The USAID FEWS-NET

Africa Weather Hazards Assessment

for

March 31 – April 6, 2005

Weekly Introduction:

Update and Review of Tropical Cyclone Situation:

As we examine the sea surface temperature conditions as well as the upper atmosphere winds over the South Indian Ocean, we see that we have entered a period favorable for cyclone development. The situation will continue to be monitored for possible impacts on the African continent at: http://www.cpc.ncep.noaa.gov/products/fews/CYCLONES/cyclones.html

We note that as of March 29, there have been 24 numbered cyclones in the Southern Indian Ocean and Southwest Pacific Ocean this season which is about average for this time period. Of the 24, only 2 had significant impact on the African continent. The first was in late October (#2) that hit Tanzania and the second was in late January (#12) that entered the Mozambique Channel and made landfall onto Madagascar.

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. Drought continues to affect parts of southern and eastern Kenya and northeastern Tanzania. Darker shading indicates the region of most intense drought. Rains have brought relief to northern Tanzania and southern Kenya.

2. Eastern Ethiopia has received below normal rains for the past two seasons.

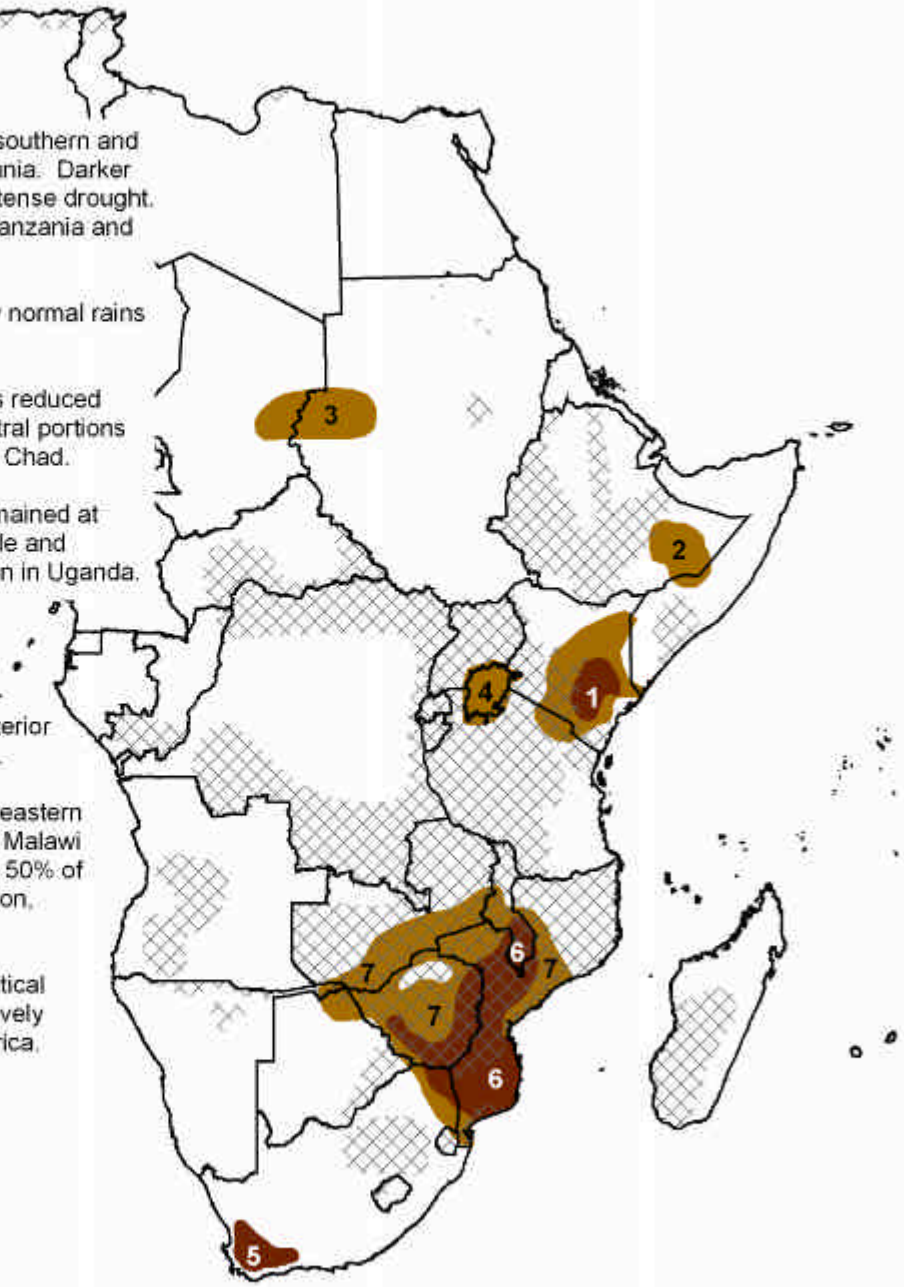
3. An early end to the rains in 2004 has reduced pasture and water supplies across central portions of Darfur and adjacent parts of eastern Chad.

4. Lake Victoria's water levels have remained at 10-year-lows reducing flows into the Nile and reducing hydroelectric power generation in Uganda.

5. Long term drought continues over interior Western Cape province in South Africa.

6. Much of Mozambique, southern and eastern Zimbabwe, as well as adjacent parts of Malawi and South Africa have received 25% to 50% of normal rainfall during the 2004-05 season, causing wide spread crop failure.

7. A dry spell that occurred during a critical period for crop development has negatively affected a wide part of southeastern Africa.



Valid: March 31 - April 6, 2005

Weather Hazards Text Explanation:

1. Most of southern and eastern Kenya, as well as adjacent parts of northern Tanzania, received below to much below normal amounts of rain during 2004. This has reduced moisture for pastures in pastoral areas and main season crop planting in the bi-modal growing areas. The arrival of seasonal rains has resulted in recent improvement across northeastern Tanzania and southern portions of Kenya while benefiting recently sown main season grains. However, dry conditions remain across much of east-central Kenya, where seasonal rains have yet to begin.

2. Rainfall during 2004 was about 50 to 70 percent of normal across Korahe, Gode and Afder zones in Ethiopia's Somali region, as well as adjacent portions of central Somalia. This has stressed pastures and reduced water supplies. Conditions are expected to remain seasonably dry over the next week. The Long Rains typically begin across these zones during early and mid April.

3. The 2004 wet season was shorter and drier than normal across much of central Darfur, as well as the Biltine and Ouaddai Prefectures in eastern Chad. This led to moisture shortfalls which in turn reduced viable pasture and water supplies in the area. Although the poor rains of 2004 were not unusual for this arid region, the dryness will certainly exacerbate the ongoing humanitarian crisis. Seasonably dry, hot conditions are expected across the region, with the potential for blowing dust during the weekend.

4. Lake Victoria's water levels remain near the lowest level in at least 10 years due to prolonged dry, warm conditions during recent years. The low water levels has reduced flow into the Nile River and has resulted in reduced hydroelectric power generation and caused energy shortages in parts of Uganda, according to IRIN news.

5. In Western Cape, South Africa near normal rainfall near the coast has contrasted sharply with much drier conditions inland, where only 25% to 60% of normal rainfall occurred from April to September of 2004. In many areas, the poor performance of the 2004 rains was in addition to lighter than normal rains in 2003. The extended drought has caused major drinking and irrigation water shortages, stressed pastures and has had a negative effect on dry land farming across interior parts of the province. Some dams are reporting to be at or near record low levels. Scattered showers are expected during the period, however no significant improvement is expected.

6. Rainfall amounts have been well below normal for the 2004-05 season across central and southern Mozambique, eastern and southern Zimbabwe, southern Malawi and the northeastern-most corner of South Africa. Rainfall totals are between 25 and 60 percent of normal across the region, with deficits of 150 to 450 mm. The driest areas are in Gaza and Inhambane provinces in Mozambique, as well as Manicaland and Masvingo provinces in Zimbabwe. Across these areas, rainfall was much lighter than normal during February and early March. As a result, there is a likelyhood of crop failures in these areas. In addition, the drought will likely result in a reduction of viable pasture, water shortages and low river levels. Showers are expected across southern Malawi and adjacent parts of Mozambique. Although the showers should benefit pastures and may result in minimal moisture increases for water supplies, these rains will be to late to help crops that have reached the permanent wilting point. Dry weather is expected across eastern Zimbabwe and southern Mozambique.

7. A lack of rainfall during February and March has resulted in an untimely dry spell across much of Zimbabwe, central Mozambique, southern Malawi, southern Zambia and northeastern Namibia. The dry spell, which resulted in 4 to 8 weeks of little to no rainfall, came during a critical stage of crop development. In many areas, the dryness was accompanied by hot temperatures. As a result, reductions in crop yield and crop quality are likely in these areas. Many parts of this area have received 60 to 74% of the normal January-March rainfall total. The effects of this dry spell may be enhanced by a late start of the rainy season in some locations. Expected spatially averaged accumulations of rainfall for the 2004-05 season over southern Matabeleland, northern Matabeland and eastern Botswana are estimated at 60%, 75% and 80% of normal, respectively. However, portions of northern Zimbabwe are not experiencing moisture stress and problems with dryness. Timely rains during late February into March have resulted in good cropping conditions in orographically favored portions of Midlands and Mashonaland in Zimbabwe. Showers and thunderstorms will favor immature crops across Namibia's Caprivi Strip, southwestern Zambia, Midlands and Mashonaland in northern Zimbabwe, as well as western portions of Matabeleland in western Zimbabwe. Dry conditions are expected across most of central Zimbabwe, increasing moisture deficits.

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