



Date: 16<sup>th</sup> January 2017

**WEATHER FORECAST FOR THE NEXT SEVEN-DAY PERIOD  
VALID 17<sup>th</sup> TO 23<sup>rd</sup> JANUARY 2017**

**REVIEW OF THE RAINFALL OVER THE LAST WEEK (9<sup>TH</sup> TO 15<sup>TH</sup> JANUARY 2017) AND THE PREVIOUS WEEK (2<sup>ND</sup> TO 8<sup>TH</sup> JANUARY 2017)**

In Kirinyaga County, last week (9<sup>th</sup> to 15<sup>th</sup> January 2017) was wet unlike the previous week (2<sup>nd</sup> to 8<sup>th</sup> January 2017) which recorded no rainfall at all. In fact the whole country was dry apart from Kirinyaga and Nyeri (see the attached National forecast). Before last week the situation in the County was sunny, dry and dusty. This situation continued until last weekend where almost all stations in Kirinyaga recorded some little amounts of rainfall which had very little effect to the situation. The rain activity during last week was as follows: Castle Forest Station reported the highest weekly rainfall followed by Kerugoya WRMA, Kangaita Tea Farm, Gathambi Coffee Factory, MIAD-Kandongu, Njuki-ini West Forest and Mwea-KALRO Kimbimbi stations. The above information is as presented in Table 1 and Figure 1 below.

*Table 1: Rainfall intensities in order of decreasing wetness during last week (9th to 15th January 2017)*

Station No.	Station Name	Last Week	Previous Week
9037115	Castle Forest Station	2.7	0
9037031	Kerugoya WRMA	1.9	0
	Kangaita Tea Factory/Farm	1.8	0
9037264	Gathambi Coffee Factory	1.3	0
9037112	MIAD-Kandongu	0	0
9037140	Njuki-ini Forest station	0	0
9037110	Mwea-KALRO Kimbimbi	0	0

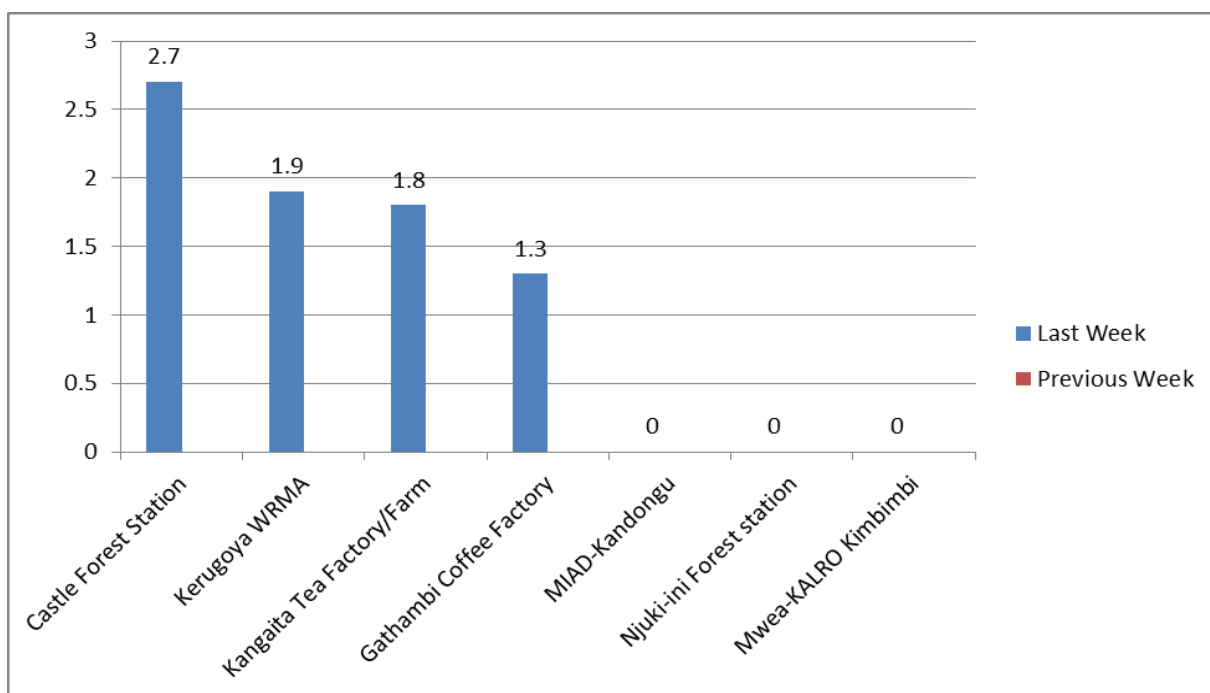


Fig. 1: Rain performance comparison between the last week (9<sup>th</sup> to 15<sup>th</sup> January 2017) and the previous week (2<sup>nd</sup> to 8<sup>th</sup> January 2017)

### Rains Performance during the Month of December 2016 in Kirinyaga County

The month of December is the last month of the October-November-December season, December 2016, on average, was drier than normal as it will be seen later. In order of decreasing wetness in the total rains received in December, Kangaita Tea Farm station reported the highest monthly rainfall followed by MIAD-Kandongu, Gathambi Coffee Factory, Castle Forest, Mwea KALRO Kimbimbi, Kerugoya WRMA and Njuki-ini Forest stations respectively. The above information is as shown in Table 2 and Figure 2 below.

Table2: November 2016 Monthly Total Rainfall intensities in order of decreasing wetness

Station No.	Station Name	Total Rainfall in December 2016
	Kangaita Tea Factory/Farm	34.7
9037112	MIAD-Kandongu	34
9037264	Gathambi Coffee Factory	33.3
9037115	Castle Forest Station	22.9
9037110	Mwea-KALRO Kimbimbi	19.6
9037031	Kerugoya WRMA	10.1
9037140	Njuki-ini Forest station	6.5

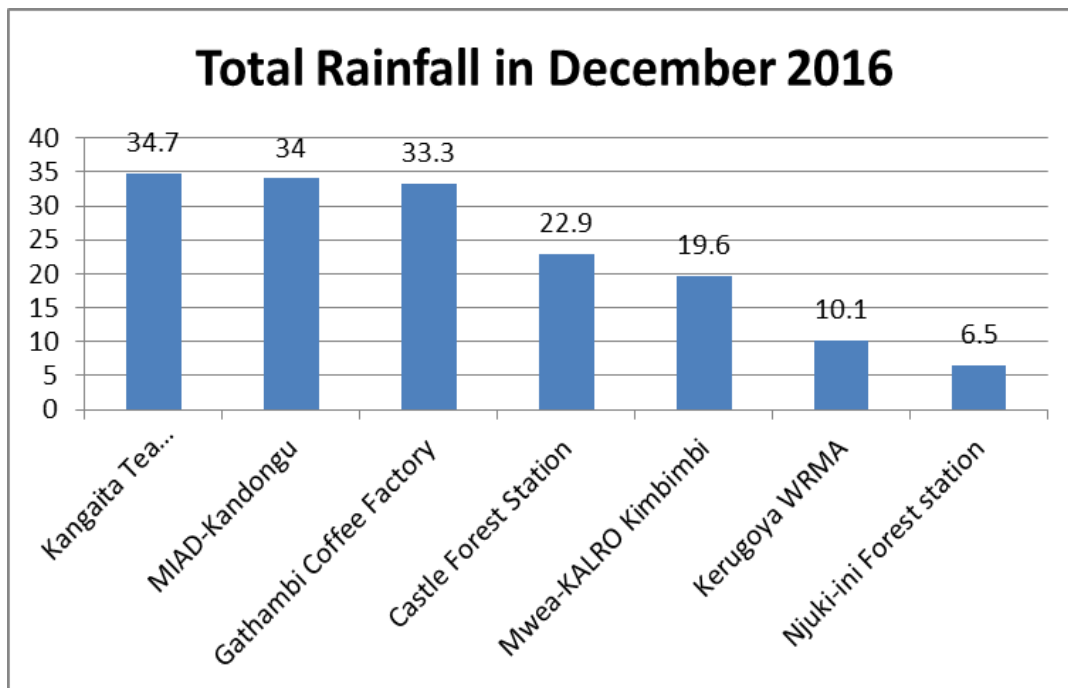


Fig. 2: Rains Performance for the Month of December 2016 in Kirinyaga County

### Comparison between the December 2016 monthly totals and the Long Term Means for December in Kirinyaga County

As compared to other months of December during past years, December of 2016 was generally drier than the Long Term Mean. All stations, reported less than the long term means. This means that the month of December 2016 received below average and depressed rainfall as was forecasted by Kenya Meteorological Department. Table 3 and Figure 3 show the foregoing.

Table 3: Comparison between the December 2016 monthly totals and the Long Term Means for December

Station No.	Station Name	December 2016 Monthly Totals	December LTM
	Kangaita Tea Factory/Farm	34.7	110.5
9037112	MIAD-Kandongu	34	55.8
9037264	Gathambi Coffee Factory	33.3	85.6
9037115	Castle Forest Station	22.9	99.5
9037031	Kerugoya WRMA	10.1	113.7
9037140	Njuki-ini Forest station	6.5	65.2

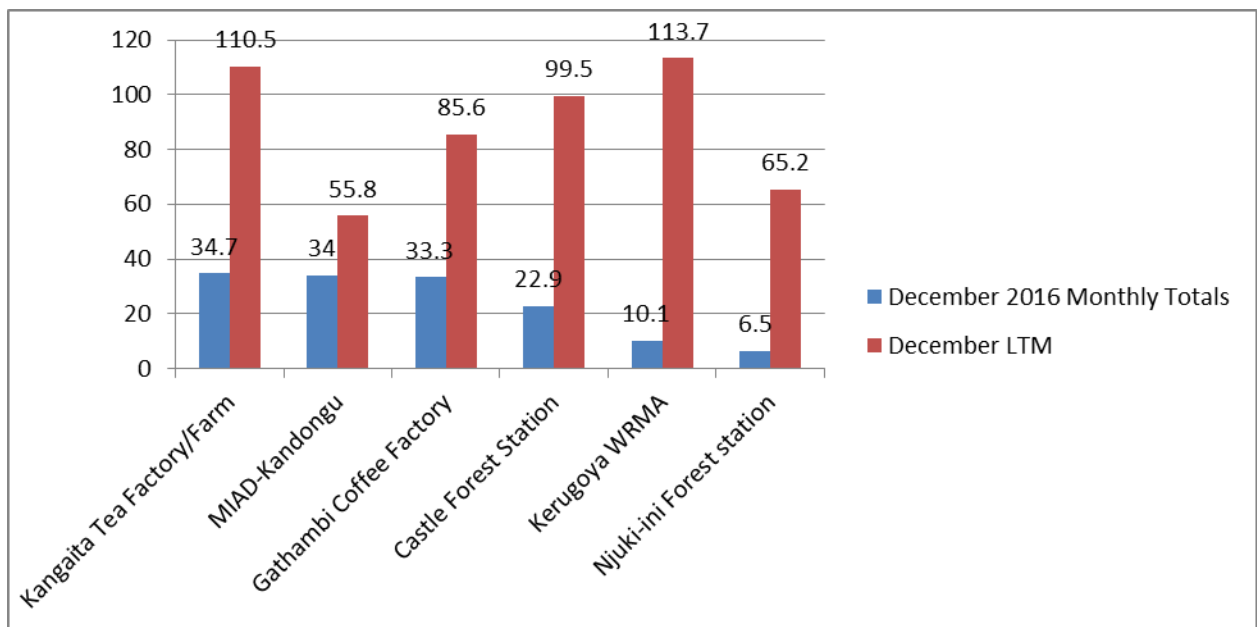


Fig. 3: Comparison between the total rainfall amounts received during the month of December 2016 and the Long Term Means (LTM) for each station during the month of December.

### Comparison between the October-November-December 2016 monthly totals and the Long Term Means for October-November-December in Kirinyaga County

October-November-December rains of 2016 were below normal just as were for by the Kenya Meteorological Department in September 2016. The forecast is as shown in Table 5 and Figure 6. Compared to long term mean (average) of October-November-December seasons, last season was depressed. This can be shown by Table 4 and Figure 4 below:

Table 4: Comparison between the October-November-December Season of 2016 with the Long Term Means for October-November-December

Station No.	Station Name	OND-2016	LTM-ODM
9037140	Njuki-ini Forest station	206.9	449.8
9037031	Kerugoya WRMA	198.8	474.2
9037264	Gathambi Coffee Factory	184.9	490.3
9037115	Castle Forest Station	177.8	562.1
9037112	MIAD-Kandongu	165.6	358.9
	Kangaita Tea Factory/Farm	160.5	480.4

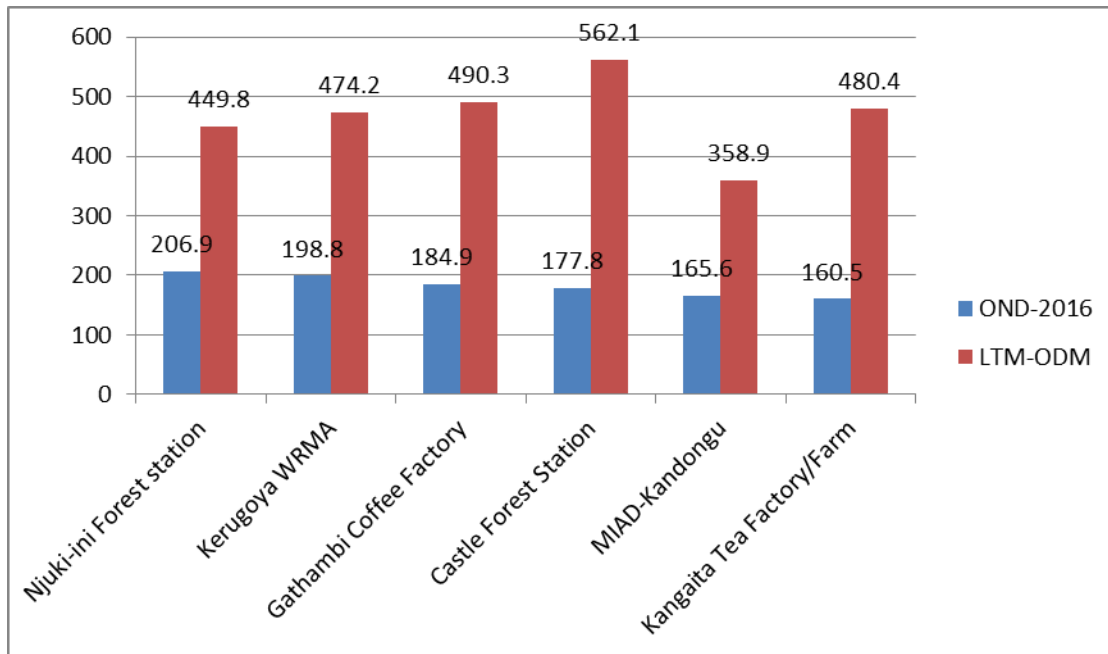


Fig. 4: Comparison between the October-November-December Season of 2016 with the Long Term Means for October-November-December

### Comparison between the October-November-December 2016 and October-November-December 2015 and their Long Term Means in Kirinyaga County

Unlike during the October-November-December (OND-2016), all stations in Kirinyaga County exceeded their long term Means during the October-November-December (OND-2015) as it was forecasted on 1<sup>st</sup> September 2015 by Kenya Meteorological Department (El Nino). The OND-2015 is as shown in figure 5 below.

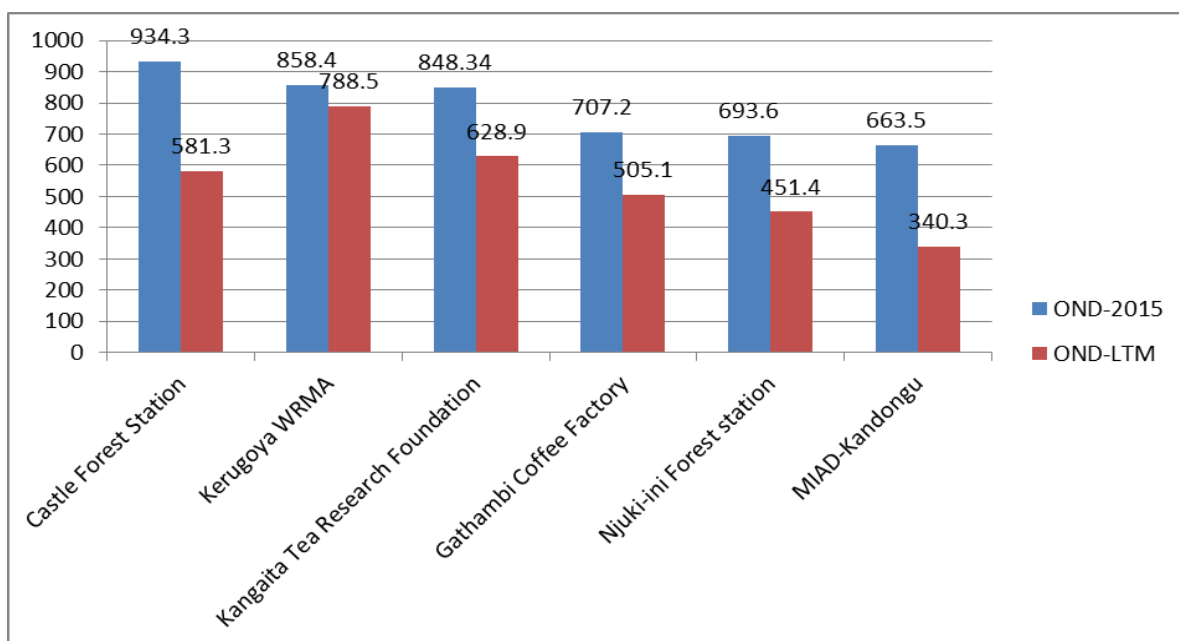


Fig.5: The comparison between the OND-2015 and the OND-LTM over the Kirinyaga County Stations.

# KIRINYAGA COUNTY OCTOBER-NOVEMBER-DECEMBER 2016 SHORT RAINS FORECAST

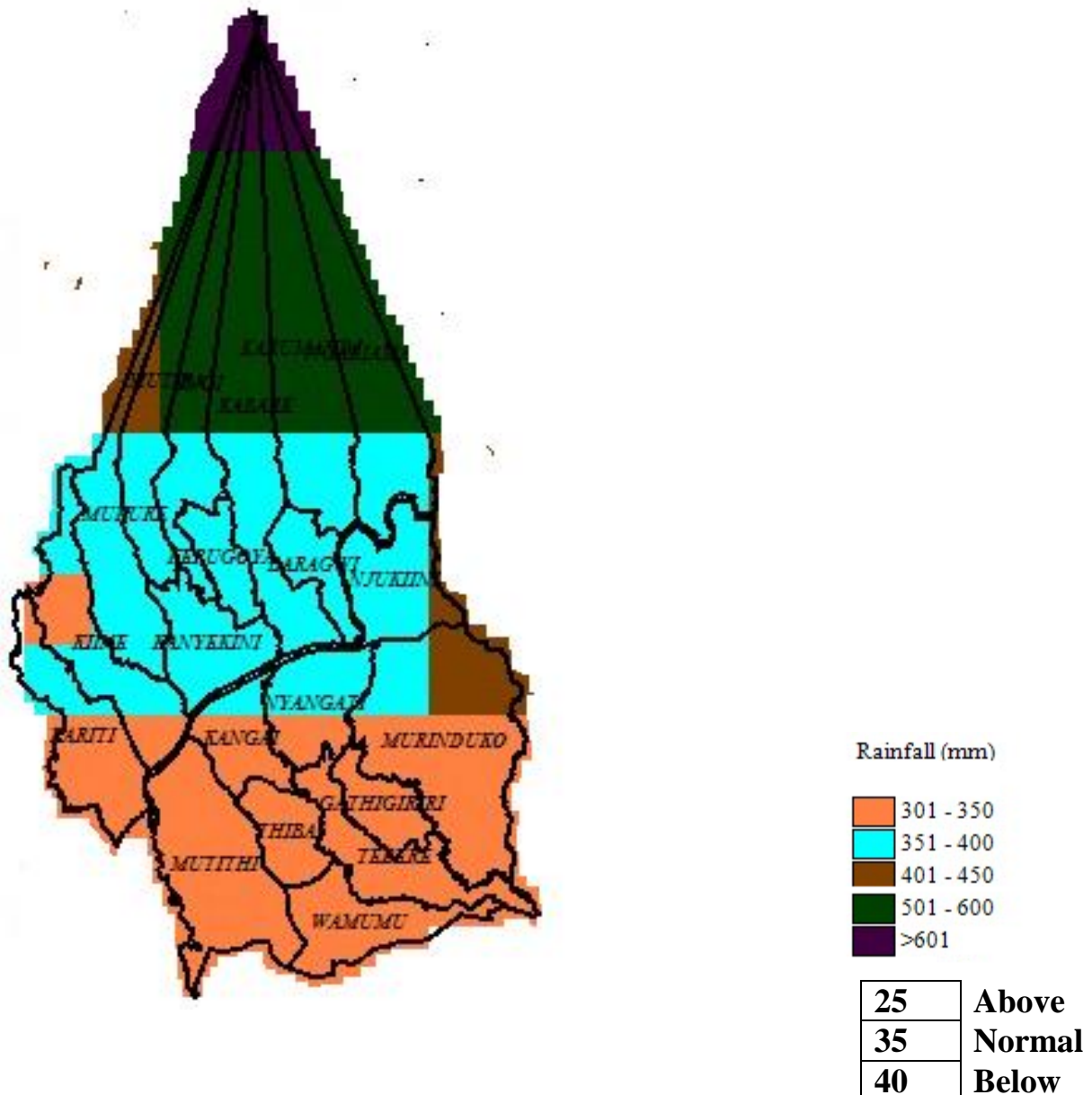


Fig. 6: Kirinyaga County OND 2016 Seasonal Forecast and the percentages of different scenarios. The highest percentage is 40% chances that the rains will be below normal

Table 5: Kirinyaga County OND 2016 Seasonal Forecast

<b>Forecast</b>	<b>Onset(Start of the rains)</b>	<b>Cessation (End of the rains)</b>	<b>Distribution in time and space</b>
<b>A:N:B(25:35:40)</b> Near normal to below normal-slightly depressed rainfall	3 <sup>rd</sup> to 4 <sup>th</sup> week of October 2016	2 <sup>nd</sup> to 3 <sup>rd</sup> week of December 2016	<b>Poor</b>

## **KIRINYAGA COUNTY WEEKLY FORECAST**

*FOR THE NEXT SEVEN DAYS*

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*The forecast indicates that:*

- *Mainly sunny and dry conditions will prevail and only very few chances of light rains. High day time temperatures and low night temperatures are expected.*

<b>DAY</b>	<b>MORNING</b>	<b>AFTERNOON/EVENING</b>
TUESDAY 17/1/2017	Mainly sunny intervals	Mainly sunny intervals with a chance of showers over few places.
WEDNESDAY 18/1/2017		
THURSDAY 19/1/2017		
FRIDAY 20/1/2017		
SATURDAY 21/1/2017		
SUNDAY 22/1/2017		
MONDAY 23/1/2017		

### 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

**Weather Link on the County Government of Kirinyaga website is:**

<http://kirinyaga.go.ke/weather.html> upon update by County Government Website administrators on duty

You can access the weather products using this link on a smart phone.

O.k.

James Gichuki Gathura

**County Director of Meteorological Services**