

Dry soil conditions could affect the early start of the Primera and Primavera seasons

KEY MESSAGES

- Better rainfall totals during March helped to reduce the dry conditions reported in the past months as a result of below-normal rainfall accumulation in Haiti and Central America (figure 1).
- The *Primera* season in Central America is expected to start on time in May, with some areas beginning in June. Good soil conditions in western Guatemala prompted an early sowing of maize.
- Most of Central America is expected to have normal rainfall in the May-July period, with below-normal in Atlantic areas of Nicaragua and above-normal in western Guatemala.
- In Haiti, dry soil conditions are affecting the normal water availability of crops for the *Primavera* Season.

APANTE AND POSTRERA PRODUCTION

National governments monitoring production in Central America do not report significant losses for the *Postrera* and *Apante* seasons due to the favorable soil moisture in the production areas. The *Postrera* and *Apante* harvests were sufficient to guarantee the availability of basic grains in Guatemala, El Salvador, Honduras and Nicaragua. The highest production was reported in Nicaragua, where, despite a reduction in planted area, the expected production levels were met due to a favorable yield.

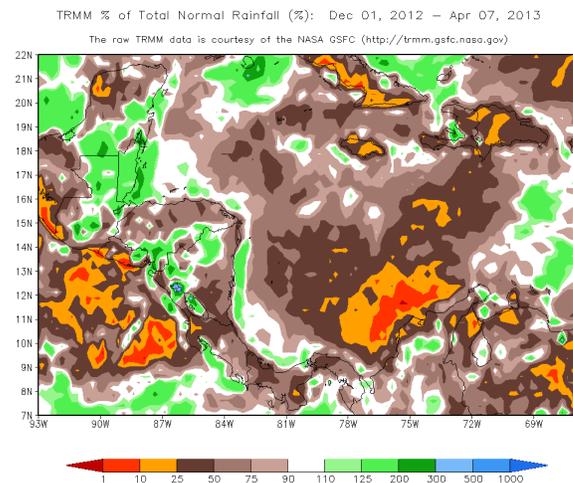
PRIMERA (CENTRAL AMERICA) AND PRIMAVERA (HAITI) SEASONAL PROGRESS

Rainfall in March helped replenish the negative rainfall reported in Central America from December 2012 to February 2013. However, high temperatures have caused evaporation and loss of moisture, keeping soil conditions dry in principal areas of production on the Pacific side of Guatemala during the *Primera* Season.

Some areas of Huehuetenango, Quiché, and Sololá departments in western Guatemala have residual moisture from the end of the 2012 rainy season. Under normal conditions, these areas tend to retain more moisture than other areas due to altitude and soil conditions. The additional residual moisture enhanced already good soil conditions in these departments, allowing farmers to start sowing maize earlier than usual.

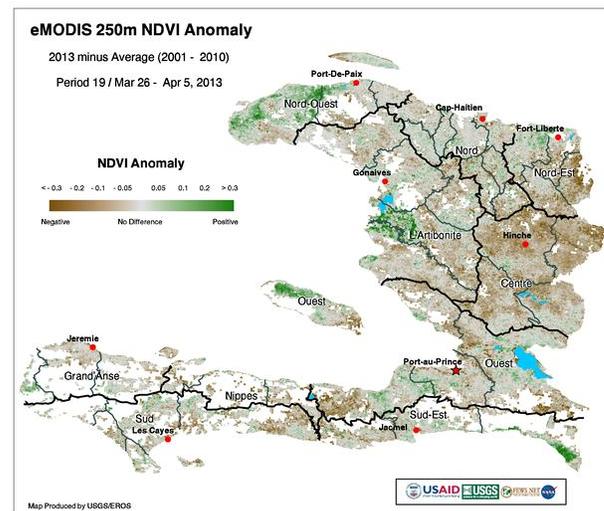
Please see http://www.cpc.ncep.noaa.gov/products/african_desk/cpc_intl/ and <http://earlywarning.usgs.gov/?l=en> for more information on remote sensing.

Figure 1. Map of rainfall anomalies in percentage (%), December 01, 2012 to April 7, 2013



Source: NOAA

Figure 2. Map of eMODIS Normalized Difference Vegetation Index (NDVI) Anomalies (2001-2010) 250m (10-day composite) Period 19 / March 26 to April 5, 2013



Source: USGS

The actual dry soil conditions in Central America and Haiti could affect the start of season. Possible effects could include a delay in sowing while waiting for well-established rain or, alternatively, crop failure in the early stages of development if sowing started early.

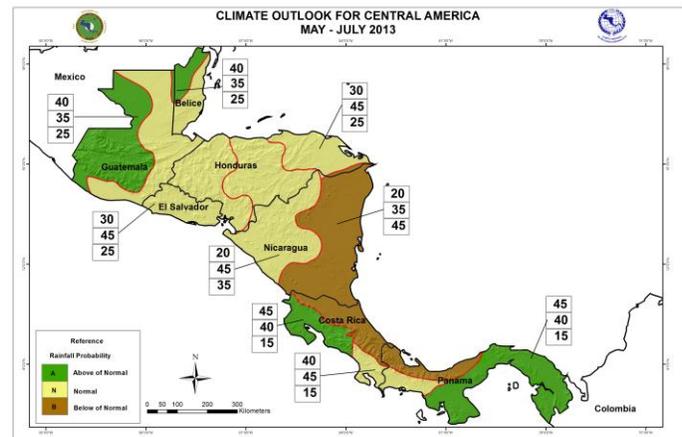
To date, the Normalized Difference Vegetation Index (NDVI) anomaly in Figure 2 shows problems with the vegetative health in several areas of Haiti. These areas represented in brown illustrate the degradation from deficient and irregular rainfall distribution during the last four months.

PRIMERA AND PRIMAVERA FORECAST

The most significant season in the region is *Primera* for Central America and *Primavera* for Haiti. In both areas, this is the first part of the rainy season (Mar/April-July/August), during which most subsistence farmers sow primarily white maize in Central America, and maize and sorghum in Haiti.

According to the Central America Regional Climate Outlook Forum (COF), rainfall will start during May in Guatemala, El Salvador, Honduras and Nicaragua. For Northern Guatemala, the rainfall will be established in June as usual.

Figure 3. Climate Outlook Forum Forecast May – July 2013



Source: COF

For May to July, the COF indicates a normal development of the rainy season in El Salvador, Honduras, and the east and the northeast parts of Guatemala (Figure 3), where conditions will be favorable for crop development. Guatemala expects above-normal rainfall for the northwestern area. Basic grains could be affected by the excess of humidity in these areas, particularly those areas close to the riverbed in the Ixcán region in the northern department of Quiché. In this area, farmers are continuously affected by floods in plains. Fungal diseases could also appear in this area during the early stages of crop development due to the excess of moisture in the environment, thereby creating optimal conditions for the development of Tar Stain infestation (*Phyllachora maydis Maubl*) during the more advanced stages of growth.

The forecast also indicates normal rain for the south and Atlantic regions of Honduras and Nicaragua, but they could experience reductions in rainfall during June/July. The meteorological services do not expect these rainfall reductions to negatively affect the yield at the end of the season. Nevertheless, close monitoring is necessary throughout the season.

The *canícula* (dry period) is forecast between July and August in Central America. The meteorological service of Nicaragua has stated that the *canícula* this year could be more humid than normal; therefore, no negative affects to crops are foreseen.

In El Salvador, the government has begun delivering inputs to farmers in time for *Primera* sowing. This assistance consists of seeds and fertilizer, and is planned to be 19 percent higher than last year, suggesting a similar production to 2012. The Honduran government also planned to deliver inputs; however, it has yet to start. This is significant because a delivery of inputs after May will be too late into the season to be utilized by farmers.

The COF forecast that at least one hurricane could affect the Caribbean and Pacific coasts of Central America between June and November. This occurrence could negatively affect the development of crops, depending on their phenological stage. Close monitoring of hurricane activity is necessary.

In Haiti, typically at the end of February, sowing would have begun under normal rainfall conditions in the Les Anglais, Les Cayes and Bale-de-Henne municipalities. However, there was a rainfall deficit and prolonged atypical dryness during February and March, which opens the possibility for crop failure during the early stages of development.