The USAID FEWS-NET

Africa Weather Hazards Assessment

for

April 14 – April 20, 2005

Weekly Introduction:

Update of El Niño:

Synopsis: A transition from weak warm-episode El Niño conditions to El Niño-Southern Oscillation (ENSO)-neutral conditions is expected to continue during the next three months. Sea surface temperature (SST) anomalies increased in the Niño 3.4 and Niño 3 regions during March 2005, while positive SST anomalies [greater than +0.5°C (~0.9°F)] persisted in the Niño 4 region. By the end of the month, positive equatorial SST anomalies greater than +0.5°C (~0.9°F) extended from Indonesia eastward to 115°W. Cloudiness and precipitation returned to near average over Indonesia.

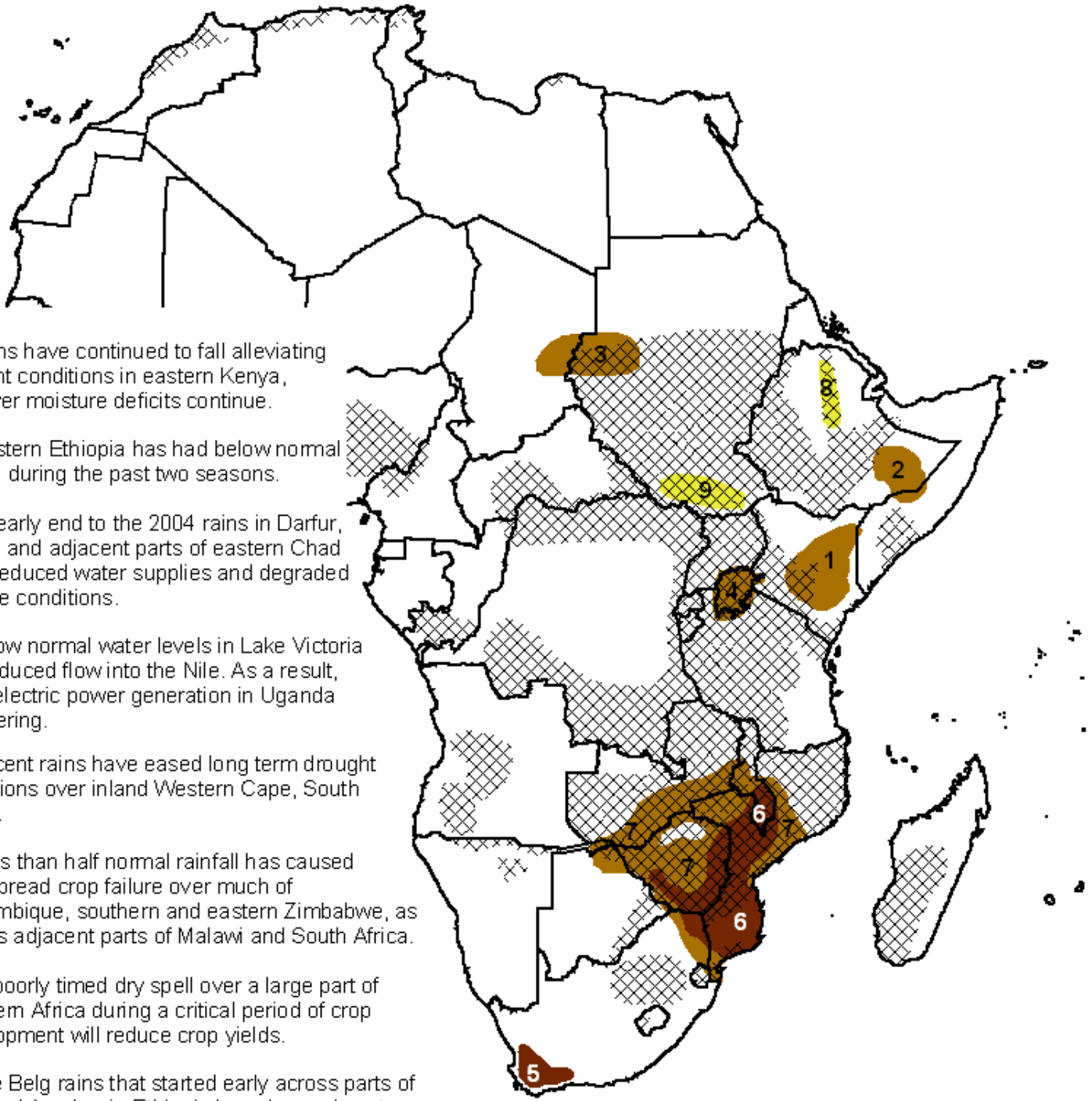
A majority of the statistical and coupled model forecasts indicate that a transition from weak warm- episode (El Niño) conditions to ENSO-neutral conditions will continue during the next three months, and that ENSO-neutral conditions will likely prevail during the northern summer.

This discussion is a consolidated effort of NOAA and its funded institutions.

Weather Hazards Assessment Graphic:

Africa Weather Hazards 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. Rains have continued to fall alleviating drought conditions in eastern Kenya, however moisture deficits continue.

2. Eastern Ethiopia has had below normal rainfall during the past two seasons.

3. An early end to the 2004 rains in Darfur, Sudan and adjacent parts of eastern Chad have reduced water supplies and degraded pasture conditions.

4. Below normal water levels in Lake Victoria has reduced flow into the Nile. As a result, hydroelectric power generation in Uganda is suffering.

5. Recent rains have eased long term drought conditions over inland Western Cape, South Africa.

6. Less than half normal rainfall has caused widespread crop failure over much of Mozambique, southern and eastern Zimbabwe, as well as adjacent parts of Malawi and South Africa.

7. A poorly timed dry spell over a large part of southern Africa during a critical period of crop development will reduce crop yields.

8. The Belg rains that started early across parts of Afar and Amahra in Ethiopia have been almost non-existent for the past two weeks.

9. The rains are later than normal in southern Sudan.

Valid: April 14 - April 20, 2005

Weather Hazards Text Explanation:

1. In Central and Eastern Kenya, the long and short rainy seasons of 2004 produced less rainfall than normal. As a result, pastoral and bi-modal areas are experiencing degraded pastures and reduced soil moisture. Conditions have improved with recent rainfall. However, the late start of the rains and their inconsistency are a continued concern. The coming period will likely bring light rains to much of Kenya.

2. Ethiopia's Somali region in 2004 was between 50 and 70 percent of normal precipitation. The coming period may see a start to the rains, especially in the later part of the week.

3. Reduced soil moisture, degraded pastures and generally lowered water supplies in Central Darfur, Sudan and Biltine and Ouaddai, Chad are the result of a 2004 wet season that was erratic and truncated. The below normal water availability has aggravated the humanitarian crisis in the region. Seasonably dry conditions persisted during the past week and are likely to remain until July.

4. As of March 25th, Lake Victoria's surface was 0.68 meters below normal. The lower than normal lake height has reduced water flowing out of the lake into the Nile. Hydroelectric power is generated along the Nile in Uganda, and the below normal water flow has reduced power generating capabilities. Rainfall totals of up to and over 150 mm fell on the lake during the previous week with smaller amounts falling over the lake's basin. Along the lake in Kenya heavy rains have caused some localized flooding, and continued rains may aggravate the situation there. Lighter amounts of rain are expected over the next week. The past weeks rainfall will help the lake recover. However, prolonged rains are needed to bring Lake Victoria back to a normal surface height.

5. Interior portions of Western Cape, South Africa have received poor rainfall over the last year, causing a prolonged drought. Only 25 to 60 percent of normal precipitation fell on the area from April to September 2004, typically the wettest time of year. Closer to the coast normal rainfall has been observed. All five of the regions major reservoirs are reporting being at or near record lows. This past week, however, very heavy rains fell on the area with several reports of over 100 mm of rainfall across Western Cape. Wide spread flooding did occur as both the Kinga and Kogmanskloof Rivers burst their banks, and urban flooding occurred in some of the regions' cities and towns. This will likely increase the amount of water in reservoirs. However, the soil needs more evenly distributed rainfall to recover. The coming week will have little to no precipitation, giving the area a chance to dry out.

6. The 2004-2005 wet season was exceptionally dry across a large area of southeast Africa. Deficits of 150 mm to 400 mm, or 60 to 25 percent and worse have continued to impact Southern and central Mozambique, southern Malawi, southern and eastern Zimbabwe and adjacent parts of northeastern South Africa. The most severely affected areas are Gaza and Inhamambane provinces in Mozambique and Manicaland and Masvingo provinces in Zimbabwe. These conditions have significantly reduced soil moisture, stressed pastures, and lowered river levels causing water shortages. Any moisture that may fall now is too late to revive crops. Seasonably dry conditions have moved into the area.

7. Much of Zimbabwe, central Mozambique, southern Zambia, central Malawi and northeastern Namibia were victims of an untimely dry spell from February into mid-March that occurred during a critical period of crop development when rains came to a halt for 3 to 5 weeks. The dry spell has reduced crop yields in the affected areas. Isolated pockets in Midlands and Mashonaland of Zimbabwe have escaped the dryness as rains did fall in orographically favored areas during the dry spell. In the negatively affected regions, which largely outnumber those spared the brunt of the dry spell, received anywhere from 25 to 75 percent of normal rain during February and the first part of March. The coming week may bring some scattered showers to the area.

8. In Afar and Amhara in Ethiopia the Belg rains started early, but have since cut off. This combined with warmer than normal air has caused drier than normal conditions in the area. It would take very little rainfall to alleviate the current deficits.

9. In southern Sudan, rains that should have arrived two dekads ago still have not arrived. This is the same general area that was impacted earlier during the dry season by below normal flow in the Nile River. Light rains fell across the area last week, with only a little rainfall expected during the coming week.

AUTHOR: Eric J Wolvovsky

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