The USAID FEWS-NET

Africa Weather Hazards Assessment

For

January 19 - 25, 2006

Weekly Introduction:

Update of El Niño:

Synopsis: Developing La Niña conditions are expected to continue during the next 3-6 months.
Equatorial SST anomalies greater than +0.5ºC were restricted to the region between Indonesia and 165ºE during December, while negative anomalies less than –0.5ºC were observed at most locations between the date line and the South American coast. By the end of the month the SST departures were negative in all of the Niño regions. During the last several months surface and subsurface temperature anomalies have decreased in the region between 180ºW and the South American coast. Collectively, the present oceanic and atmospheric anomalies are consistent with the development of La Niña conditions in the tropical 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 ENSO-neutral) indicates some uncertainty in the outlooks. However, current conditions (stronger-than-average easterly winds over the central equatorial Pacific) and recent cooling trends in observed oceanic conditions support the continuation of La Nina conditions in the tropical Pacific during the next 3-6 months.

Notice to our users:

Throughout the years, the Africa Weekly Weather Hazard Assessment has always been an evolving product. Recent discussions have suggested that the current product could be made even more useful if we include, in addition to the hazards, information on where we recognize things have improved. For example, if we carried a specific area last year as one that had a severe drought, but do not mention it this year, is this because things have improved or because we aren't monitoring it? We, of course, do continue to monitor the full situation and we want to inform everyone as to both the good as well as the bad.

We are thinking of several possible modifications that focus on making a graphic that includes extended information, with wording that is a bit more concise, and sending this out as the e-mail product. This would be supplemented by the web page which would include detailed information. As we develop a prototype we will submit it for comments before making it operational.

We look forward to working with everyone to continue making the product better.

Weather Hazards Assessment Graphic:

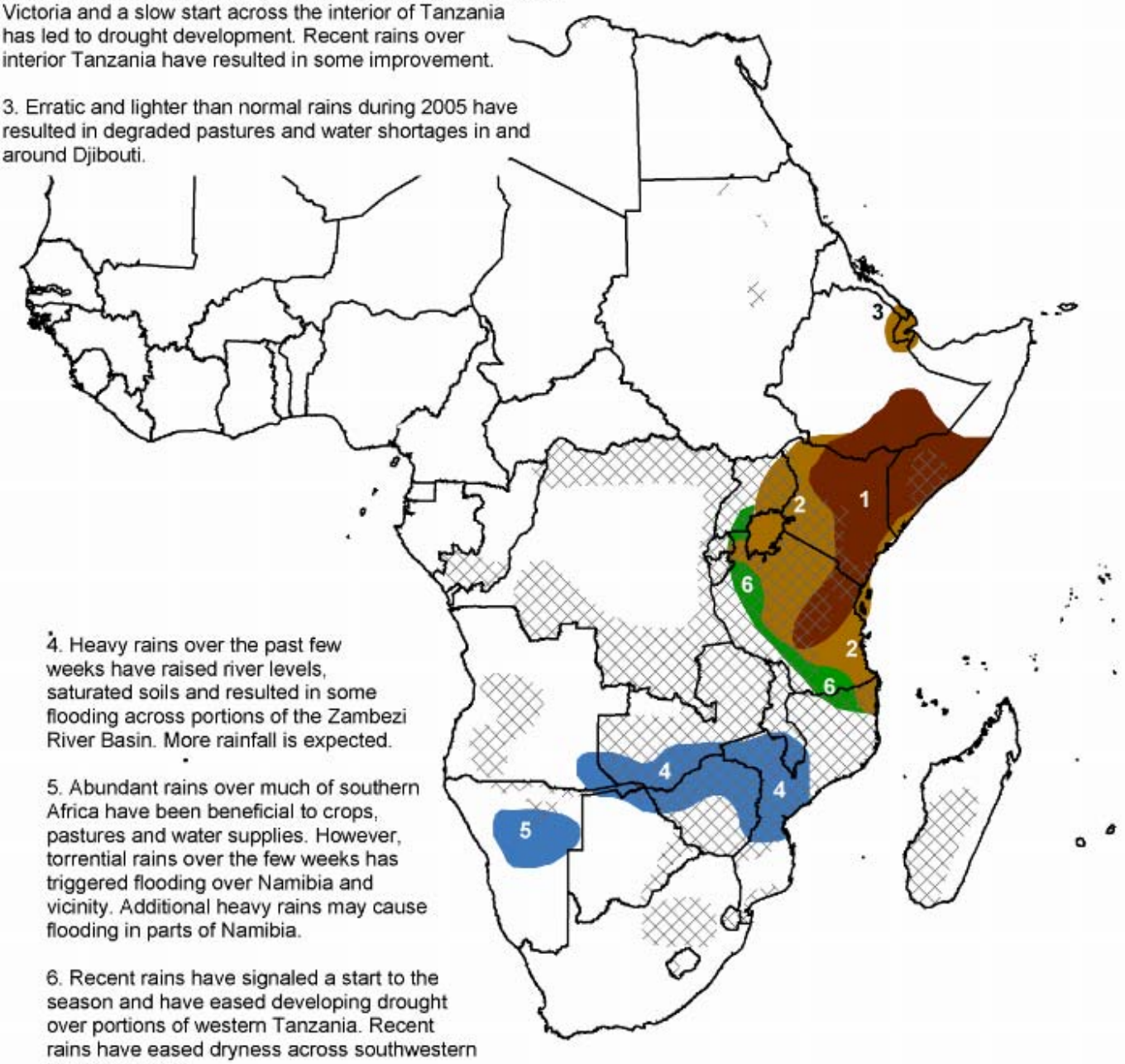
Africa Weather Hazards Assessment

1. Severe drought continues to plague southeastern Ethiopia, southern Somalia, portions of Tanzania, northern and eastern Kenya.

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)

2. A combination of failed short rains, light rains around Lake Victoria and a slow start across the interior of Tanzania has led to drought development. Recent rains over interior Tanzania have resulted in some improvement.

3. Erratic and lighter than normal rains during 2005 have resulted in degraded pastures and water shortages in and around Djibouti.



4. Heavy rains over the past few weeks have raised river levels, saturated soils and resulted in some flooding across portions of the Zambezi River Basin. More rainfall is expected.

5. Abundant rains over much of southern Africa have been beneficial to crops, pastures and water supplies. However, torrential rains over the few weeks has triggered flooding over Namibia and vicinity. Additional heavy rains may cause flooding in parts of Namibia.

6. Recent rains have signaled a start to the season and have eased developing drought over portions of western Tanzania. Recent rains have eased dryness across southwestern Uganda as well.

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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 this year's 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 drought has resulted in crop failures, pasture degradation, water shortages and has raised serious food security concerns for the region. To the south, an early end to last year's season has combined with seasonal rains that are 1 ½ months late over the central Tanzania to result in yearly totals for 2005 that are only 50 to 60 percent of normal. This has resulted in the development of hydrological drought. The drought is resulting in serious problems in the Rufiji basin. While eastern Kenya, southeastern Ethiopia and Somalia remained dry, significant rains fell over Tanzania last week. 10 to 50 mm of rainfall helped to ease dryness over northeastern Tanzania, with heavier amounts reported over the higher elevations of the interior. Additional rains are expected, however much more rain is needed. Scattered showers are possible over southeastern Kenya. However, long term drought will persist for at least the next 3 months.

2. Drier than normal conditions since October has resulted in the development of 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. Across the Lake Victoria Basin, including eastern Uganda, northwestern Tanzania and far eastern Rwanda, rainfall since October 1 has totaled only 100 to 250 mm. This is only 40 to 60 percent of normal, and has caused crop and pasture stress. Below normal rainfall, among other factors, has contributed to low water levels on Lake Victoria. Water levels have dropped to post 1960 levels, and are the lowest recoded since 1951. Some passenger ships failed to find docking stations due to the shallow water levels in recent weeks. People had to be ferried off of ships by small boats. Recent rains have provided some relief. 10 to 50+ mm of rainfall around Lake Victoria broke the dry spell that has lasted 4 to 8 weeks. However, deficits of 50 to 200+ mm still remain. Over northeastern Tanzania, showers moistened top soils and reduced dryness. Across Tanzania's interior, widespread rainfall (40 – 80+ mm) signaled the start of the season. However, these rains did start 4 to 6 weeks late, and deficits stand at 100 to 150 mm. Therefore, more rain is needed. The best chances for rain during the period will be over interior Tanzania, where seasonal rains will continue and further improvement is expected. Scattered showers are possible around Lake Victoria, however little in the way of improvement is expected. Large deficits are likely to persist.

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. The next chance for relief will be when the March-May rains set in.

4. Heavy rains soaked southern Malawi, central Mozambique and adjacent areas during the last week of December and the first week of January. These rains saturated soils and raised river levels. Flooding was reported in Malawi on the Shire, the Nyamazire, and the Lalanje rivers. Locally heavy rains have continued to fall across the region, as well as other parts of the Zambezi Basin. On the lower Zambezi, some flooding has been reported. However, the flooding has been minor. More serious flooding has been reported on the smaller rivers. This has been a problem particularly in central Mozambique between the Save and the Pungue rivers. Roads in some of these areas have become impassable due to flash flooding. Additional rains are expected across the area. Heavy rains may trigger additional flooding across central Mozambique, southern Malawi, northern and eastern Zimbabwe, southern Zambia and the Caprivi Strip of Namibia. Localized crop damage, ponding in fields and soil erosion are also possible. The main risks are of flash flooding and of smaller rivers bursting their banks. The larger rivers need to be monitored as the waters from the smaller rivers feed into them, raising their levels. Despite some of the problems, the abundant moisture and favorable temperatures have resulted in very good growing conditions across southeastern Africa's growing and pasture areas. This bodes well for the region as a whole.

5. Recent heavy rains have resulted in high antecedent moisture levels and localized flooding in Namibia. Torrential rains during the first week of January were followed by heavy rains on the second week. More rainfall is expected. As a result, flooding and localized crop damage is a possibility during the early part of the period. A break in the rains is possible during the end of the period.

6. Abundant rains over the past several days have eased dryness caused by a late onset of the seasonal rains across portions of western Tanzania. Additional rains should further reduce moisture deficits and improve crop, pasture and water supply prospects in the area. Recent rains have also eased dryness and moisture deficits over portions of southwestern Uganda adjacent to Lake Victoria.

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