

## The USAID FEWS-NET

# **Africa Weather Hazards Benefits Assessment**

For

## November 2 - 8, 2006

## Weekly Introduction: Flooding in Ethiopia and Somalia

FLOOD WARNING LEVEL				
	Last Week	This week	Next Week	
Shabelle				
Juba				

During the week ending October, 31st 2006, the Juba and Shabelle catchments in Somalia received heavy rains (See Table below) leading to devastating floods along the Juba, resulting in loss of life and damage to property.

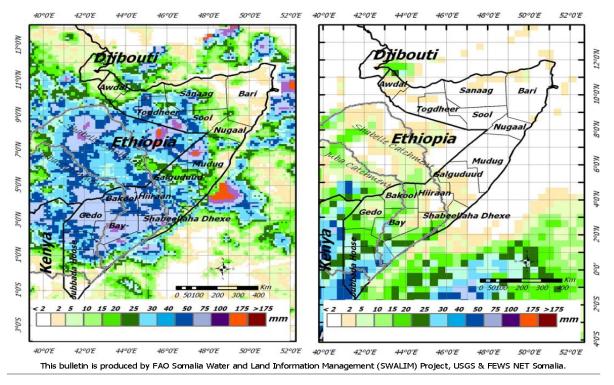
Station	Ceelbadre	Hudur	B/Weyne	Bulo Burti	Jowhar	Genale
Total catch (mm)	83.0	141.0	59.5	133.5	91.5	77.5

Similarly, the Ethiopian highlands received heavy rains as indicated in the cumulative 7-day satellite rainfall estimate image. Reports from the Ethiopian Meteorological Agency indicated heavy rains have fallen in the area over the last week in the highlands.

The rainfall forecast for the coming week is calling for reduced rains in the two rivers' catchments both in Ethiopia and within Somalia with exception of lower Juba which might receive moderate rains during the forecast period. There is high risk flooding in the riverine areas following the heavy rains in the catchments during the last week.

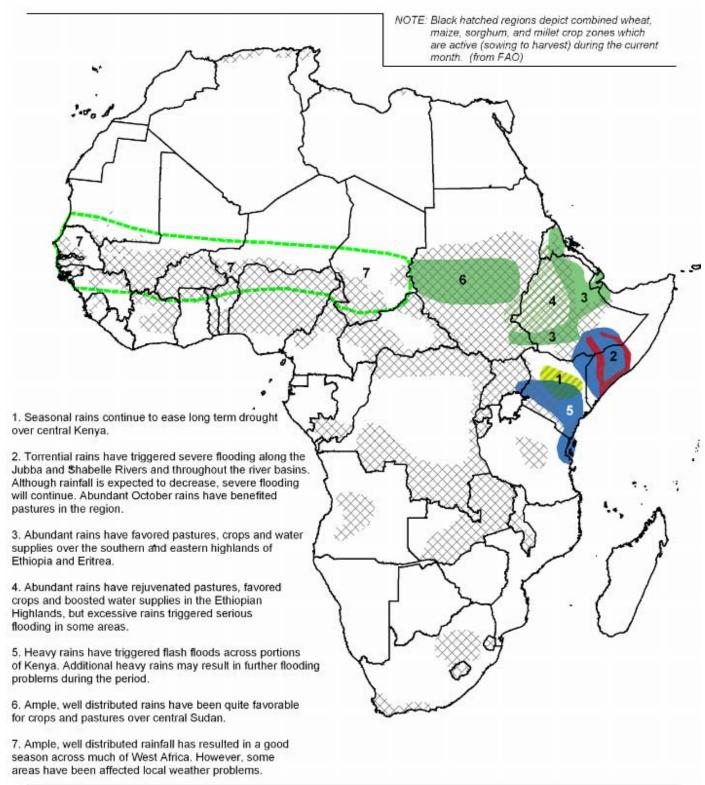
#### Total rainfall week ending 31/10/06

#### 7-Day Rainfall Forecast ending 06/11/06



Finally, as a reminder, Jim Miller has retired. Future correspondence should be addressed to Chester Schmitt at Chet.Schmitt@noaa.gov.

# Africa Weather Hazards/Benefits Assessment



Valid: November 2 - 8, 2006

## Weather Hazards Benefits Text Explanation:

- 1) After very poor rains during the 2005 short season, the 2006 long rains were abundant across much of Africa's Greater Horn. However, over much of northern and central Kenya, the March through May rains were quite poor. This resulted in the development of severe drought, which caused crop failures, degradation of pastures and livestock losses across the region. However, recent rains have been abundant to excessive across the region. The intense October rains have significantly reduced the long term moisture deficits across central Kenya, while favoring pastures, second season crops and water supplies. However, in some areas these rains have been excessive, resulting in some flooding problems. Additional rainfall is expected during the period, resulting in continued improvement. However, localized flooding problems are possible.
- 2) Torrential rains have fallen across large portions of Ethiopia, Somalia and northeastern Kenya over the past few weeks, causing floods. These heavy rains have resulted in particularly severe flooding along the Jubba and Shabelle rivers. According to a recent field report, observed river levels along the course of the Jubba are within the levels of historic floods with a 10-20 year return period. Although the heavy rains are expected to ease, severe flooding is expected to continue. Lower reaches on the main stem of the rivers are particularly at risk for continued severe flooding. However, all riverine areas in the Jubba and Shabelle basins are at risk for flooding during the period. On the flip side, the abundant October rains have resulted in a strong start to the second rainy season. These rains have resulted in favorable conditions for pastures away from flood-prone areas.
- 3) Seasonal rains have been abundant and well distributed across the highlands of Eritrea, eastern portions of Ahmara and Tigray. Abundant rains have also fallen across much of Afar, Djibouti and the Rift Valley, as well as SNNPR. This has favored Meher crops and pastures across the area while boosting water supplies. In some areas, such as parts of Borena zone in southern Oromiya, areas of dryness were observed as the long season rains were erratic. A round of late season rains increased moisture for maturing crops and late season pasture growth. Showers are expected to decrease during the period.
- 4) Rainfall has been quite abundant this season across the Ethiopian Highlands. This has generally resulted in good crop conditions, favorable conditions for pulse crop seedbed preparations, good pasture conditions and abundant water supplies. However, periodic torrential rains have resulted in serious flooding problems in flood-prone areas, such as along riverbanks and low-lying locations. Heavy rains have resulted in some crop damage and water logging of some fields while raising concerns about crop pests. Abundant cloud cover and low sunshine hours has slowed the development of some crops as well. Seasonal rains have tapered off during mid-October; however another round of moderate to heavy rain fell across the region during the last week of October. This may have triggered some localized flooding, mainly in the northwestern highlands.
- 5) Moderate to heavy rain has fallen across southwestern Kenya and adjacent portions of southern Uganda over the past week. Torrential rains have triggered flash floods in Kenya's Isiolo district, as well as across portions of Kenya's northern frontier. While lighter rains are expected across northern Kenya during the period, more substantial rains are expected across central and southern Kenya. As a result, the potential for flash floods continues across these areas. The best chance for heavy rainfall will be over Kenya's eastern highlands. Flash flooding is possible across this region, as well as along downstream portions of rivers flowing out of interior eastern Kenya, such as the Tana. Along the Kenya coast, floods washed out roads during October. The impassable roads have led to scarcity of commodities and rising food prices in some coastal districts. Heavy rains may return to the area during the period, resulting in a renewed risk for flash flooding. The risk for flash flooding extends into coastal portions of northeastern Tanzania as well.
- 6) Ample, well distributed rains have fallen across much of central Sudan during July, August and September. This has favored crops, pastures and water supplies in and around the region, while resulting in a seasonal rainfall surplus of 50 to 150 mm across Darfur and Kurdufan. Rainfall has decreased recently as the 2006 wet season comes to a close. The drying trend will continue this week, with low rain chances until May and June of next year.
- 7) Ample, well distributed rains have fallen across most of the Sahel and adjacent areas this season, resulting in favorable conditions for crops and pastures while boosting water supplies. Rainfall has been particularly abundant in Burkina Faso, southern Mauritania and southern Chad. Seasonal rains started 2 to 4 weeks late across Niger, but were abundant after the onset. Some localized flooding problems have been observed, raising concerns about disease. Some flooding problems have been reported in northern Nigeria as well. In central Chad, many areas saw a slow start to the season in June. A delay in crop growing and pasture was observed in some locations. However, rains were abundant during late July, August and September. A few pockets of dryness have been observed in the Sahel, such as in southeastern Senegal and in Niger's Tillaberi Department west of Niamey. Despite these localized problems, much of West Africa is on track for a good 2006 season. Except for a few scattered showers, seasonal rains have ended over the Sahel as the ITCZ has shifted south into the Gulf of Guinea region.

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