REPUBLIC OF KENYA

MINISTRY OF ENVIRONMENT AND MINERAL RESOURCES

KENYA METEOROLOGICAL DEPARTMENT

Dagoretti Corner, Ngong Rd, P. O. Box 30259, 00100 GPO, Nairobi, Kenya
Telephone: 254 (0) 20 3867880-7 / 3876957/60 / 3873682
Mobile: 254(0)724255153/ 254(0)724255154
Fax: 254 (0) 20 3876955/3877373/3867888/3874501
e-mail: director@meteo.go.ke; **Website**: http://www.meteo.go.ke

Ref. No. Met/ 7/23 Date: 4th March 2010

WEATHER REVIEW FOR THE LAST SEVEN DAYS(25TH FEBRUARY –3RD MARCH 2010) AND THE EXPECTED CONDITIONS DURING THE NEXT SEVEN DAYS, VALID 5TH– 11TH MARCH 2010

1. WEATHER HIGHLIGHTS

During the review period (25th February to 3rd March 2010):

- Wet weather conditions characterized most parts of the country.
- The middle of the review period realized a drop in daytime. However these temperatures rose again towards the end of the period. Nighttime temperatures generally dropped except the costal strip which realized slight increases.

The forecast for the next seven days (5th to 11th March 2010) indicates that:

- The rains are likely to continue over the western sector of the country and pick up over the eastern sector including the central highlands and Nairobi area towards the end of the forecast period.

2. WEATHER SUMMARY

(a) Rainfall

The review period (25th February to 3rd March 2010) was characterized by wet weather activities over most parts of the country. The active weather conditions started over western Kenya and later spread to other parts of the country especially over to the northeastern, southeastern and the southern part of the coastal strip. During the period, some stations such as Mandera, Suba, Kakamega, Laikipia and Meru recorded heavy rainfall amounts of 108.1mm, 83.5mm, 65.1mm, 60.7mm and 55.5mm respectively on a single day. Mandera station also recorded the highest total amount of rainfall of 154.1mm in seven days. The other stations that recorded more than 50mm of rainfall during the entire period include Eldoret Airport (137.8mm), Suba(134.0mm), Kakamega (108.4mm), Laikipia (100.6mm), Eldporet-Kapsoya (98.6mm), Kitale (88.2mm), Meru(87.2mm), Thika (87.7mm), Dagoretti (82.2mm), Kabarak (76.4mm), Wilson (74.4mm), Kisumu (70.3mm), Narok (66.6mm), Nakuru (65.4mm), Garissa (58.8mm), Nyahururu (56.2mm), Kisii (56.0mm), Msabaha (55.5mm) and Marsabit (54.0mm). Elsewhere in the country, the rainfall recorded was either less than 50mm or nil **(see Figure 1)**.

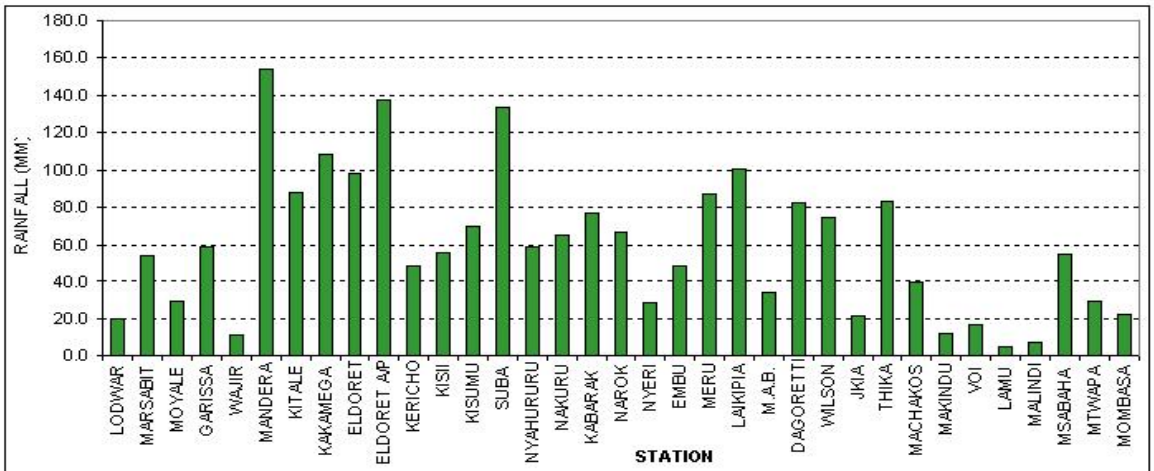

FIGURE 1:SEVEN-DAY RAINFALL TOTALS FROM 25TH FEBRUARY TO 3RD MARCH 2010

(b) Temperature

Daytime temperatures were generally high at the beginning of the period; declined at the middle (28th February and 1st March 2010) and increased during the last two days (2nd and 3rd March 2010) of the period. Nighttime temperatures on the other hand generally declined over most parts of the country except over the coastal strip where an increase was realized.

Mandera and Wajir Meteorological stations both recorded the highest daytime temperature of 39.0°C on 28th of February 2010 and 1st March 2010 respectively, while Nyahururu Meteorological station recorded the lowest nighttime temperature (7. 9°C recorded on 25th February 2010). On average Wajir and Nyahururu Meteorological stations recorded the highest and lowest temperatures of 36.5°C and 10.7°C respectively (**Figure 2**).

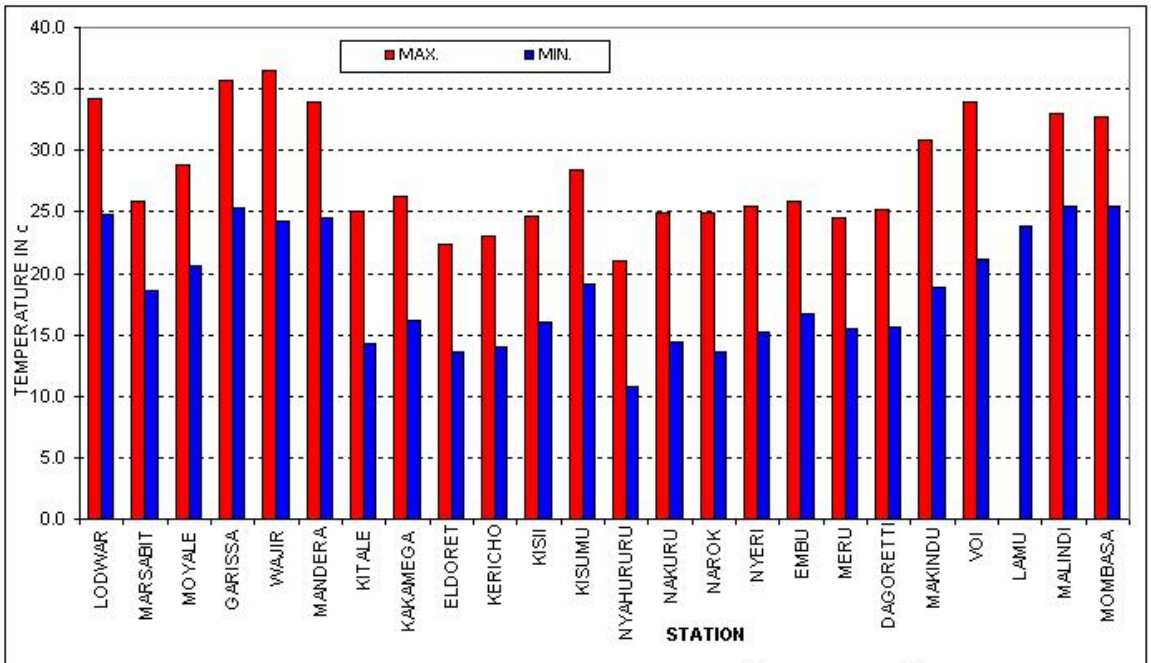

FIG2:SEVEN-DAY MAXIMUM & MINIMUM TEMPERATURES FROM 25TH FEBRUARY TO 3RD MARCH 2010

3: EXPECTED SYNOPTIC DEVELOPMENTS FROM 5TH –11TH MARCH 2010

It is expected that pressures will be;

i) Weak over the Southern Atlantic Ocean (St. Hellena), becoming moderate with time;
ii) Weak over central Europe and the Mediterranean region, strengthening as the period progresses;
iii) Strong over the South West Indian Ocean (Mascarene) and the Mozambique Channel, weakening as the period progresses;
iv) Weak and maritime over the Arabian Ridge throughout the forecast period.

Emergence of a low-pressure system (depression) over the southwest of Indian Ocean (about 12°S) is likely to enhance west-east pressure gradient over western and central sectors of the country.

Wind fields;

Weak westerly and easterly wind fields are expected to be dominant in the lower and upper levels of the atmosphere respectively.

Following the above synoptic developments, the rains are likely to continue over the western sector of the country and pick up over the eastern sector including the central highlands and Nairobi area towards the end of the forecast period. However, the coastal strip is expected to remain generally under low rainfall activities.

4: FORECAST FOR THE NEXT SEVEN DAYS FROM 5TH –11TH MARCH 2010

The Lake Victoria basin, Highlands west of the Rift Valley and Central Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Kericho, Eldoret, Nakuru, Narok, Nyahururu, etc) will experience afternoon showers and thunderstorms over several places, occasionally reducing to few places. Occasional night showers/ morning rains over few places are also likely especially towards the end of the period.

The Northwestern districts (Lodwar, Lokitaung, Lokichoggio, etc), will experience afternoon showers over several places reducing to few places as the period progresses.

The Central highlands including Nairobi area (Nyeri, Meru, Dagoretti, Embu, etc) will experience afternoon showers over few places increasing to several places as the period progresses. Night showers/ morning rains over few places are also expected especially towards the end of the period.

The Northeastern districts (Marsabit, Moyale, Mandera, Wajir, Garissa etc), will experience morning rains and afternoon showers over few places increasing to several places with time.

Southeastern lowlands (Voi, Makindu, Machakos etc), will experience night showers/morning rains over few places increasing to several places as the period progresses. Afternoon showers over few places are also likely especially towards the end of the period.

The Coastal strip (Mombasa, Kilifi, Malindi, Lamu etc) will experience mainly sunny intervals throughout the forecast period.

5: POTENTIAL IMPACTS

Areas in the western sector of the country including north eastern have realized substantial rainfall to date and are projected to continue experiencing rainfall activities. The soils are most likely saturated. This situation is conducive for flash floods and even land/mud slides. Rivers in the western sector including Ewaso Ngiro North river in northeastern are likely to maintain high flows during the entire forecast period.
N.B: This forecast should be used in conjunction with the daily (24-hour) forecast issued by this Department.

KEY OF SCIENTIFIC WORDS USED

High Pressure System (Anticyclone): An area associated with clear skies or fine weather.
Ridge: An elongated area of high pressure from which winds flow outward.
Most Places: Between 66% and 100%.
Several Places: Between 33% and 66%
Few Places: Between 0 and 33%

Dr. Samwel Marigi
FOR: DIRECTOR OF METEOROLOGICAL SERVICES