

The USAID FEWS-NET

Africa Weather Hazards Assessment

for

February 16 - 22, 2006

Weekly Introduction:

Update of El Niño:

Synopsis: La Niña conditions are expected to continue during the next 3-6 months.

The patterns of anomalous ocean temperatures, atmospheric circulation and precipitation are consistent in indicating La Niña conditions in the tropical Pacific. During January negative equatorial SST anomalies less than -0.5° C were observed at most locations between the date line and the South American coast, while anomalies greater than $+0.5^{\circ}$ C were restricted to the region between Indonesia and 160°E. Negative SST departures increased in magnitude in the Niño 4 and Niño 3.4 regions, as the oceanic cold tongue strengthened in the central equatorial Pacific.

Over the past several months most of the statistical and coupled model forecasts have trended towards cooler conditions in the tropical Pacific through mid-2006. The spread of the most recent statistical and coupled model forecasts (weak La Niña to neutral) indicates some uncertainty in the outlooks. However, current conditions and recent cooling trends in observed oceanic conditions support continuation of La Nina conditions in the tropical Pacific during the next 3-6 months.

The seasonal precipitation outlooks for Africa will be presented during the forthcoming weeks.

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

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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) Phenomenal drought continues to affect much of southern Ethiopia, northeastern Kenva, and southern Somalia. 2) A failure to near failure of seasonal rains has led to drought across much of Kenya, eastern Uganda, and northeastern Tanzania. '3) Erratic and lighter than normal 2005 rainfall has led to areas of poor pastures and water shortages in and around Djibouti. 4) Heavy rains continue to lead to localized flooding in parts of southern Zambia, northwestern Botswana, and northeastern Angola. 5) Rains have been lighter than normal in parts of southern Mozambique during the past 3-4 weeks, leading to areas of short term dryness and stressed crops in some locations. 6) Rainfall has been erratic and lighter and usual in parts of central and southern Angola during the past month. Areas impaacted include the main agricultural area of the country. 7) Generally, seasonal rainfall in most regions of southern Africa has been at beneficial levels for agriculture, water supplies, and pastures. Precipitation in parts of western Zambia, Angola, Namibia, and northern Botswana has actually been too intense during recent weeks. Improvement is expected in parts of southern Zimbabwe, northeastern South Africa, and southern Mozambique during the next week as a frontal system brings moisture to the area. 8) A moderate frontal system brought improving rains to portions of extreme southern Mozambique and northeastern South Africa during the past week. 9) Onshore moisture was observed in regions of southeastern Tanzania and extreme northeastern Mozambique during the past week, helping to somewhat reduce dryness in the region. 10) A stalled frontal system may produce continued heavy rains along the lower Zambezi River Basin in Mozambigue during the next week, leading to areas of localized flooding.

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Weather Hazards Text Explanation:

1. Several poor consecutive rainy seasons have resulted in the development of severe drought across much of eastern Kenya, southeastern Ethiopia and southern Somalia. The poor performance of this year's March-May season and the failure of the October- December season have resulted in rainfall totals for the year 2005 that are only 20 to 50 percent of the long term mean, and annual rainfall deficits of 250 to 500 mm. This severe drought has resulted in crop failures, pasture degradation, water shortages and has threatened the overall food security situation in the region. Although an increase in shower activity due to the start of the wet season has resulted in some improvement across interior central Tanzania, the rest of the region remained dry. No relief is expected in the short term and long term drought will persist for at least the next 2-4 months.

2. Drier than normal conditions since October has resulted in drought across western Kenya, much of Tanzania and the Lake Victoria Basin. In the bimodal areas of southern Kenya, northwestern Kenya and northeastern Tanzania, the short rains have failed for the 2005 season. In the southern and eastern parts of the Lake Victoria Basin, rainfall since October 1 has totaled only 200 to 300 mm. This is only 45 to 70 percent of normal, and has caused crop and pasture stress. On Lake Victoria, passenger ships failed to find docking stations in some areas due to the shallow water levels in recent weeks. Although the dry conditions in and around the basin have contributed to the low water levels, other factors such as downstream dam releases, are playing a substantial role. Across Tanzania's interior, widespread rainfall a few weeks ago signaled the start of the season. However, these rains did start 4 to 6 weeks late, and deficits stand at 50 to 150 mm. Therefore, more rain is needed. An early end to last year's season has combined with this years' late start to the season over the central Tanzania to result in the development of hydrological drought. The drought is resulting in serious problems in the Rufiji basin.

3. Seasonal rains across Djibouti and the surrounding area have been erratic and lighter than normal. This has resulted in pasture degradation and possible water shortages. Rainfall totals for 2005 are around half of the long term mean. Scattered showers occurred over the past few weeks across southern Djibouti, however little in the way of improvement was observed. The next chance for relief will be when the March-May rains set in.

4. Rainfall diminished somewhat in portions of southern Angola and northern Namibia during the past week, though heavy rains continued in areas of southern Zambia and the surrounding region. Flooding has been reported in this area as well as some crop damage due to the heavy rains. Additional heavy rains are expected during the next week.

5. The short term dryness seen in the previous hazards assessment has diminished (see current area 8), though dryness continues to be observed just to the north. Rains have been lighter than normal for much of the past week and dryness is generally expected during the next week.

6. Dryness has been observed recently in some of the primary agricultural areas of southern and central Angola due to lackluster rainfall since mid-January. Rains that have fallen in recent weeks have been located more to the north, east, and south of this region, though some moderate precipitation is possible during the next seven days. Conditions should improve in the region if the forecast rainfall does indeed fall.

7. Noting the current progress of seasonal rains in southern Africa, this area represents regions that have generally received the most beneficial rainfall during the past 2-3 months. Agricultural and pastoral conditions within this area are very healthy for the most part, and short term weather trends are optimistic. Latest market prices for primary food staples are encouraging, and at the moment there are very few areas of weather-related food shortages in this region. Crop prospects within the Maize Triangle are good to very good assuming continued healthy rains and normal temperatures during the remainder of the season. In and around Region 7, the only areas of noted declining weather-related conditions are in northern and southern portions of Mozambique, where some dryness has been observed during the past weeks, and areas to the west, associated with hazard area 4, where rains have been too heavy in recent weeks.

8. A strong cold front brought much needed precipitation to areas of southern Mozambique during the past week, as weekly totals of 50-100+ mm were noted in much of the area previously marked as exhibiting short term dryness. Thus, improvement is seen in the region, and water resources are not as concerning for the moment.

9. Improvement has also been noted during the past week in areas of southeastern Tanzania where the region has received some of its heaviest seasonal rains in the past few days. Onshore moisture flow has brought substantial rainfall, with widespread weekly totals of 40-50 mm and localized amounts exceeding 75 mm in the region. This has helped to improve conditions not only in southern Tanzania, but in extreme northern Mozambique as well.

10. As a branch of the Intertropical Convergence Zone moves slowly northward during the next week, heavy rains will again be possible near the mid and lower Zambezi River Basin in Mozambique. Weekly rainfall totals exceeding 75-100 mm are possible in the area and therefore localized river flooding is possible.

AUTHOR: Timothy B Love

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

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