

REPUBLIC OF KENYAMINISTRY OF ENVIRONMENT AND FORESTRY

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Ref: MET/EBU/2/MONTHLY/9TH OCTOBER-2021

Issue Date: 9th October 2021

WEATHER FORECAST FOR OCTOBER 2021 AND WEATHER REVIEW FOR SEPTEMBER 2021

1.0 HIGHLIGHTS

1.1. The Weather Forecast for October 2021

Embu County is likely to experience Near average rainfall. The month of October normally marks the onset of rainfall in several parts of the county. The onset of the October-November-December rains is likely to be from the third to fourth week of October 2021 just as it had been predicted.

1.2. Weather Forecast for October-November-December 2021

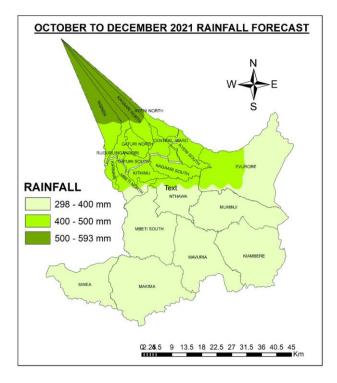


Fig. 1: OND 2021 Forecast for Embu County

The month of September 2021 was marked by high intensity rains despite few areas reporting the wet weather activities. Manyatta and Runyenjes Sub-Counties received the lion share of the wet weather activities. Unlike June, July and August, when temperatures were quite low, the temperatures were relatively high during the month of September 2021. The foregoing information on rains is as shown in Figure 1 above.

In the month of September 2021, Thigingi Girls Sec School Rainfall Station reported the highest amount of rainfall in Embu County. It reported a monthly total rainfall of 58.2mm and was followed by Mungania Tea Factory which reported 51.7mm, Runyenjes Agriculture Office 40.9, St. Paul's Kevote Boys Sec. Sch. 30.8, Kigari PTTC 26.7mm, Embu Met. Station 13.4mm, Kininthe Secondary School 13.0mm while Mayori reported 0.1mm. Kasafari, Kianamu-Nthawa, Gitii–Ngura, Managia, Kirathe Dispensary, Muthanthara Dispensary, Kanyuambora Secondary School, Makima ACC Grounds, Malikini Secondary School, Gachoka Agriculture Office and Kirie all reported no rainfall during the month of September 2021. Similar information is as shown in Table 1 and Figure 2 below.

Table 1: Monthly Rainfall Performance in September 2021

	Station	September 2021 Total ranfall
1	Thigingi Girls Sec Schoo	58.2
2	Mungania Tea Factory	51.7
3	Runyenjes Agri. Office	40.9
4	St. Paul's Kevote Boys Sec. Sch.	30.8
5	Kigari PTTC	26.7
6	Embu Met. Station	13.4
7	Kininthe Secondary School	13
8	Mayori	0.1
9	Kirathe Dispensary	0
10	Managia	0
11	Kianamu-Nthawa	0
12	Muthanthara Dispensary	0
13	Kanyuambora Secondary School	0
14	Makima ACC Grounds	0
15	Kirie	0
16	Kasafari	0
17	Gitii - Ngura	0
18	Malikini Secondary School	0
19	Gachoka Agriculture Office	0

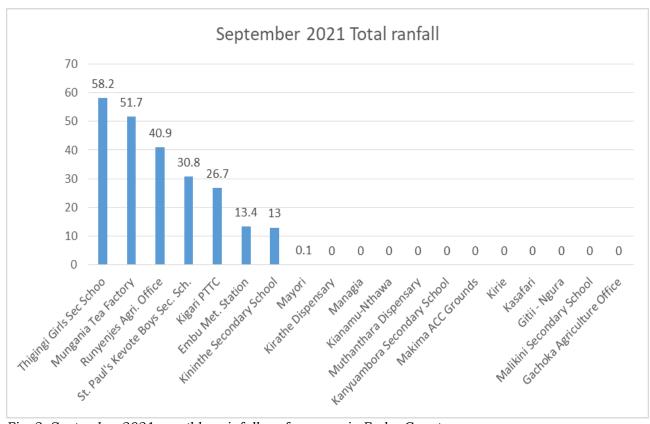


Fig. 2: September 2021 monthly rainfall performance in Embu County

Comparison between September 2021 and August 2021 rainfall performance in Embu County

The month of September 2021 reported higher rainfall intensities than in August 2021The month of August 2021. However fewer stations reported wet weather activities. Just like in August 2021, most of the wet weather activities were concentrated over Manyatta and Runyenjes sub-counties. Table 2 and Figure 3 below show comparison of rainfall performance in Embu County in September and August 2021.

Table 2: Monthly Rainfall Performance comparison between September and August 2021 in Embu County

No.	Station	September 2021 Total rainfall	August 2021 Total rainfall
1	Thigingi Girls Sec Schoo	58.2	30.2
2	Mungania Tea Factory	51.7	35.7
3	Runyenjes Agri. Office	40.9	25.7
4	St. Paul's Kevote Boys Sec. Sch.	30.8	21.7
5	Kigari PTTC	26.7	28.9
6	Embu Met. Station	13.4	24.2
7	Kininthe Secondary School	13	4.2
8	Mayori	0.1	2.1
9	Kirathe Dispensary	0	0
10	Managia	0	1.2
11	Kianamu-Nthawa	0	1.3
12	Muthanthara Dispensary	0	0
13	Kanyuambora Secondary School	0	0
14	Makima ACC Grounds	0	0
15	Kirie	0	0
16	Kasafari	0	11.9
17	Gitii - Ngura	0	1.3
18	Malikini Secondary School	0	0
19	Gachoka Agriculture Office	0	0

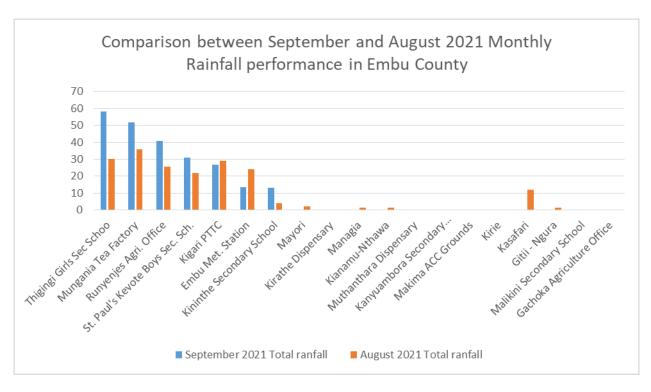


Fig. 3: Comparison between September and August 2021 Monthly rainfall performance in Embu

2.0 The Weather Outlook for the Month of October 2021

Embu County is likely to experience occasional rainfall at the beginning of the month. The rainfall is expected to break and resume during fourth week of October to first week of November, marking the onset of the seasonal rains. The expected total rainfall amounts are, however, likely to be near the long-term average amounts for October. Cool and cloudy conditions are also likely to occur in the mornings, especially at the beginning of the month.

The rainfall forecast for October 2021 is based on the observed patterns of the Global Sea Surface Temperatures (SSTs) and more so those over the Indian and Pacific Oceans. The near average to below average SSTs in the Western Equatorial Indian Ocean (adjacent to the East African Coast) and the warmer than average SSTs in the Eastern Equatorial Indian Ocean (adjacent to Australia) and also the near to below average SSTs across most of the equatorial Pacific Ocean were taken into account. This constitutes a negative Indian Ocean Dipole and ENSO neutral conditions.

3.0 EXPERIENCED IMPACTS

The following are the impacts that were experienced in Embu County during the month of September 2021:

3.1. Agriculture and Food Security

The continuation of sunny and dry weather conditions in ASAL sub-Counties of Embu may continue diminishing pastures for livestock in these regions and crop failure

3.2. Disaster Risk Management

Some residents are expected face food shortages in ASAL of Embu. Human to human and human to wildlife conflicts are likely to continue being experienced due to competition for diminished water resources and pasture.

3.3. Health

In areas expected to receive average rainfall, water-borne diseases such as malaria are likely to emerge. Dry areas are likely to be susceptible to dust storms, which may lead to increase in respiratory tract diseases. Water insufficiency may also lead to acute diarrhoeal diseases in the affected areas. Poorly drained areas may harbor pools of stagnant water, which may become conducive to breeding areas for disease-causing pathogens.

NB: Please use this monthly forecast in conjunction with the weekly weather forecasts issued by the Embu County Office.

KEY OF SCIENTIFIC WORDS USED

Rainfall categories			
Range	Category		
<5 mm	Light		
5 - 20mm	Moderate		
20 - 50mm	Heavy		
>50mm	Very heavy		

Rainfall coverage			
Term	Meaning		
Most Places	Between 66% and 100%		
Several Places	Between 33% and 66%		
Few Places	Between 0 and 33%		

Synoptic patterns/features: Are the global and continental weather causing systems that play a major role in determining the weather in a Country/area. The synoptic patterns are modified by the local conditions such as water bodies (lakes) and topography (Mountains).

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