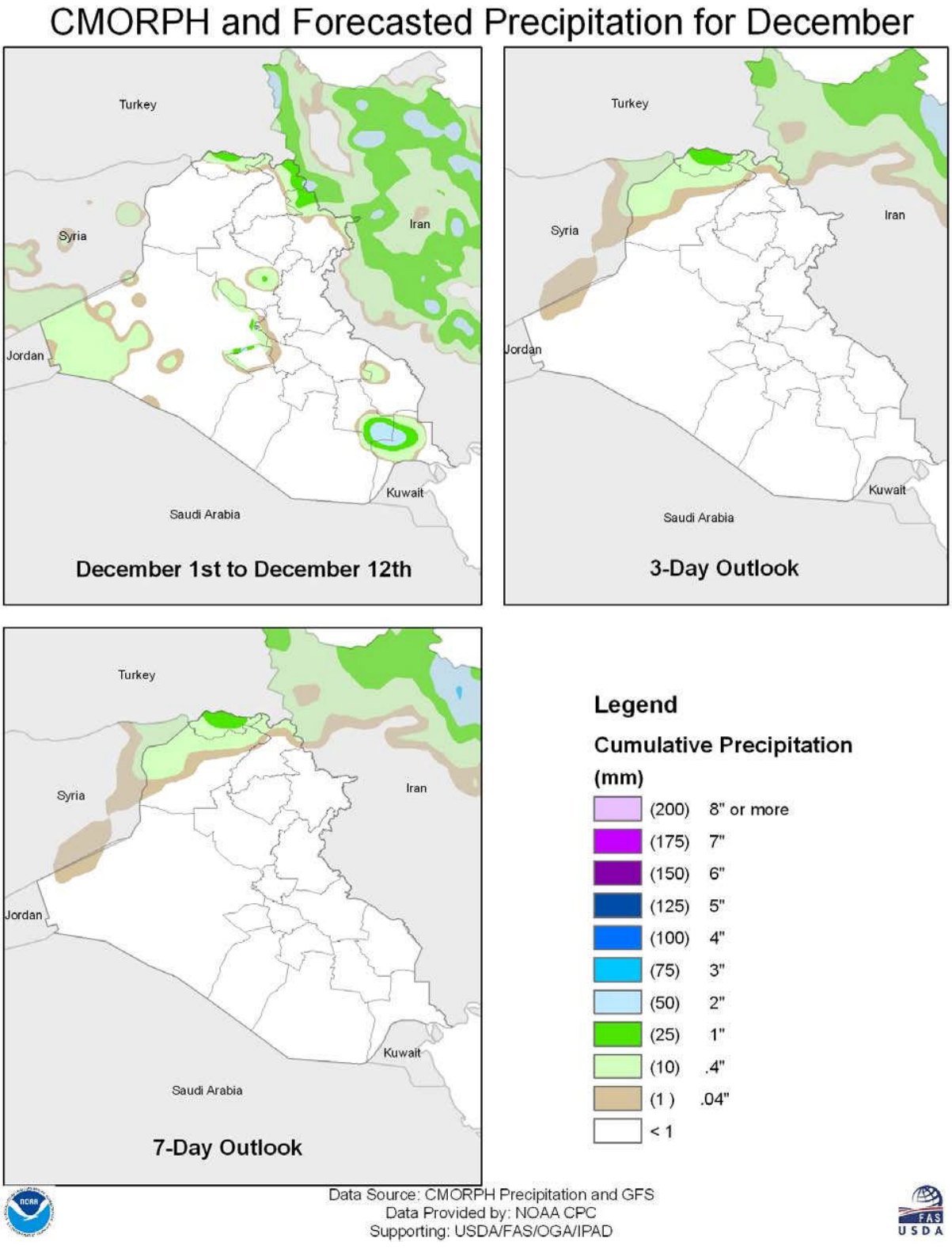


Figure 3: CMORPH decadal cumulative precipitation and global forecast system for the month of November.

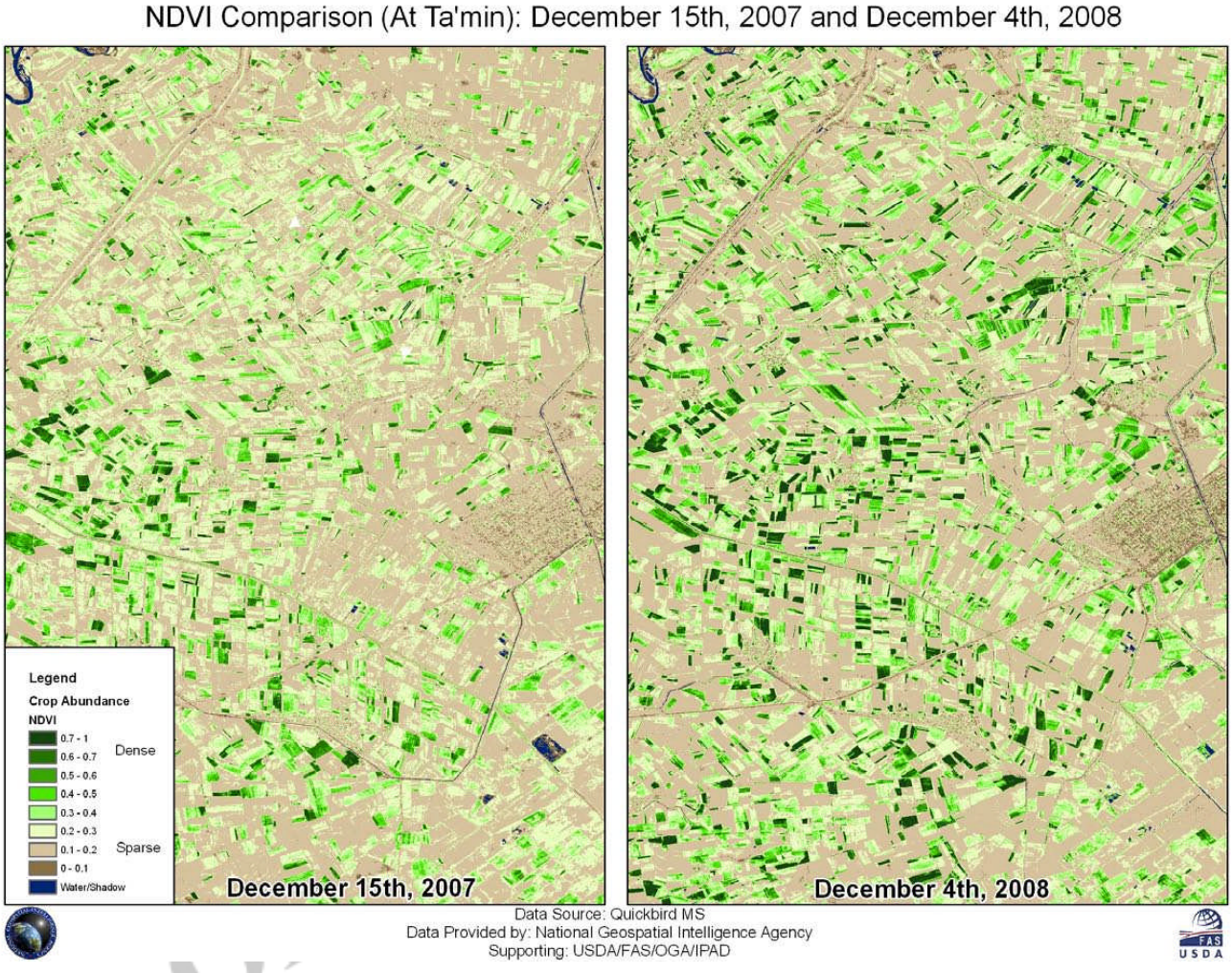


Figure 4: Multi-temporal NDVI comparison for At Ta'min: December 2007 and December 2008.

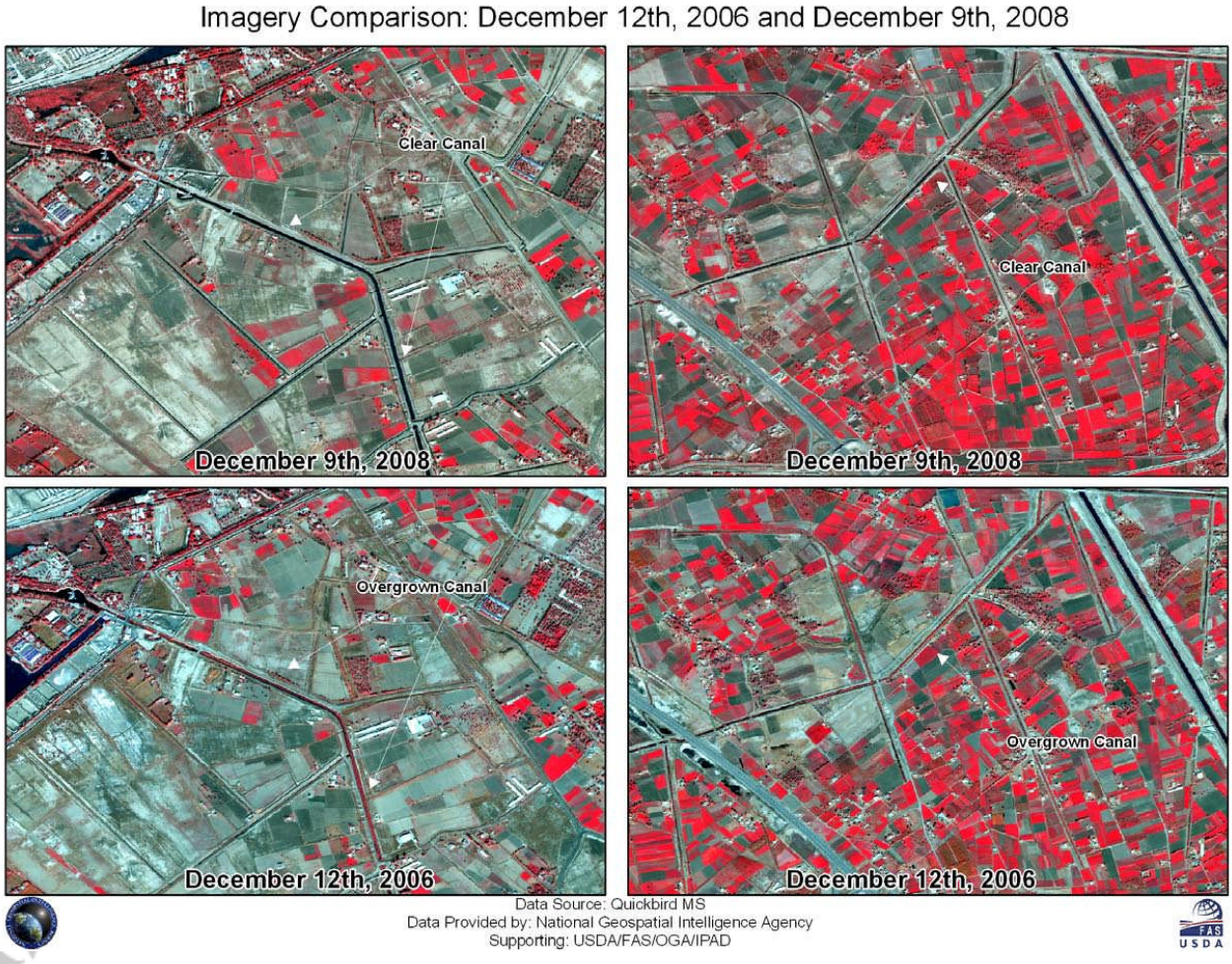


Figure 5: Imagery and vegetation comparison at study area 6 and 7 (33.29N, 44.24E): December 2006 and December 2008.

For more information contact
Michael Shean | michael.shean@fas.usda.gov | (202) 720-7366 USDA-FAS, Office of Global Analysis or
Sean Griffin |sean.griffin@asrcms.com| (202) 720-9107 ASRC Management Services.