The USAID FEWS-NET

Africa Weather Hazards Assessment

for

March 17 - 23, 2005

Weekly Introduction:

Outlook Updates:

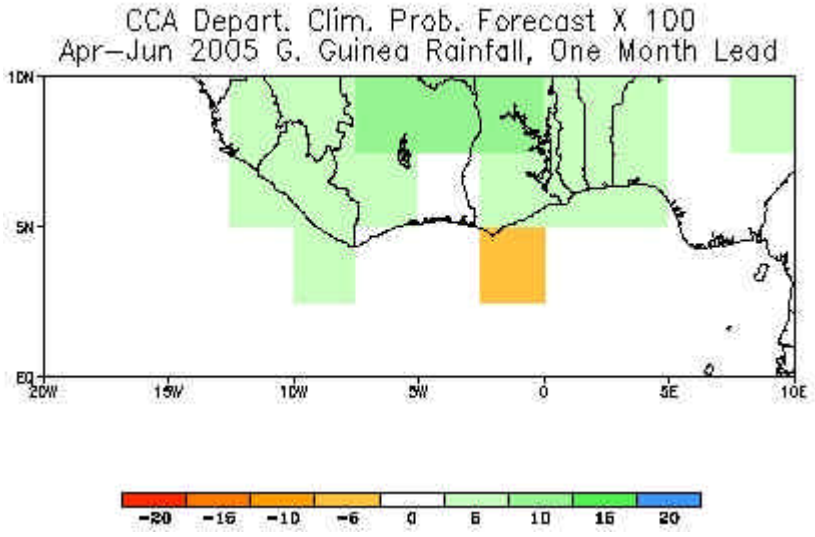
April-June 2005 Forecasts

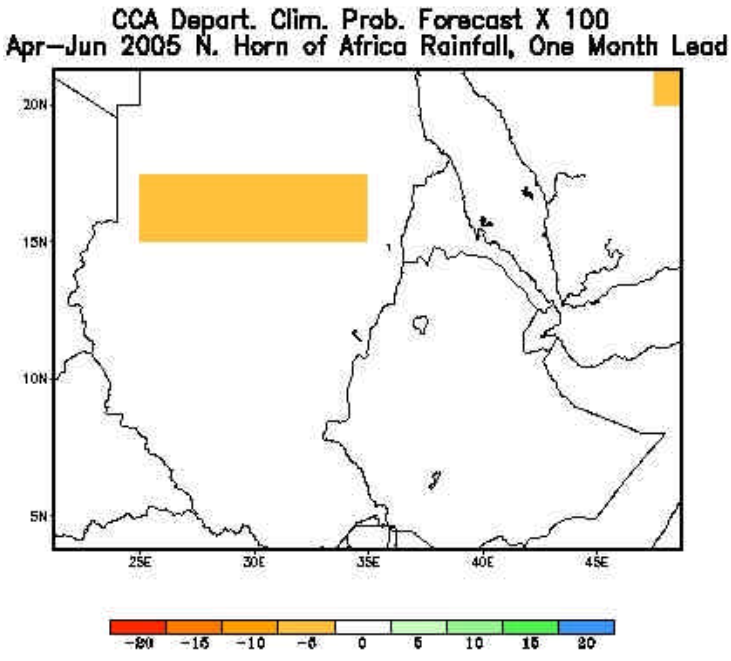
Gulf of Guinea Region:

The outlook for Apr-Jun 2005 Gulf of Guinea rainfall at one month lead shows a slight tilt in the odds favoring above average rainfall over most sectors in the Gulf of Guinea region from Sierra Leone eastward into western Nigeria. There is also a tilt in the odds favoring above normal rainfall over northeastern Nigeria.

Northern Horn of Africa:

Climatology is expected across the region, except locally in central Sudan, where there is a slight tilt in the odds favoring below normal rainfall.





Weather Hazards Assessment Graphic:

Africa Weather Hazards Assessment

1. Drought continues to negatively affect areas of southern and eastern Kenya and northeastern Tanzania. Darker shading indicates the region of most intense drought.

2. Parts of eastern Ethiopia have received below normal rains for the past two seasons.

3. Areas in and around western Afar in north central Ethiopia continue to feel the effects of poor seasonal rainfall in 2004. However, abundant rains over the past week have eased dryness and favored Belg crops.

4. An early end to the 2004 wet season has reduced viable pasture and water supplies across central portions of Darfur and adjacent parts of eastern Chad.

5. Low water levels on lake Victoria have reduced flows into the Nile and hydroelectric power generation in Uganda.

6. Several weeks of heavy rainfall have resulted flooding problems across the mountains of western Angola. Additional heavy rains and flooding problems are expected.

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

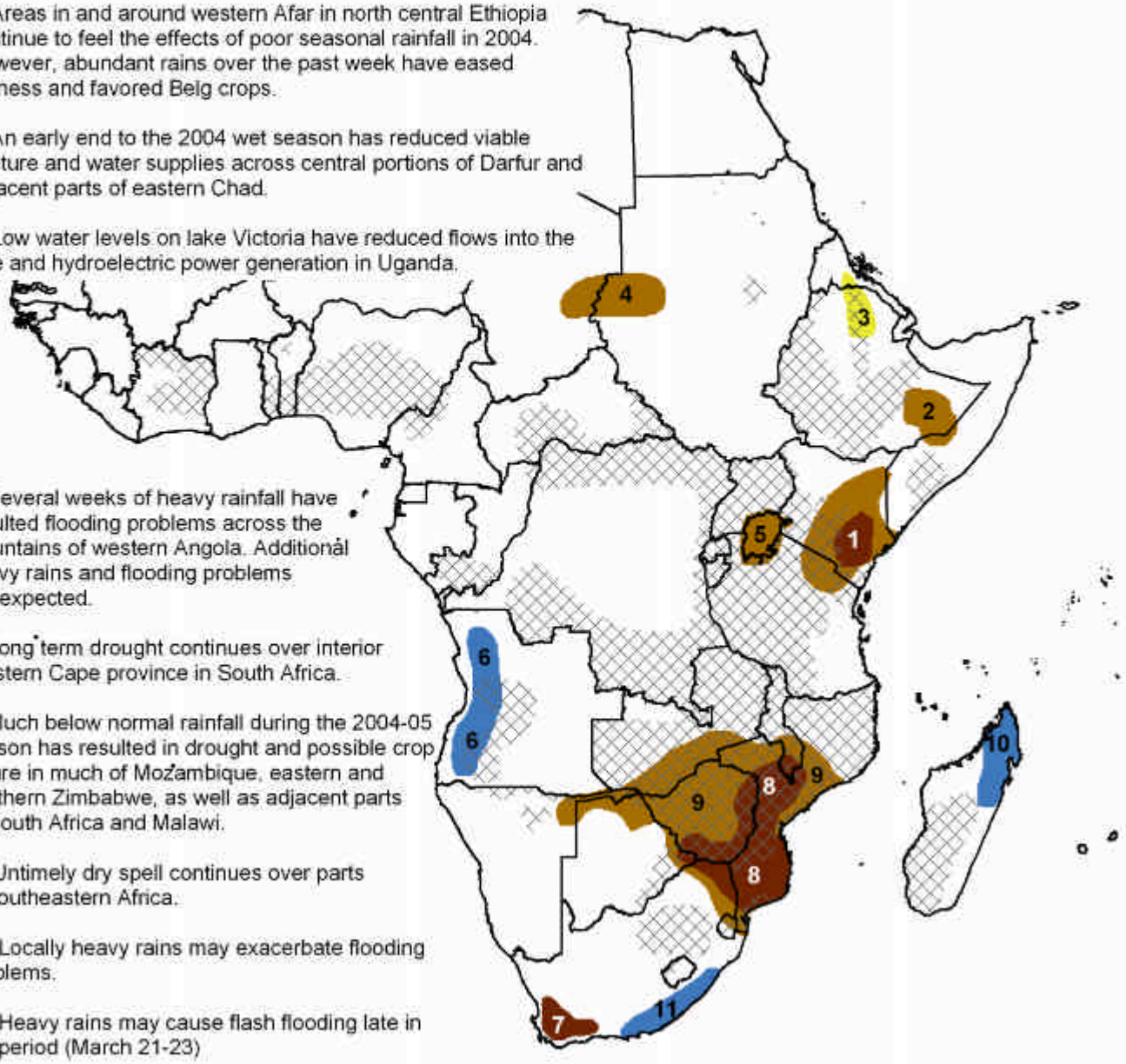
8. Much below normal rainfall during the 2004-05 season has resulted in drought and possible crop failure in much of Mozambique, eastern and southern Zimbabwe, as well as adjacent parts of South Africa and Malawi.

9. Untimely dry spell continues over parts of southeastern Africa.

10. Locally heavy rains may exacerbate flooding problems.

11. Heavy rains may cause flash flooding late in the period (March 21-23)

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)



Valid: March 17 - 23, 2005

Weather Hazards Text Explanation:

1. Most of southern and eastern Kenya, as well as adjacent parts of northern Tanzania, received rainfall that was well below normal during both the long and short rainy seasons of 2004. This has reduced moisture for pastures in pastoral areas and main season crop planting in the bi-modal growing areas. Beneficial showers have been observed across northern Tanzania and southwestern Kenya over the past few weeks. Dry conditions are expected across most of the region during the period, however there is a chance of rain over northern Tanzania.

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 may have stressed pastures and reduced water supplies. However, the first significant rains since November are expected across the region, with up to 30 mm possible. The best chances for rain will be over northern portions of the Korahe and Gode zones.

3. Rainfall was erratic and well below normal during 2004 across western Afar, eastern Tigray, eastern Ahmara and adjacent parts of Eritrea. Rainfall totals were less than half of the long term mean in many areas, resulting in degraded pastures and water supply reductions. However, rainfall has been robust across the area during the past two weeks, indicating that the Belg rains are underway. Abundant showers are expected to continue during the period, easing dryness and benefiting season agricultural activities.

4. 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.

5. Lake Victoria's water levels remain near the lowest level in at least 10 years due to prolonged dry, warm conditions over and around the lake. The low water levels have reduced flow into the Nile River. The low flow has resulted in reduced hydroelectric power generation and caused energy shortages in parts of Uganda, according to IRIN news. Showers are expected to increase across the Lake Victoria Basin during the period, however prolonged rains are needed to raise lake levels. Rainfall typically increases over Lake Victoria during March, with the heaviest rains of the year typically falling in April into May.

6. Several weeks of soaking rains have resulted in saturated soils and swollen rivers, as well as flooding problems across western Angola. Additional heavy rains are expected during the period, which may result in additional flooding problems.

7. 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 being at or near record low levels. Scattered showers are expected during the period, however no significant improvement is expected.

8. Rainfall amounts have been well below normal for the 2004-05 season across central and southern Mozambique, eastern and southern Zimbabwe, extreme 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 400 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 definite possibility 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. Scattered showers are expected during the period. However, these rains will be too light to result in any significant improvement in the drought situation.

9. A lack of rainfall during February 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 3 to 5 weeks of little rainfall, came during a critical stage of crop development. 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, not all locations within the shaded region are 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. During the period, showers and thunderstorms are expected to be numerous across northeastern Namibia and western Zambia. In fact, localized flooding is possible. Showers will be more scattered over eastern Zambia, Malawi, central Mozambique and Zimbabwe.

10. Torrential rains last week resulted in deadly flooding, damaged crops and destroyed homes over northern Madagascar during the first week of March. Devastating floods were reported around Lake Alaotra, about 200 kilometers northeast of Madagascar's capital city of Antananarivo. The floods ruined rice paddies and inundated villages around Lake Alaotra. According to News24.com, Lake Alaotra is considered Madagascar's "rice basket" and accounts for about 13 percent of the country's rice production. Between March 7 and 14, showers and locally heavy thunderstorms aggravated flooding problems and hampered clean up efforts in the area. Additional showers and thunderstorms are expected during the period, although rainfall is expected to be lighter than those responsible for the March 1 – 6 floods.

11. A vigorous cold frontal system has the potential to produce locally heavy rains and flash floods in and around the coastal areas of KwaZulu-Natal and Eastern Cape provinces in South Africa sometime between March 21st and 23rd. This includes the cities of Durban, East London and Port Elizabeth. Heavy showers have resulted in flooding during the past two weeks across these areas, with flooding reported on March 8th in Port Elizabeth and north of Durban.

AUTHOR: Chester V. Schmitt

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