The USAID FEWS-NET

Africa Weather Hazards Assessment

for

September 14 - 20, 2006

Weekly Introduction:

Update of ENSO Conditions:

El Niño conditions have developed in the tropical Pacific and are likely to continue into early 2007. Ocean temperatures increased remarkably in the equatorial Pacific during the last two weeks. Currently, weak El Niño conditions exist, but there is a potential for this event to strengthen into a moderate event by winter.

By early September equatorial SST anomalies greater than +0.5ºC were observed in most of the equatorial Pacific, with anomalies exceeding +1.0ºC in the central Pacific between 165ºE and 170ºW. The latest SST departures in the Niño regions are all greater than +0.5. Beginning in February the basin-wide upper ocean heat content increased, and since early April positive anomalies have been observed. Since early July weaker-than-average low-level equatorial easterly winds have been observed across most of the equatorial Pacific. In August the Southern Oscillation Index (SOI) was negative for the fourth consecutive month. Collectively, these oceanic and atmospheric anomalies are consistent with developing warm episode (El Niño) conditions in the tropical Pacific.

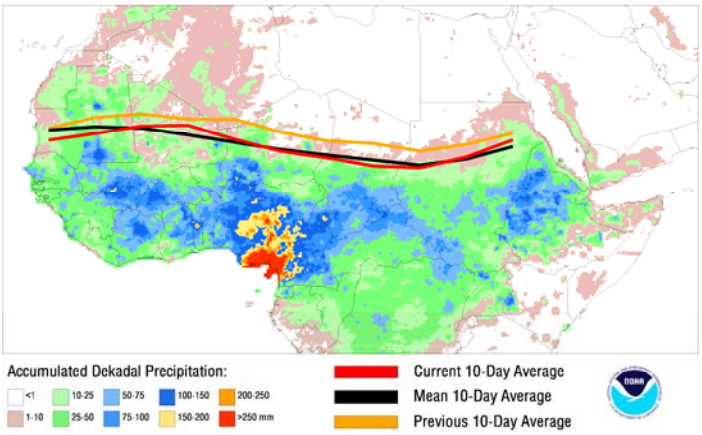
Additional information can be found at the web site:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/

ITCZ Update:

During the period from September 1-10, 2006, the African portion of the ITD was located near 17.3 degrees north latitude, which is very close to the climatological average position, and one tenth of a degree south of its position last year. Overall, the ITD moved southward around 1.6 degrees during the previous dekad (see Figure 1). In the west (from 10W-10E), the ITD was located near 18.4 degrees north latitude, only one tenth of a degree north of its normal position during the same period. (see Figure 2). In the east (from 20E-35E), the ITD was located near 16.0 degrees north, and very close to the climatological mean position (see Figure 3).

Current vs Mean Position of the Africa ITCZ
As analyzed by the NOAA Climate Prediction Center
September 2006 Dekad 1



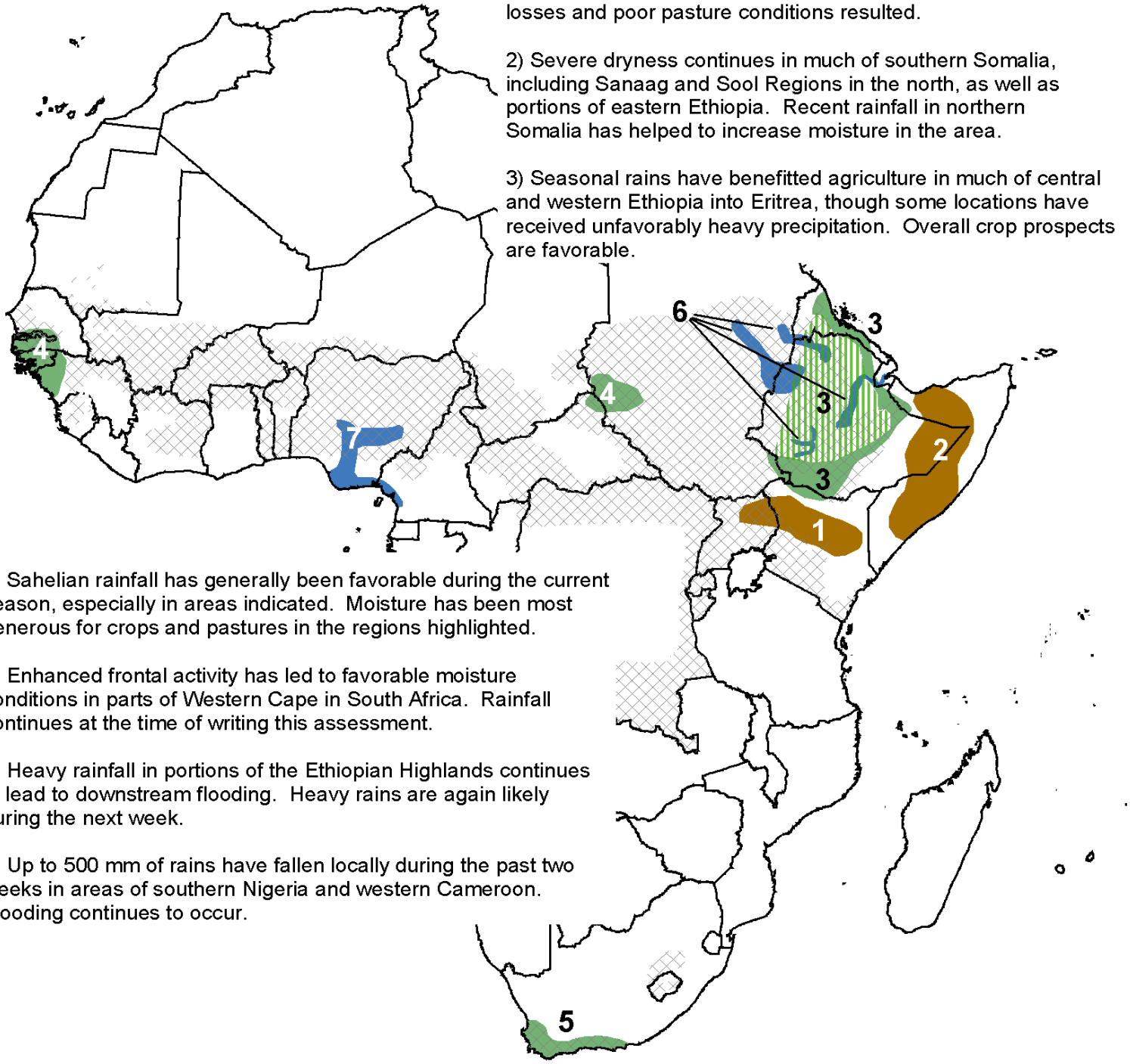
Africa Weather Hazards/Benefits Assessment

NOTE: Black hatched regions depict combined wheat, maize, sorghum, and millet crop zones which are active (sowing to harvest) during the current month. (from FAO)

1) Long term dryness continues in much of central and northern Kenya due to successive, poor seasons. Evidence of poor moisture conditions also exists in parts of eastern Uganda. Crop losses and poor pasture conditions resulted.

2) Severe dryness continues in much of southern Somalia, including Sanaag and Sool Regions in the north, as well as portions of eastern Ethiopia. Recent rainfall in northern Somalia has helped to increase moisture in the area.

3) Seasonal rains have benefitted agriculture in much of central and western Ethiopia into Eritrea, though some locations have received unfavorably heavy precipitation. Overall crop prospects are favorable.



4) Sahelian rainfall has generally been favorable during the current season, especially in areas indicated. Moisture has been most generous for crops and pastures in the regions highlighted.

5) Enhanced frontal activity has led to favorable moisture conditions in parts of Western Cape in South Africa. Rainfall continues at the time of writing this assessment.

6) Heavy rainfall in portions of the Ethiopian Highlands continues to lead to downstream flooding. Heavy rains are again likely during the next week.

7) Up to 500 mm of rains have fallen locally during the past two weeks in areas of southern Nigeria and western Cameroon. Flooding continues to occur.

Valid: September 14 - 20, 2006

Weather Hazards Text Explanation:

1. Long term drought continues in much of central Kenya due to a failed long rainy season in 2005 and poor performing rains thereafter. Recent evidence also suggests that negative moisture anomalies exist in portions of eastern Uganda. The region is experiencing drinking water shortages and poor pasture conditions, and is generally affecting livelihoods in a negative manner. Little rainfall is expected in the region during the next week, as seasonal dryness is observed. Rainfall should begin in mid-October throughout a good portion of the region if trends follow climatological patterns.

2. Poor rains during the 2005 and 2006 March-May rainy seasons, combined with poor rains from other periods, resulted in drought across much of Somalia and eastern Ethiopia. In some areas, this was in addition to previous poor rainy seasons. The poor 2006 MAM rainy season resulted in crop losses, degradation of pastures and low water supplies. The past week brought slight relief in many areas of northern Somalia, with 7-day total rainfall accumulations exceeding 15 mm in some locations. Light rains are again possible in northern locations, though conditions should be dry elsewhere. Conditions appear to be slightly more optimistic in coastal regions of southern Somalia.

3. Seasonal rainfall has been widespread and generally heavier than normal across much of central and western Ethiopia. This has led to favorable moisture conditions virtually throughout the region, though some locations have experienced negative repercussions due to periods of very intense thunderstorm activity. Crop production for the current season should be above normal.

4. Rainfall during the later half of the season has been widespread and continuous throughout much of The Sahel, though areas of southwestern Sudan, Southern Senegal, Guinea-Bissau, and western Guinea are experiencing more favorable conditions. The ITCZ has reached its peak northward location and has begun to move southward, thus rains will begin to diminish in many areas within the next few dekads.

5. Successive frontal passages in southern areas of Western Cape province in South Africa have led to above average moisture conditions in agricultural regions shown in the highlighted area. Another low pressure system should pass thru the region around Sept 17th, brining light rainfall to much of the area.

6. Associated with the heavy rains described in Area 3, downstream flooding continues in much of the region surrounding the Ethiopian Highlands. During the previous week, widespread falls of greater than 50-75 mm were observed in central and western locations, and heavy rains are again expected generally in western higher elevations. Therefore, flooding will continue in western Ethiopia and eastern Sudan, and water levels are declining in the upper parts of Shebelle and Jubba Rivers of southern Somalia.

7. Weekly rainfall totals exceeding 250 mm were observed in portions of southern Nigeria and western Cameroon during the previous period. Latest meteorological forecasts indicate a moderate chance for heavy rains to exceed 100 mm during the next week, thus leading to continued flooding along and downstream of areas with the most intense thunderstorm activity.

AUTHOR: Timothy B Love

Questions or comments about this product may be directed to Chet.Schmitt@noaa.gov or 1-301-763-8000 x7552

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