Background

This note provides an update on the expected weather conditions for the Horn of Africa during the coming growing season which has just started and will last until mid January. It is based on seasonal forecasts which predict three month rainfall totals and three month average temperature up to four months in advance.

The forecasts used in this note were released in mid October and predict the rainfall and temperature for November 2011 to January 2012 (3 month total rainfall and average temperature, predicted 1 month ahead) and December 2011 to February 2012 (predicted 2 months ahead), thus covering the key development stages of the two major cereal crops in Somalia, maize and red sorghum. For the coming growing season (locally known as “Deyr”) the following key timings apply:

- **Planting**: October (maize in the first half, sorghum in the second half).
- **Harvest**: January (maize in the first half, sorghum in the second half).
- **Period of highest sensitivity to water supply deficits**: At the time of flowering and grain filling, broadly late November to early December.

**ECMWF Seasonal Forecast. Issued 15/10/2011**
**Probability of Rainfall above the median**

November 2011 - January 2012

December 2011 - February 2012

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Fig 1 – ECMWF forecasts for rainfall in November-January (left) and December-January (right). Blue shades indicate increasing probabilities of wetter than usual conditions, while yellows to reds indicate decreasing probabilities. Note average and above average conditions across the region (left) with a change to moderately below average conditions in southernmost Somalia and eastern Kenya (right) later in the season (right).

Source: European Centre for Medium Range Weather Forecasts (ECMWF)

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1 See [http://www.fao.org/agriculture/seed/cropcalendar/welcome.do](http://www.fao.org/agriculture/seed/cropcalendar/welcome.do)
Highlights

- Previous forecasts (issued in September) pointed to moderately above average rainfall for the earlier stages of the rainfall season across most of the Horn of Africa and October rainfall was indeed timely and widely distributed, with localized heavy rains.

- Current forecasts for the Horn for the bulk of this rainfall season (November-January) predict on or moderately above average rainfall across most of the Horn with the exception of Southern Somalia and North-eastern Kenya where drier and hotter than average conditions are forecast. Elsewhere cooler than average conditions should predominate (see Fig 1 and 2).

- Forecasts from other sources (IRI, UKMetOffice) present a similar picture of average and moderately below average rainfall and hotter than average temperatures. However, the GHACOF (Great Horn of Africa Climate Outlook Forum) forecast indicates moderately above rainfall for the 4 month period September to December.

- Everything considered, in the recently drought stricken regions of Somalia and NE Kenya, current favourable rainfall is likely to continue until mid November, resulting in broadly normal first stages of crop development (assuming rainfall will offset the effect of higher temperatures).

- The situation is less clear for the second half of the growing season (late November – December and later), corresponding to the key stages of crop development in Southern Somalia and NE Kenya, when forecasts point to below average rainfall and hotter than average conditions – this may impact crops, specially maize with high sensitivity to water deficits during flowering and grain filling.

- The situation will be monitored closely as the unfavourable forecasts cover some of the regions hardest hit by the recent droughts, where even moderate impacts on the next harvest will put an already fragile population under additional pressure.

- In South Sudan, late season rainfall may continue bringing good conditions to areas of late planted long cycle sorghum varieties. Elsewhere across the region (Uganda, western Kenya, Tanzania), forecasts point to above average rainfall, together with average or moderately cooler than average temperatures until February 2012 (fig 1 and 2), indicating generally favourable conditions for crop and pasture development throughout this period.
Data Sources

Seasonal forecasts for rainfall and temperature used in this note are available from:

ECMWF (European Centre for Medium-range Weather Forecasts)
http://www.ecmwf.int/products/forecasts/d/charts/seasonal/forecast/seasonal_range_forecast/group_public/seasonal_charts_public_rain/rain1%20month/Africa/201109/prob%20exceeding%20median/

IRI (International Research Institute for Climate and Society, USA)
http://iri.columbia.edu/climate/forecast/net_asmt/

GHACOF
http://www.disasterriskreduction.net/fileadmin/user_upload/drought/docs/GHACOF_29_Statement.pdf

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