The USAID FEWS-NET

Africa Weather Hazards Benefits Assessment

For

April 13 - 19, 2006

Weekly Introduction:

Intertropical Convergence Zone Analysis (ITCZ) Re-Initiated:

On April 1 we re-initiated the program to depict the dekadal position of the ITCZ along with a comparison with its normal position at the following site: http://www.cpc.ncep.noaa.gov/products/fews/ITCZ/itcz.html. The ten-day average ITCZ position is plotted and compared with the estimated rainfall for that period and the first plot for the season will cover April 1-10.

Armyworm Update:

The Desert Locust Organization of East Africa **(http://www.dlcoea.org.et/)** has indicated in its report for March that weather and ecological conditions are favorable for more Armyworm outbreaks in Kenya during April. For Tanzania, the Armyworm season ends, but some outbreaks are expected to continue in the northern regions.

Update of ENSO: La Niña conditions are expected to continue during the next 1-3 months.

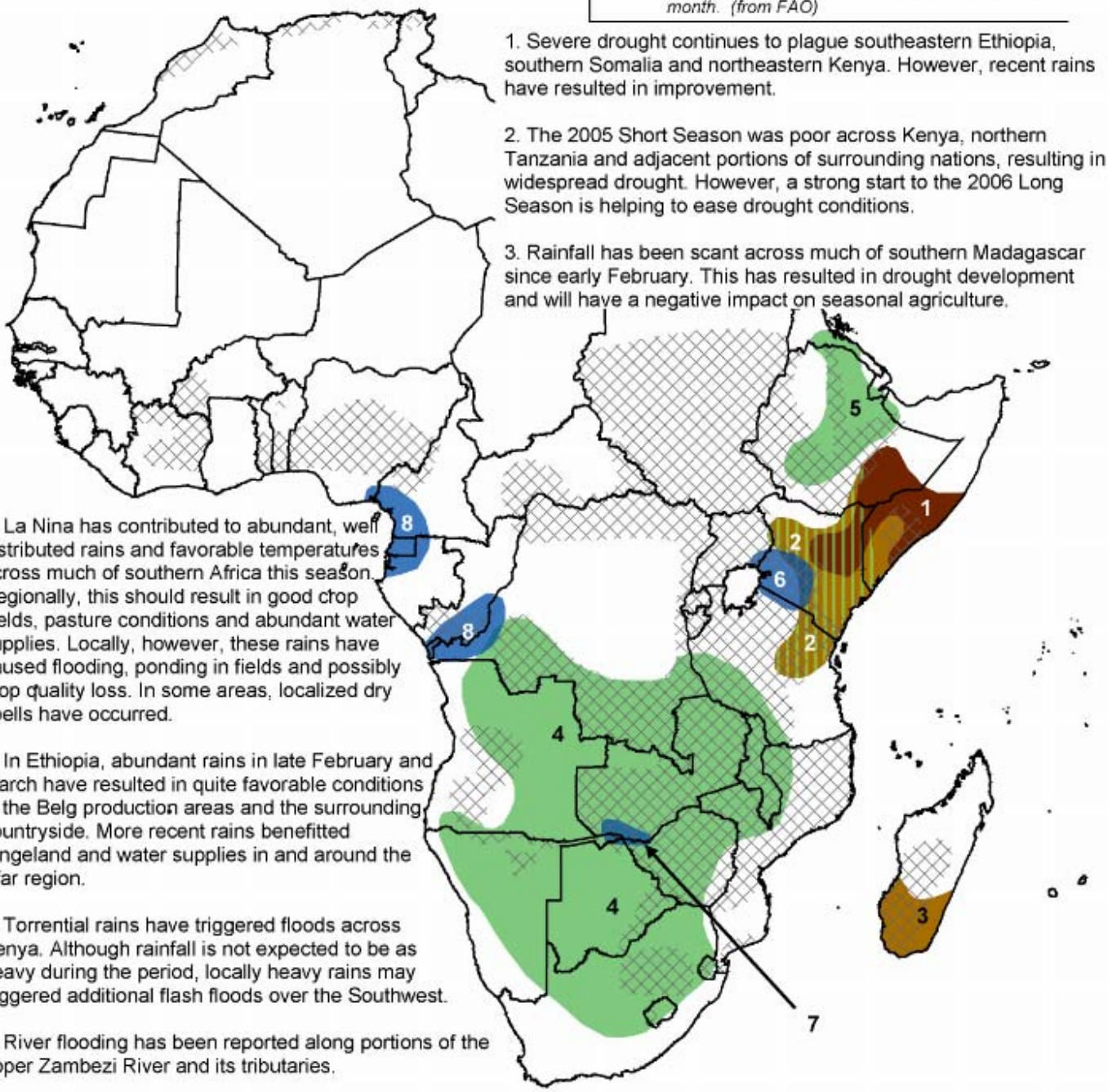
The patterns of anomalous ocean temperatures, atmospheric circulation and precipitation are consistent in indicating La Niña conditions in the tropical Pacific. During March negative equatorial SST anomalies less than –0.5ºC were observed at most locations between 180ºW and 90ºW, and negative SST departures were observed in all of the Niño regions, except for Niño 1+2. During the month, positive SST departures decreased in the extreme eastern equatorial Pacific, as conditions returned to near average in that region. Observed atmospheric and oceanic features are consistent with ongoing La Niña conditions.

Most of the statistical and coupled model forecasts indicate ENSO-neutral conditions in the tropical Pacific through the end of 2006. The spread of the most recent statistical and coupled model forecasts (weak La Niña to weak El Niño) indicates some uncertainty in the outlooks for the last half of the year. However, current conditions support those forecasts indicating that La Nina conditions will continue for the next 1-3 months. This discussion is a consolidated effort of NOAA and its funded institutions. The seasonal precipitation outlooks for Africa will be presented during the forthcoming weeks.

Weather Hazards Benefits Assessment Graphic:

Africa Weather Hazards/Benefits 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. Severe drought continues to plague southeastern Ethiopia, southern Somalia and northeastern Kenya. However, recent rains have resulted in improvement.

2. The 2005 Short Season was poor across Kenya, northern Tanzania and adjacent portions of surrounding nations, resulting in widespread drought. However, a strong start to the 2006 Long Season is helping to ease drought conditions.

3. Rainfall has been scant across much of southern Madagascar since early February. This has resulted in drought development and will have a negative impact on seasonal agriculture.

4. La Nina has contributed to abundant, well distributed rains and favorable temperatures across much of southern Africa this season. Regionally, this should result in good crop yields, pasture conditions and abundant water supplies. Locally, however, these rains have caused flooding, ponding in fields and possibly crop quality loss. In some areas, localized dry spells have occurred.

5. In Ethiopia, abundant rains in late February and March have resulted in quite favorable conditions in the Belg production areas and the surrounding countryside. More recent rains benefitted rangeland and water supplies in and around the Afar region.

6. Torrential rains have triggered floods across Kenya. Although rainfall is not expected to be as heavy during the period, locally heavy rains may triggered additional flash floods over the Southwest.

7. River flooding has been reported along portions of the upper Zambezi River and its tributaries.

8. Torrential rains have swollen rivers, saturated soils and triggered localized flooding over western parts of equatorial Africa. Additional rains may result in additional flooding problems in these areas.

Valid: April 13 -19, 2006

Weather Hazards Benefits 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 led to crop failures, pasture degradation, water shortages and has threatened the overall food security situation in the region. However, recent rains have been abundant as the long rains are off to a strong start across most of the region. Over the past week, 50 to 200+ mm of rain has fallen across western parts of the region. These rains will help to rejuvenate pasture and water supplies in the region. Unfortunately, these heavy rains may have caused stress and/or death to livestock and people weakened by several months of scarce forage and water. Furthermore, these populations have weakened immune systems, which will make them more vulnerable to water borne disease. The heavy rains also triggered flash flooding. Additional showers are expected during the period, and these rains should not be as heavy as those that fell last week.

2. Poor rains during the 2005 short rainy season resulted in drought development across Kenya and parts of Tanzania. In some areas, this was in addition to previous poor rainy seasons. The poor short rainy season resulted in crop losses, degradation of pastures and low water supplies. In some areas, the drought has resulted in hydrological problems as well, such as low water tables and reduced streamflow. However, the long rains are off to a strong start in many areas this year. Recent rains have been abundant across Kenya. These rains are resulting in improvement in the overall drought situation and are favorable for recently sown main season crops. However, some of these rains were very heavy, and deadly flooding was reported in Kenya. Additional rains are expected during the period, continuing the trend for improvement and favorable growing conditions in the region.

3. After a good beginning to the 2005-06 rainy season over southern Madagascar, rainfall was dramatically reduced during February and March. Many areas have received little in the way of rainfall since early February, resulting in seasonal rainfall deficits of 100 to 200+ mm, and may indicate an end to the rainy season that is two months premature. This early cessation of seasonal rains has resulted in the development of drought across the region and has likely resulted in reductions in crop production and crop losses. Losses will be highest for crops sown late. Some showers are possible during the period, primarily in southeastern areas. However, any rainfall will likely be too late to ease stress and crop damage caused by the February-March drought.

4. La Nina conditions in the equatorial Pacific have contributed to a season of abundant well distributed rainfall and favorable temperatures across much of southern Africa. Major growing areas in South Africa, Zimbabwe, Zambia, Botswana and Malawi have enjoyed a good season, as well as pasture areas and rangelands of Namibia, Botswana and western South Africa. Although, conditions regionally have been good for agriculture, water supplies and pastures, the abundant rains were excessive e in some areas and may have resulted in flooding, ponding in fields, localized crop diseases and pest problems. In other area, such as Malawi, localized untimely dry spells have had a negative impact of crop production. Therefore, some local areas may have had a fair to poor season, while regionally the season has been a good one.

5. Seasonal rains are off to a strong start across Ethiopia's Belg Production area. The best rains in several years have been reported across these areas. The favorable rains have resulted in good growing conditions and are favorable to the establishment of Belg crops. These rains have not been confined to just the Belg areas, as adjacent parts of the Highlands, as well as southern portions of Afar and the Rift Valley have also enjoyed good February through early April rainfall. Widespread rains have recently fallen across northern portions of Afar, as well as Djibouti, Eritrea and northwestern-most Somalia. Scattered showers are possible during the period, which will continue favorable conditions.

6. The heavy rains which resulted in improvement to the long term drought situation over Kenya and the surrounding countries has also triggered flooding across the region. Additional rains may be locally heavy in and around southwestern Kenya. As a result, the potential for additional flash flooding exists in these areas. However, rainfall is not expected to be as heavy as last week.

7. Continuous heavy rains during the 2005-06 rainy season across the upper portions of the Zambezi River Basin has led to river flooding along the Zambezi upstream from Lake Kariba. Flooding has also been reported along its tributaries. As water levels are expected to remain high, river flooding should continue along the upper Zambezi and its tributaries in Namibia, southwestern Zambia and northwestern Zimbabwe during the period. However, as the rainy season ends, river levels should begin to subside later in April.

8. Recent torrential rains have swollen rivers, saturated soils and triggered flooding across southwestern Cameroon, Equatorial Guinea, northwestern Gabon, southern Congo and adjacent parts of DRC. Severe flooding has been reported in the city of Kinshasa in the Democratic Republic of Congo. Additional heavy rains are expected in and around these areas, especially early in the period. As a result, additional flooding problems are expected.

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