



Date: 4<sup>th</sup> April 2016

**WEATHER FORECAST FOR THE NEXT SEVEN-DAY PERIOD  
VALID 5<sup>TH</sup> TO 11<sup>TH</sup> APRIL 2016**

**REVIEW OF THE RAINFALL OVER THE LAST WEEK (28<sup>TH</sup> MARCH TO 3<sup>RD</sup> APRIL 2016) AND THE PREVIOUS WEEK (21<sup>ST</sup> TO 27<sup>TH</sup> MARCH 2016)**

As the Kenya Meteorological Department (KMD) forecasted, the March-April-May 2016 rains have started. According to KMD, the onset was within the 4<sup>th</sup> week of March and the 1<sup>st</sup> week of April 2016. Last week (28<sup>th</sup> March to 3<sup>rd</sup> April 2016) Kirinyaga County started experiencing rain in all the stations that reported. As it can be seen in Table 1 and Figure 1, last week (28<sup>th</sup> March to 3<sup>rd</sup> April 2016) was wetter than the previous week (21<sup>st</sup> to 27<sup>th</sup> March 2016) when only two stations reported rains.

As forecasted last week, the rains started from Friday the 1<sup>st</sup> April 2016 as it was the case at Kibirigwi. All the stations received rains on Sunday the 3<sup>rd</sup> April 2016. County Meteorological Services (CMS) can now authoritatively declare that the MAM 2016 rains have started.

In order of decreasing rain intensities, Njuki-ini Forest station reported the highest followed by Kibirigwi Irrigation Scheme, MIAD-Kandongu, Castle Forest, Mwea-KALRO Kimbimbi, Kerugoya WRMA and Kangaita Tea Farm stations.

*Table1: Rainfall intensities in order of decreasing wetness during last week (28th March to 3rd April 2016)*

Station No.	Station Name	Last Week	Previous Week
9037140	Njuki-ini Forest station	38.7	0
9037174	Kibirigwi Irrigation Scheme	36.3	0
9037112	MIAD-Kandongu	17.5	0
9037115	Castle Forest Station	17.4	4.9
9037110	Mwea-KALRO Kimbimbi	14	0
9037031	Kerugoya WRMA	13	0
	Kangaita Tea Factory/Farm	9.8	11.2
9037264	Gathambi Coffee Factory	5.1	0

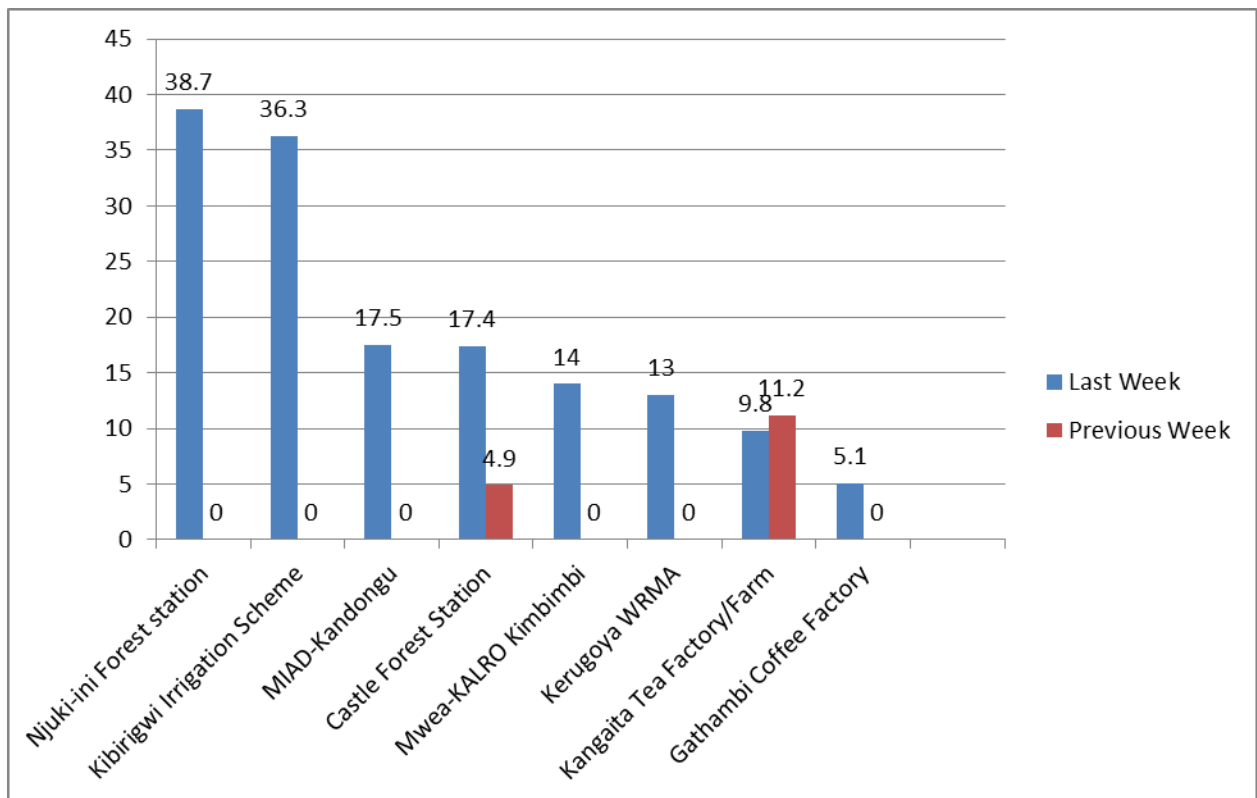


Fig. 1: Rain performance comparison between the last week (28th March to 3rd April 2016) and the previous week (21st to 27th March 2016).

### RAIN PERFORMANCE IN THE MONTH OF MARCH 2016

Due to the forecasted late onset, March 2016 was very dry and sunny thus increasing day and night temperatures. Kangaita Tea Farm received the highest amount of rainfall during the month of March 2016 followed by Njuki-ini Forest, MIAD-Kandongu, Kerugoya WRMA, Castle Forest, Kibirigwi Irrigation Scheme, Gathambi Coffee Factory and Mwea-KALRO Kimbimbi stations in that order. This is as shown in Table 2 and Figure 2 below.

Table 2: Rainfall intensities in order of decreasing wetness during the month of March 2016)

Station No.	Station Name	March 2016 Total
	Kangaita Tea Factory/Farm	94.6
9037140	Njuki-ini Forest station	91.2
9037112	MIAD-Kandongu	71.7
9037031	Kerugoya WRMA	68.9
9037115	Castle Forest Station	62.8
9037174	Kibirigwi Irrigation Scheme	55.9
9037264	Gathambi Coffee Factory	55
9037110	Mwea-KALRO Kimbimbi	43.8

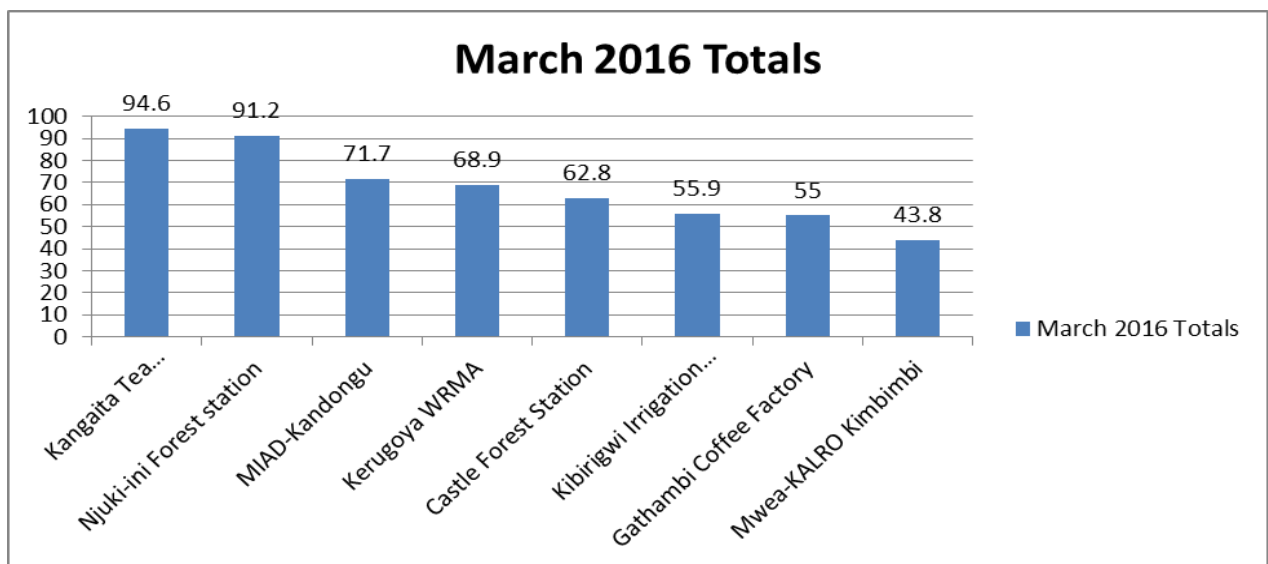
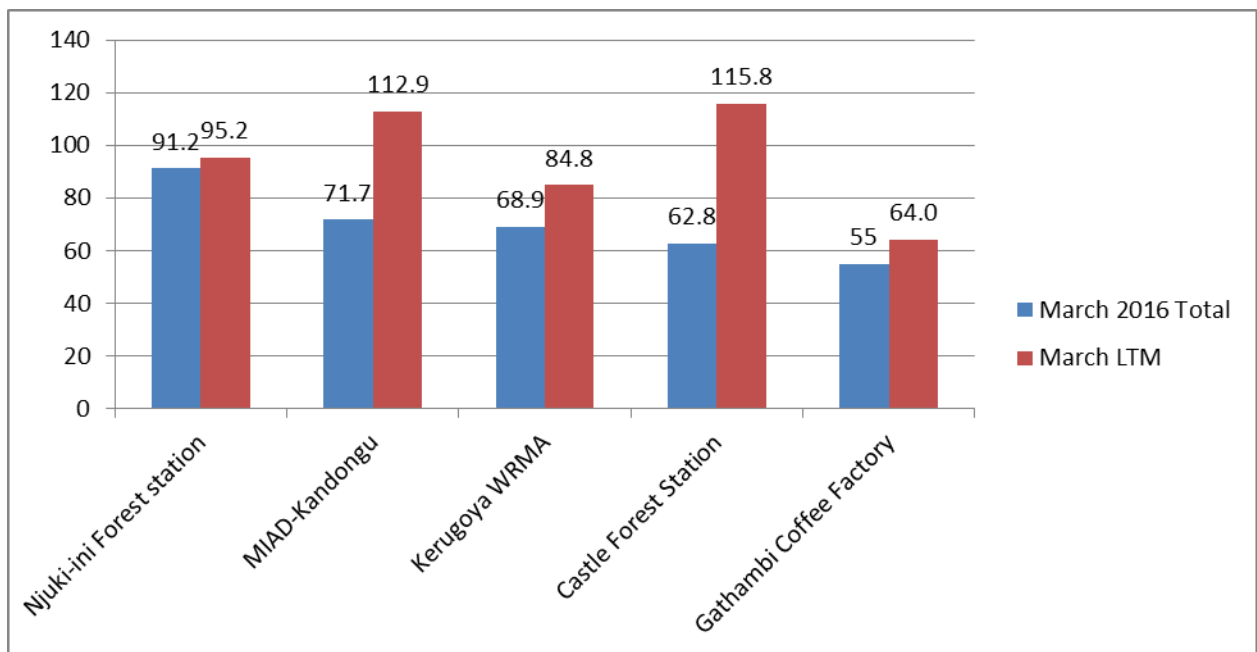


Fig. 2: Rain performance comparison during the month of March 2016

The rainfall performance during the month of March was below what is usually experienced in Kirinyaga County. Long term means (LTM) of the stations with many years of data collected showed that all the stations considered reported less than their LTM. This is as indicated in Table 3 and Figure 3 below.

Table 3: March 2016 rainfall performance as compared to the Long Term Means (LTM) of March

Station No.	Station Name	March 2016 Total	March LTM
9037140	Njuki-ini Forest station	91.2	95.2
9037112	MIAD-Kandongu	71.7	112.9
9037031	Kerugoya WRMA	68.9	84.8
9037115	Castle Forest Station	62.8	115.8
9037264	Gathambi Coffee Factory	55	64.0



### MONTHLY FORECAST FOR APRIL 2016

April marks the peak month of the “Long Rains” season. The rainfall forecast for April 2016 is based on regression of Sea Surface Temperature Anomalies (SSTAs) on Kenyan rainfall, Sea Surface Temperature (SST) gradients and the expected evolution of global SST patterns. The forecast indicates that Kirinyaga County is likely to experience near average to slightly enhanced rainfall. The rainfall may occasionally be characterized by heavy storms.

\*\*\*\*\* START OF RETAINED IMPORTANT INFORMATION \*\*\*\*\*

### SEASONAL FORECAST

March-April-May (MAM)-“Long” Rains 2016 forecast is as given on Table 2 and Figure 2 below.

**Kirinyaga County is likely to receive near normal (average) rainfall.**

Table 2: Seasonal Forecast

REGION	START OF MAM RAINS	END OF MAM RAINS
Central highlands including KIRINYAGA COUNTY	4th week of March to 1st week of April 2016	3rd to 4th week of May

**Poor temporal distribution of the seasonal rainfall expected**

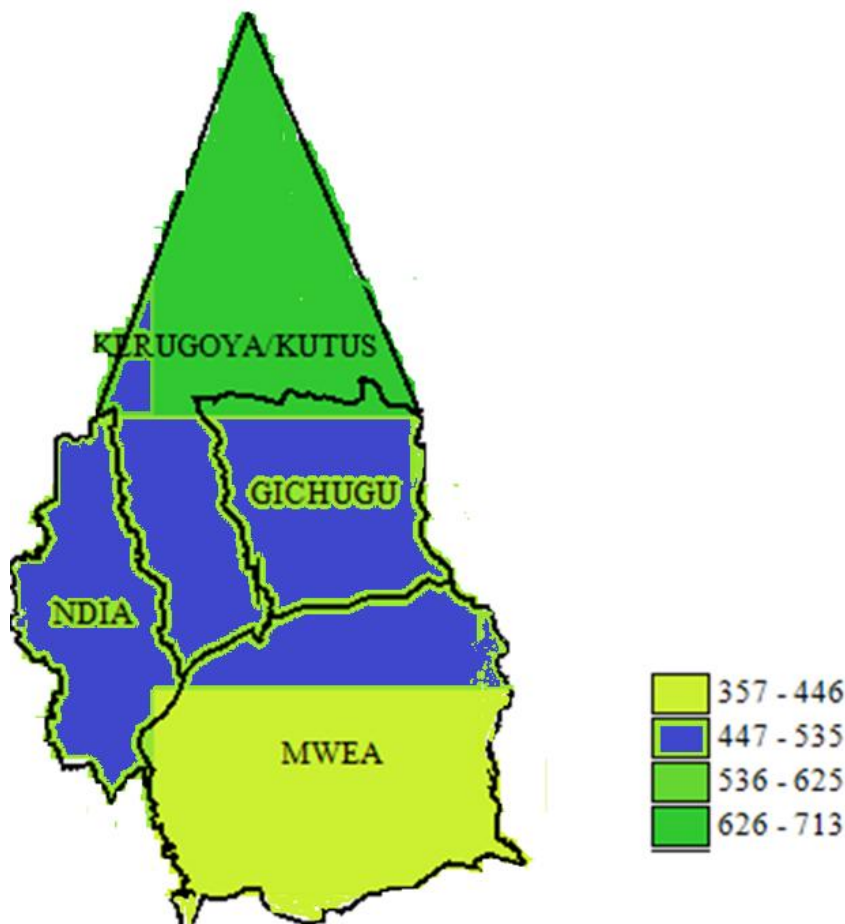


Fig. 2: Downscaled County Seasonal Forecast for March-April-May 2016. The figures are likely to have been an underestimation. The blue shaded region deserve approximately 700mm while the green shaded areas deserve more than 800mm.

\*\*\*\*\* END OF RETAINED IMPORTANT INFORMATION \*\*\*\*\*

### KIRINYAGA COUNTY WEEKLY FORECAST

FOR THE NEXT SEVEN DAYS (5<sup>th</sup> TO 11<sup>th</sup> APRIL 2016):

- Rainfall is expected to continue over several parts of the county throughout the forecast period.

DAY	MORNING	AFTERNOON/EVENING
TUESDAY 5/4/2016	Cloudy mornings with occasional rains over few places	showers over few places
WEDNESDAY 6/4/2016		
THURSDAY 7/4/2016		
FRIDAY 8/4/2016		
SATURDAY 9/4/2016		
SUNDAY 10/4/2016		
MONDAY 11/4/2016		

#### KEY OF SCIENTIFIC WORDS USED

Most Places: Between 66% and 100% of Kirinyaga County  
 Several Places: Between 33% and 66% of Kirinyaga County  
 Few Places: Between 0 and 33% of Kirinyaga County

## **OTHER INFORMATION**

### **PSP Advisory**

Weather/climate advisory from PSP workshop (see below) is being disseminated to all stakeholders. Just like the other weather products, the PSP Advisory is attached in the link: <http://kirinyaga.go.ke/weather.html>

## **QUESTIONNAIRE**

Please take your time and fill in the questionnaire which is attached alongside this forecast (if you have never filled it before). You are kindly requested to send the filled questionnaire to [meteorological@kirinyaga.go.ke](mailto:meteorological@kirinyaga.go.ke) for onward delivery to the research centre.

O.k.  
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**County Director of Meteorological Services**