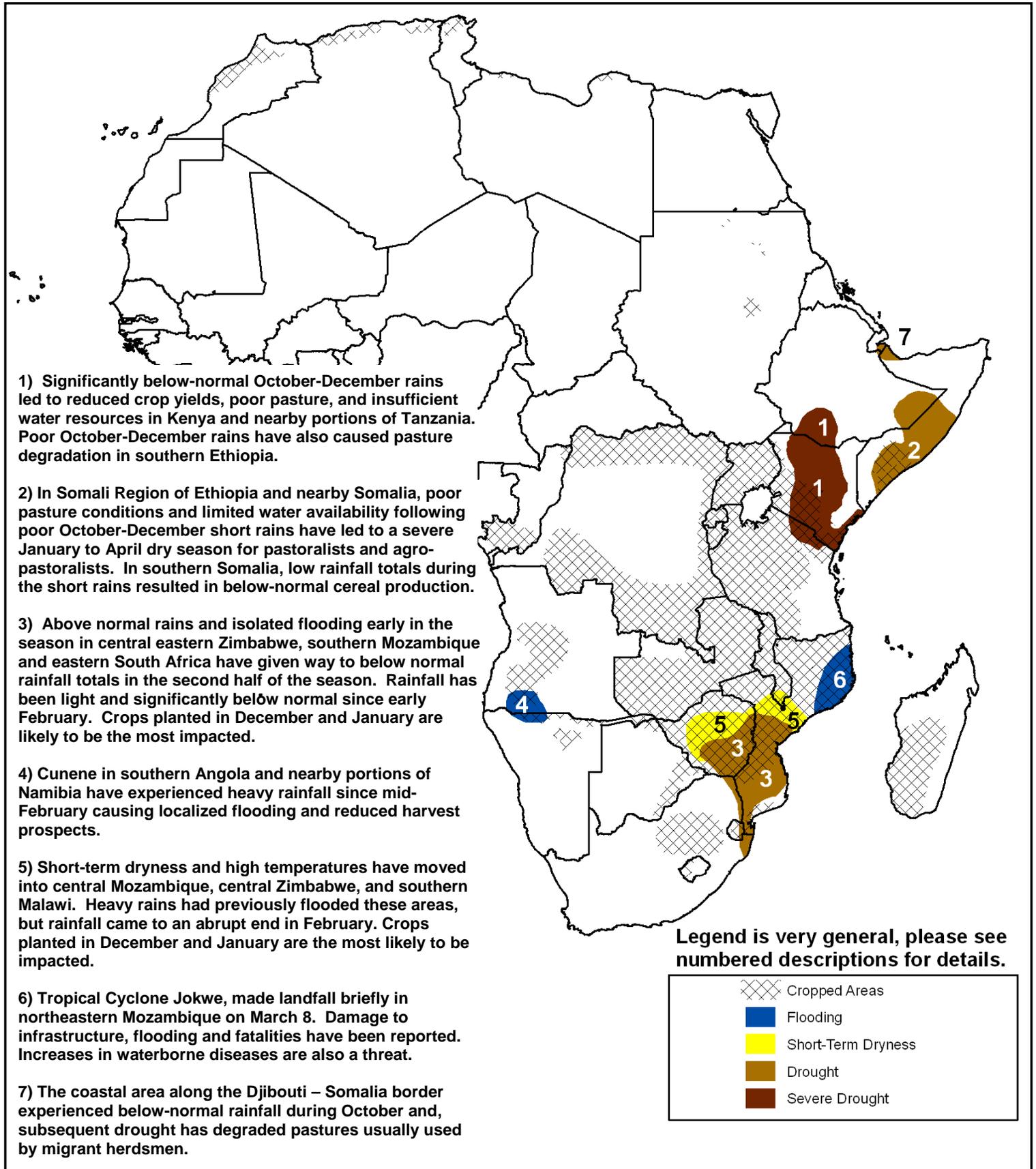


- Tropical Cyclone Jokwe skimmed Madagascar and Mozambique last week before moving out towards the middle of the Mozambique Channel.
- What began as a wetter-than-normal October-May season in southern Africa has become critically dry in some areas.
- Preseasonal rains did not arrive in Ethiopia, and forecasts are not favorable for the March – May season.



## Southeastern Africa turns from wet to dry

Swollen rivers and concerns about dams characterized much of the early part of the October – May season in southeastern Africa. Since February, however, moisture patterns have shifted, with heavier rainfall moving out of the region.

When the wet season started in most of southern Africa, it began heavy as rivers, such as the Zambezi, the Shire, the Save and the Pungue, burst their banks. The Cahora Bassa Dam, along with other dams in the region, was placed under an unusual amount of stress. Soil leaching was reported in areas along the Zambezi River in Zimbabwe and Zambia. It appeared likely that Maize Triangle and areas of Botswana would have an above-normal harvest. The usually dry areas of southern Mozambique had season long rainfall totals significantly above normal.

Beginning around the first of February, however, rainfall shifted, with the heavier rainfall concentrating across Angola, Namibia, and western South Africa. This has raised flooding concerns in southwestern Angola, but of more concern are the dry conditions in southeastern Africa. Rainfall totals in Botswana and South Africa are no longer above normal, though this is not expected to have a large impact on overall crop production in these countries. In Zimbabwe, the dry spell occurred as the maize crop was near the reproductive stage, slowing and ultimately threatening the crop's development. Central Mozambique, where several rivers had flooded earlier in the season, faces its fourth consecutive week of low precipitation, though most crops in this area have been less affected by this dry spell. Crops in southern Mozambique, by contrast, face severe water stress. Zambia, which had received an alarming amount of rainfall earlier in the season, has received less than 100 mm of rainfall since early February and crops are experiencing moisture stress.

Heat has also been a factor as precipitation eased; additional heat in the region has evaporated existing water faster than normal, possibly exacerbating the situation.

Seasonal rainfall totals still remain above normal, due to heavy rainfall earlier in the season, and in some areas where crops normally mature in February, or were planted early are taking advantage of the early dryness for harvesting activities.

(See Figure 1)

## Jokwe skims Mozambique, offers no relief from dry conditions

Tropical Cyclone Jokwe developed over the Indian Ocean on March 5. The storm moved off to the west and clipped the northern tip of Madagascar. The storm was not very strong at this time, and damage was minimal.

Jokwe then began to intensify rapidly and made its way to the Nampula-Zambezia coast of Mozambique. The storm slid along the coast for approximately 12 hours before moving back out in the Mozambique Channel on March 8.

The strongest part of the storm remained mostly over the Mozambique Channel. Precipitation totals remained relatively low for a tropical cyclone, 200 mm over several days, and winds peaked at landfall at 100 knots (115 mph, 51 meters/second). These wind speeds are normally associated with a strong cyclone, but Jokwe was compact, significantly reducing the area that experienced wind speeds of this magnitude.

## Water Requirement Satisfaction Index for Maize March 9, 2008

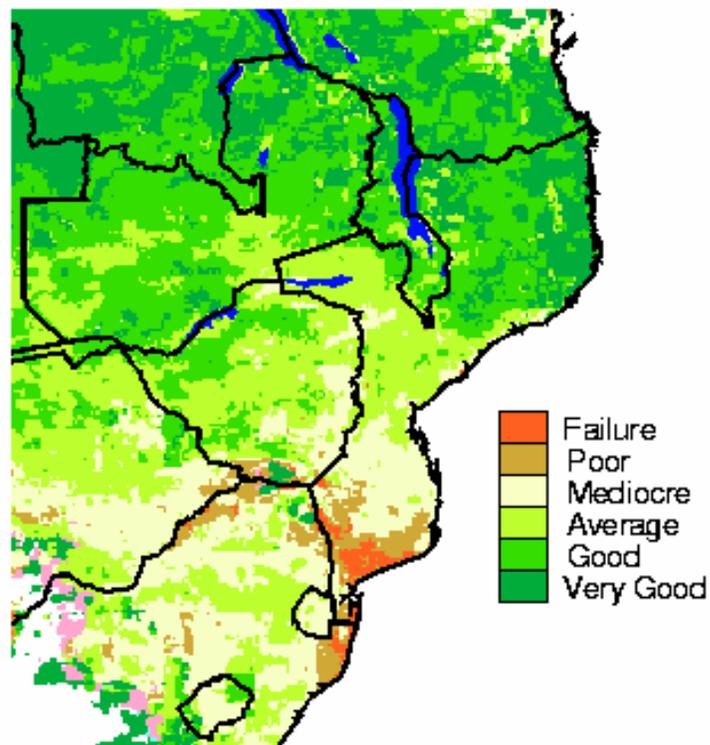


Figure 1: A wet season across most of southern Africa, has turned abruptly dry affected crop conditions.

Source: USGS

## Severe Tropical Cyclone Jokwe As of March 11, 2008

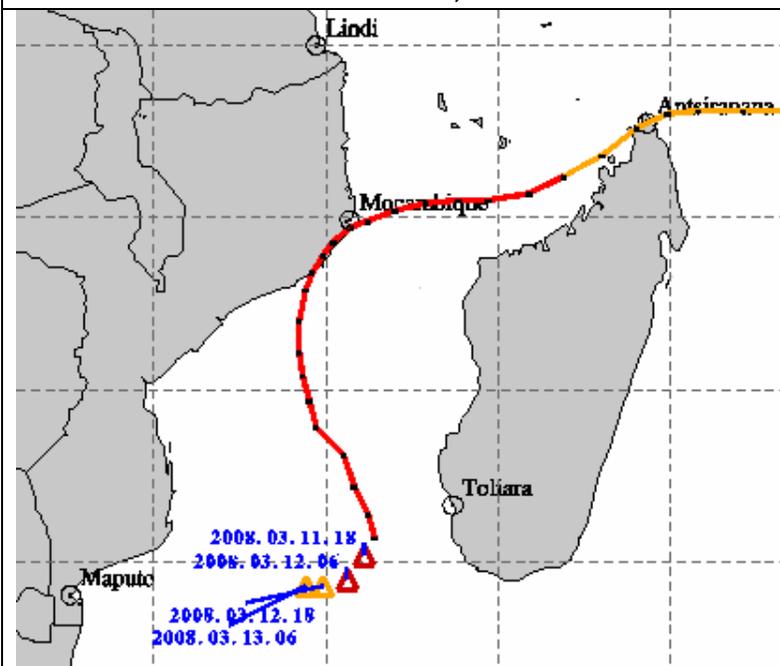


Figure 2: The path of Cyclone Jokwe

Source: NOAA, Data from Joint Typhoon Warning Center

Jokwe is expected to dissipate over the Mozambique Channel with little to no impact on land expected. It is unlikely that it will make landfall again.

(See Figure 2)