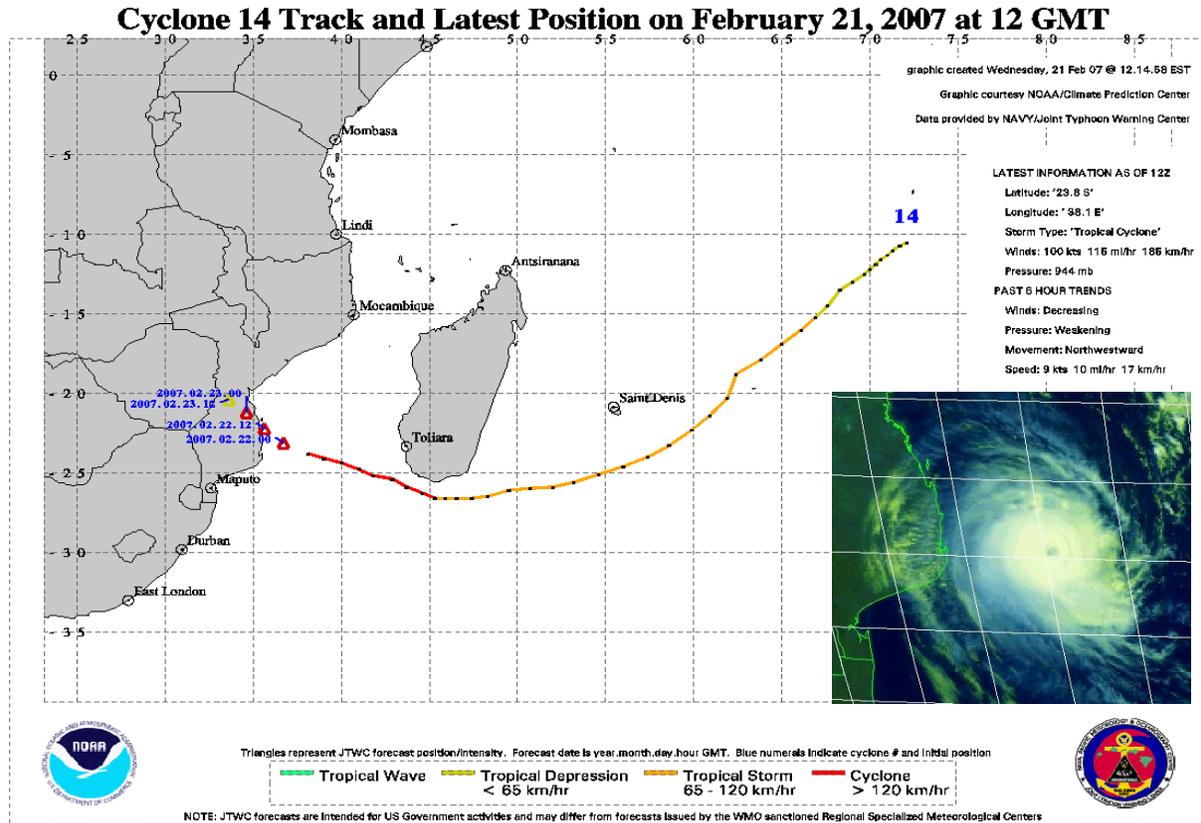


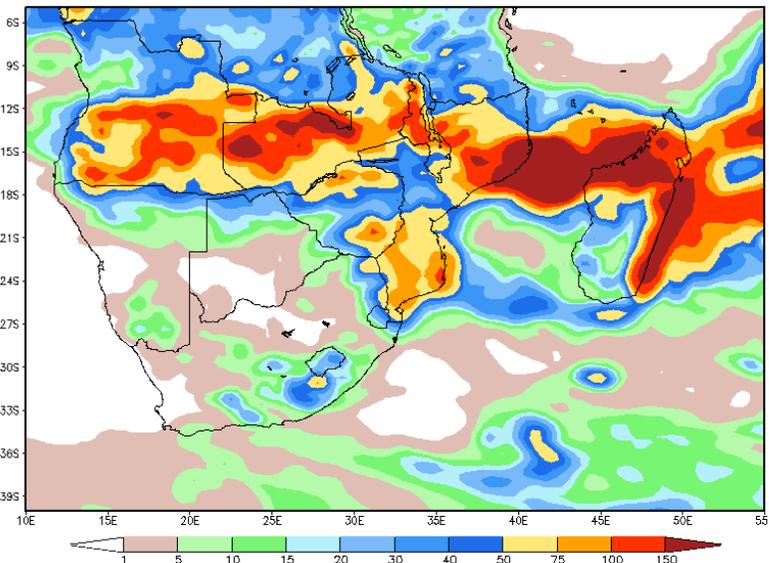
Africa Weather Hazards Benefits Assessment

For
February 22 - 28, 2007

Weekly Introduction: Tropical Cyclone Favio bears down on southern Mozambique, Zimbabwe



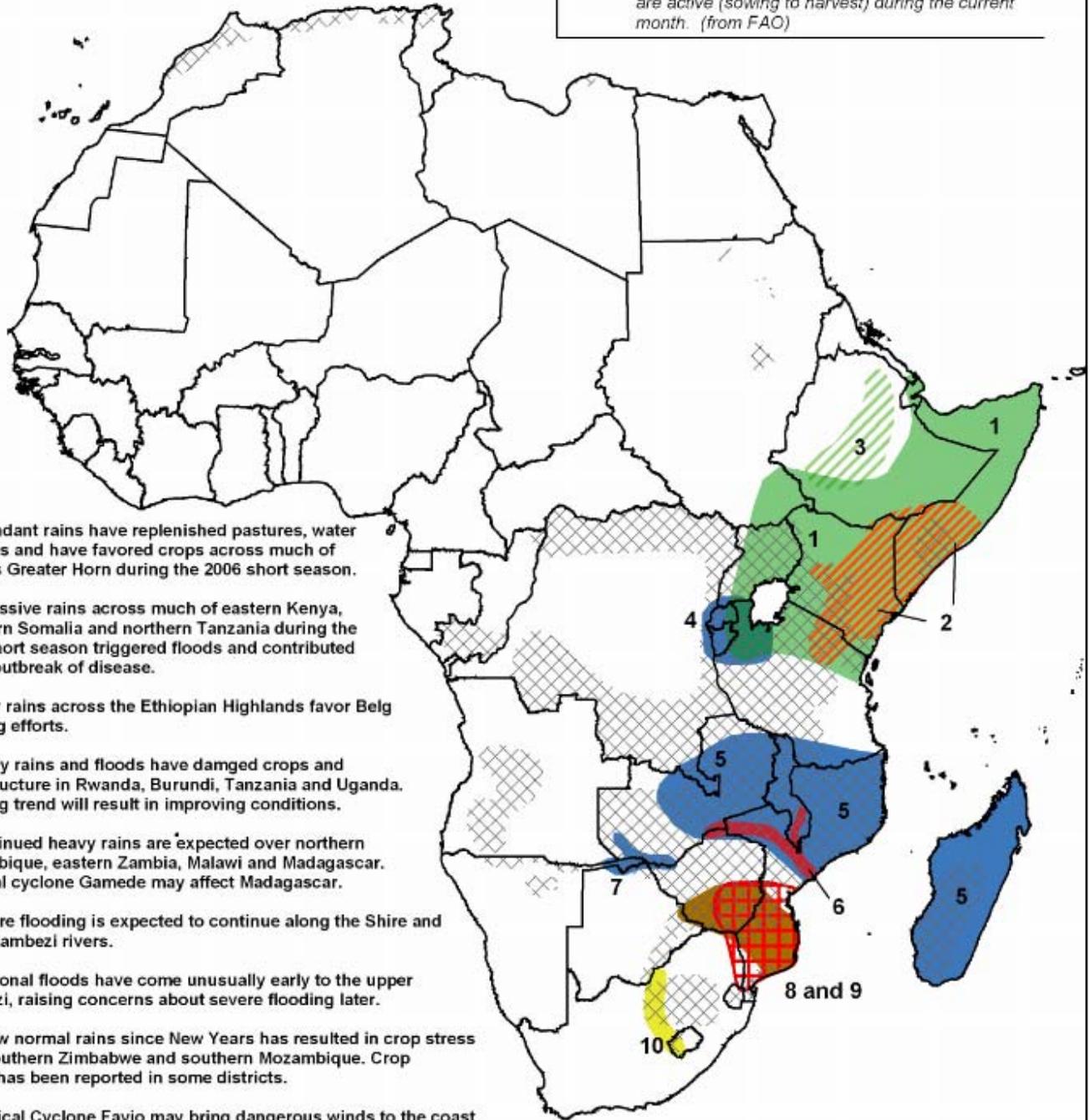
NOAA GFS 37.5 km Week 1 Total Precipitation (mm)
Issued at Feb 21 2007 00Z for the period ending at Feb 28 2007 00Z



Tropical cyclone Favio (TC 14) is moving across the Mozambique Channel and is expected to strike the coast early on the 22nd. Strong, damaging winds are expected in the immediate vicinity of where Favio makes landfall. Torrential rains are expected to fall from Feb 22 through Feb 25 across southern Mozambique and southeastern Zimbabwe. At this time it appears that the bulk of the rainfall will occur over the Limpopo Basin, where conditions have been dry since early January. While flooding is still possible, the ground and river systems should be able to handle more in the way of rainfall due to the dryness. This would also spare the Zambezi Basin from torrential rains that would worsen the flooding. Unfortunately, heavy rainfall can be expected in the Zambezi Basin during the period even though Favio's rains will mainly fall to the south.

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. Abundant rains have replenished pastures, water supplies and have favored crops across much of Africa's Greater Horn during the 2006 short season.
2. Excessive rains across much of eastern Kenya, southern Somalia and northern Tanzania during the 2006 short season triggered floods and contributed to the outbreak of disease.
3. Early rains across the Ethiopian Highlands favor Belg planting efforts.
4. Heavy rains and floods have damaged crops and infrastructure in Rwanda, Burundi, Tanzania and Uganda. A drying trend will result in improving conditions.
5. Continued heavy rains are expected over northern Mozambique, eastern Zambia, Malawi and Madagascar. Tropical cyclone Gamede may affect Madagascar.
6. Severe flooding is expected to continue along the Shire and lower Zambezi rivers.
7. Seasonal floods have come unusually early to the upper Zambezi, raising concerns about severe flooding later.
8. Below normal rains since New Years has resulted in crop stress over southern Zimbabwe and southern Mozambique. Crop failure has been reported in some districts.
9. Tropical Cyclone Favio may bring dangerous winds to the coast and torrential inland rains over southern Mozambique and Zimbabwe. Favio's rains may ease drought conditions, but the rain will come too late for some crops.
10. Below normal rains in recent weeks has raised concerns about crop stress over western parts of RSA's Maize Triangle.

Valid: February 22 - 28, 2007

Weather Hazards Benefits Text Explanation:

- 1) Abundant to excessive rains fell across the Greater Horn during the 2006 short season. In the pastoral areas of Somalia, Kenya, southern and eastern Ethiopia, abundant rains favored the rejuvenation of pastures degraded by previous years' droughts and overgrazing. The abundant rains also replenished water supplies and allowed cropping in areas typically too dry for cultivations during a typical short season. In the grain producing areas of Kenya, northern Tanzania and Uganda, abundant and well distributed rains favored second season crops while replenish drinking water and irrigation supplies. However, the excessive rains triggered floods, crop damage and contributed to the spread of disease in some locations.
- 2) While abundant seasonal rains favored crops and pastures across much of the horn, these rains also triggered severe flooding in some areas. Floods washed away crops and roads across eastern Kenya and Somalia. Even as the flood waters receded, many areas have been rendered inaccessible. The flood waters have also contributed to an outbreak of water borne diseases such as Rift Valley Fever and Cholera. Confirmed cases of Rift Valley Fever have been reported in eastern Kenya and portions of northern Tanzania, and are suspected in southern Somalia. Southern portions of Ethiopia are also at risk, since seasonal rains were quite abundant there as well.
- 3) Belg rains started falling in late January across the southern and eastern highlands of Ethiopia. This early start of the Belg rains will favor land preparation efforts for and the emergence of Belg crops. Showers are expected to continue across the region during the period. The Belg season is a minor season, yet is significant due to the time of year when crops may be harvested and consumed.
- 4) Torrential rains triggered flooding and damaged crops across Burundi, Rwanda and parts of southern Uganda during the past several weeks. Unusually heavy rains have fallen over northwestern Tanzania as well. However, drier conditions are expected over the next several days. This will allow flood water to recede and will facilitate clean-up efforts.
- 5) Unusually heavy rains have fallen over southern portions of Tanzania, northern Mozambique, Malawi, Zambia and Madagascar. These heavy rains have resulted in flooding problems across the region, and have resulted in exceptionally high amounts of runoff into the Zambezi River and its tributaries. Additional heavy rains are expected over the next several days in these areas, which may result in additional floods. The potential exists for some heavy rainfall over southern Angola during the period, which may trigger flash floods. Tropical Cyclone Gamede (TC15) has developed well out to sea in the Indian Ocean. Gamede may bring strong winds and heavy rains to Madagascar late in the period. Tropical Cyclone 16 has developed several days out to sea, and needs to be monitored to determine what impact, if any, the system will have on Madagascar or southeastern Africa. Conditions in the southern Indian Ocean are expected to remain favorable for the development of tropical systems over the next few weeks. Therefore, Madagascar and southeastern Africa will be at risk from cyclones into the first week of March.
- 6) Torrential rains since the beginning of the calendar year have drenched the Zambezi River Basin. This resulted in large amounts of runoff into the main stem and major tributaries, resulting in severe flooding problems. Flooding has been particularly severe in Mozambique and along the Shire, a major tributary of the Zambezi, in Malawi. Inflow from upstream has pushed the impoundment behind the massive Cahora Bassa dam to capacity, forcing dam operators to open the flood gates. This released massive amounts of water into the lower Zambezi during early February. Recently, dam managers decided to decrease the discharges from 8,400 cubic meters per second to 6,640 cubic meters per second as from Feb 12. According to the Feb 20 bulletin from Mozambique's water department, the discharge has been further decreased to 3,300 cubic meters per second. These efforts have reduced inflow to the lower Zambezi from the reservoir. However, heavy seasonal rains are expected to return to the Zambezi Basin during the period. As a result, the reduced inflow may be short lived, and the risk for severe river flooding continues.
- 7) Heavy rains in southern Angola, western Zambia and northern Namibia during January and early February have pushed river levels up along the upper portions of the Zambezi. Flooding is occurring much earlier than normal in some areas, including the Caprivi Strip in Namibia. This has raised concerns about the severity of the floods during March and April. Rainfall has decreased over western Zambia and southeastern Angola over the past week or so, which should reduce the amount of runoff into the river system. However, rainfall is expected to pick up during the period, especially over southern Angola and western Zambia.
- 8) After good rains during November and December, a 4 to 7 week dry spell during January and February has caused crop stress over southern portions of Zimbabwe. Total crop failure has been reported in the southern districts of Manicaland, Masvingo, the Midlands provinces and the greater parts of Matebeleland South province. IN southern Mozambique, rainfall has been light and erratic all season in Gaza and Inhambane provinces. While the dry weather has stressed pastures, it is not too late to get a good crop in flood recession areas along major rivers. Recent rains have reduced moisture deficits over southeastern parts of Zimbabwe and adjacent parts of Mozambique. In addition, Tropical Cyclone Favio is expected to produce significant rainfall over the region. These rains will reduce moisture deficits, favor pastures and crops not yet beyond the permanent wilting point. However, the rainfall will come too late for crops in the aforementioned districts, and may result in soil erosion and flooding.
- 9) Tropical Cyclone Favio is expected to make landfall in Mozambique's Inhambane Province early on the 22rd. Powerful damaging winds are expected near the site of landfall. Favio is expected to generate heavy rainfall across interior portions of southern Mozambique and southern Zimbabwe. Flooding is possible as a result.
- 10) Over southwestern Lesotho, seasonal rains have been erratic and generally below normal. This combined with some occasional hot temperatures has resulted in crop water availability problems and stress. Rainfall has been spotty in recent weeks across western portions of RSA's Maize Triangle. Some beneficial showers are expected during the period.

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