KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 18, 2012
21– 30 JUNE 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was an increase in rainfall activities both in space and in intensity countrywide during the current dekad. The highest rainfall was received in Rift valley region with Eldoret and Kericho stations recording 129.2mm and 110.5mm respectively. This was a significant increase compared to 93.6mm received as the highest rainfall at Kisii station in Nyanza region in the previous dekad. Lamu station reported 84.2mm as the highest rainfall in the Coast region. Kakamega station reported 62.5 mm as the highest rainfall in Western region. In Nyanza region Kisii station recorded 60.2 mm as the highest rainfall. Nyahururu station reported 14.7 mm as the highest rainfall in Central region. In Nairobi region the highest rainfall received was 42.6mm at Moi Airbase Station. Mwea station in Eastern region recorded 25.5 mm as the highest rainfall. Moyale Station recorded insignificant amount of rainfall of 0.02mm being the highest rainfall in North Eastern region.

Most stations continued reporting decreased maximum temperatures, with a few stations reporting an increase in temperatures. Minimum temperatures also continued on decreasing in most stations apart from a few stations recording an increase in temperatures especially in the Rift Valley region. Lodwar station in Rift Valley region still reported the highest temperature of 34.4 ^0C, just as in the previous dekad. Ngong' station in Nairobi region still reported the lowest maximum temperature of 19.6^0C which was an increase from 18.6^0C recorded in the previous dekad.

For more comprehensive summary of rainfall and other meteorological parameters, see Figures 3.1 to 3.4 as shown below.

2.0 CROP AND WEATHER REVIEW FOR DEKAD 18; 21 – 30 JUNE 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 62.52 mm of rainfall which was a decrease from 76.9 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 19.9^{0}c and 41.5 mm respectively. There was no report on sunshine hours.

Maize and beans were at flowering and at harvesting stages respectively. Both crops were in good state and normal yield is expected for both crops.

2.1.2 Kisii

This station recorded 60.2 mm of rainfall compared to 93.6 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 19.3^{0}C and 31.3 mm respectively. There was no report on sunshine.

Maize and beans were at flowering and maturity stages respectively. Both crops are in good state and normal yield is expected.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall of 57.2 mm compared to 29.0 mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 18.5^{0}C and 27.2mm respectively. There was no report on sunshine.

Maize and beans were at flowering and maturity stages respectively. Both crops were in fair state and normal yield is expected.

2.2.2 Eldoret-Kapsoya

The station recorded significant rainfall amount of 129.2 mm compared to 52.0 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 16.7^{0}c and 38.0mm respectively. There was no sunshine report.

Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state with normal yield expected.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received 37.2mm compared to 1.7 mm of rainfall in the previous dekad. The average air temperature and total pan evaporation recorded were 17.0^{0}c and 30.9 mm respectively. There was no report on sunshine hours.

Maize and beans were at flowering and maturity stages respectively. Maize was in fair condition though adversely affected by stalk borers and insects and normal yield is still expected. Beans were in poor state having been adversely affected by excessive rainfall and insects hence below normal yield are expected.

2.3.2 Kabete

The station recorded rainfall amount of 20.1 mm compared to 0.02 mm in the previous dekad. The average air temperature and pan evaporation recorded were 17.2^{0}c and 24.1 mm respectively. Sunshine hours reported were 4.8 hours per day.

Maize and beans were at emergence and flowering stages respectively. Maize was in fair condition with normal yield expected, while beans were in poor state due to excessive rainfall and below normal yield is expected. Coffee were at 100% pinhead stage and in moderate state but damaged by leaf rust and leaf minor at less than 10% each. Bananas were at 100% appearance of suckers stage and in moderate state though damaged by thrips and cigar end rot at less than 10% each.

2.3.3 Thika

The station reported 3.6mm of rainfall compared to 2.4 mm in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 18.5^{0}c and 27.1 mm respectively. There was no report on sunshine hours.

Maize and beans were at flowering and harvesting stages respectively. Maize are in fair state, though having been adversely affected by wind still normal yield is expected. Beans are in poor state, having been adversely affected by army worms hence below normal yield is expected.

2.3.4. Nyahururu

The station received rainfall of 45.9 mm compared to 14.7 mm reported in the previous dekad. The mean air temperature and pan evaporation recorded were 13.9^{0}c and 31.4mm respectively. There was 5.4 hours of sunshine recorded per day.

Maize and beans were at emergence and flowering stages respectively. Maize was in good state with normal yield expected while beans were in fair state with normal yield expected.

2.3.5. Dagoretti

The station reported rainfall amount of 16 mm compared to 0.02 mm recorded in the previous dekad. The average air temperature and pan evaporation recorded were 16.8^{0}c and 26mm respectively. There was no sunshine report.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported 17mm of rainfall compared to dry conditions in the previous dekad. The average air temperature and pan evaporation recorded were 17.4^{0}c and 37 mm respectively. There was 7.06 hours per day of sunshine.

Maize and beans were at flowering and harvesting stages respectively. Maize was in fair condition with above normal yield expected while beans were in good state with normal yield expected.

2.4.2 Embu

The station recorded rainfall of 18.0 mm compared to 1.9 mm in the previous dekad. The average air temperature and pan evaporation were 18.1^{0}c and 27.2 mm respectively. Sunshine hours reported were 4.3 hrs per day.

Maize and beans were at flowering and maturity stages respectively. Both crops were in good condition and normal yield expected

2.4.3 Katumani (Machakos)

The station reported 13.4mm compared to the dry conditions in the previous dekad. The average air temperature recorded was 17.3^{0}c. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at flowering and harvesting stages respectively. Both cops are in good state with normal yield expected.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall of 70.4 mm compared to 3.0 mm in the previous dekad. The average air temperature and pan evaporation recorded were 25.7^0 c and 30.1mm respectively. There was no sunshine report.

Maize was at flowering and in fair state hence normal yield is expected. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

This station recorded rainfall of 25.7 mm compared to 4.6 mm in the previous dekad. The average air temperature and pan evaporation were 25.7^0c and 35.7 mm respectively. There was no report on pan evaporation and sunshine parameters.

Maize was at flowering stage and in unsatisfactory state as had been adversely affected by stalk borer and leaf rust. Watermelon was at 100% consumer's ripeness stage and in unsatisfactory state due to damage by aphids leaf rust leaf miners and fruit bores.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

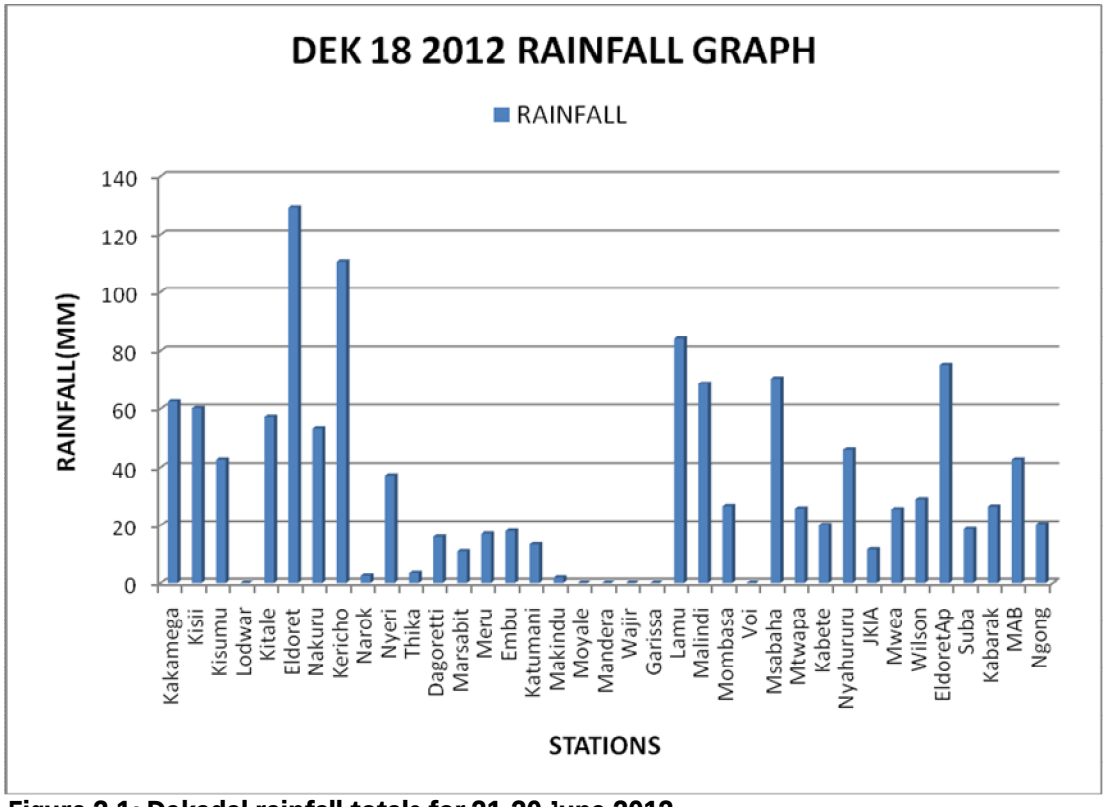

Figure 3.1: Dekadal rainfall totals for 21-30 June 2012

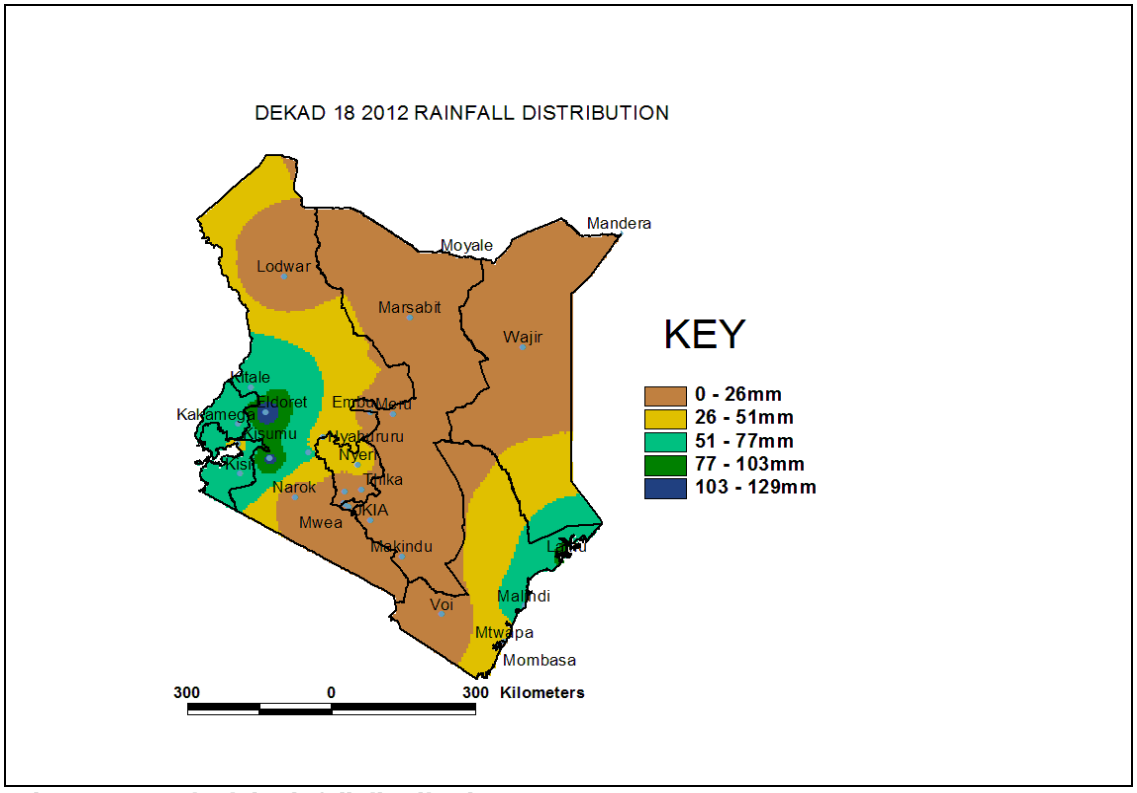

Figure 3.2: Dekadal rainfall distribution

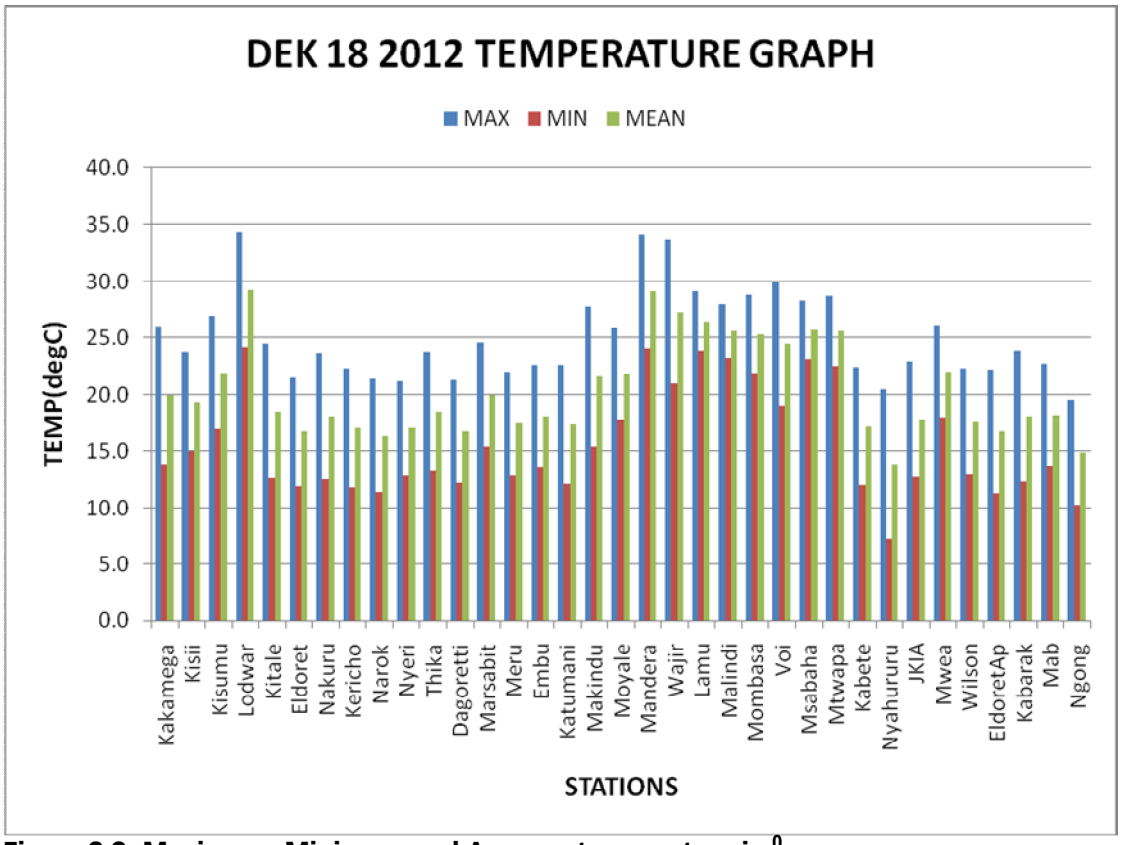

Figure 3.3: Maximum, Minimum and Average temperature in ^{0}c

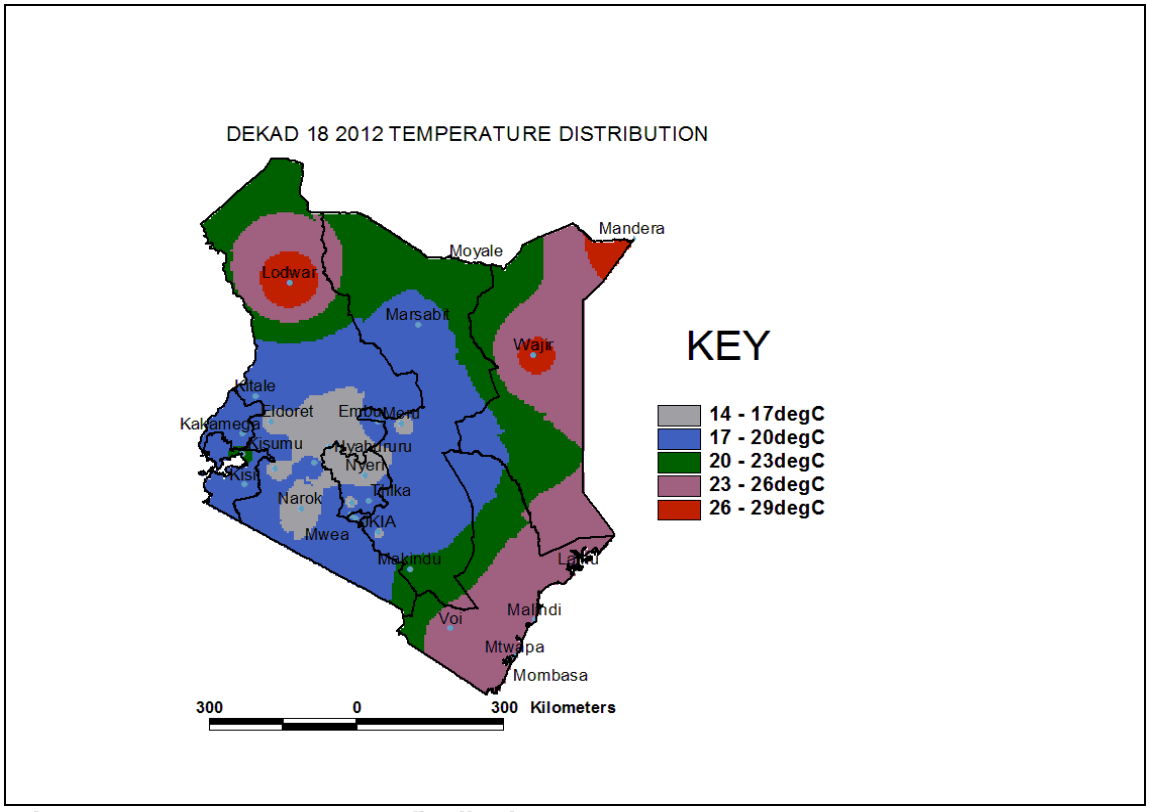

Figure 3.4: Mean temperature distribution

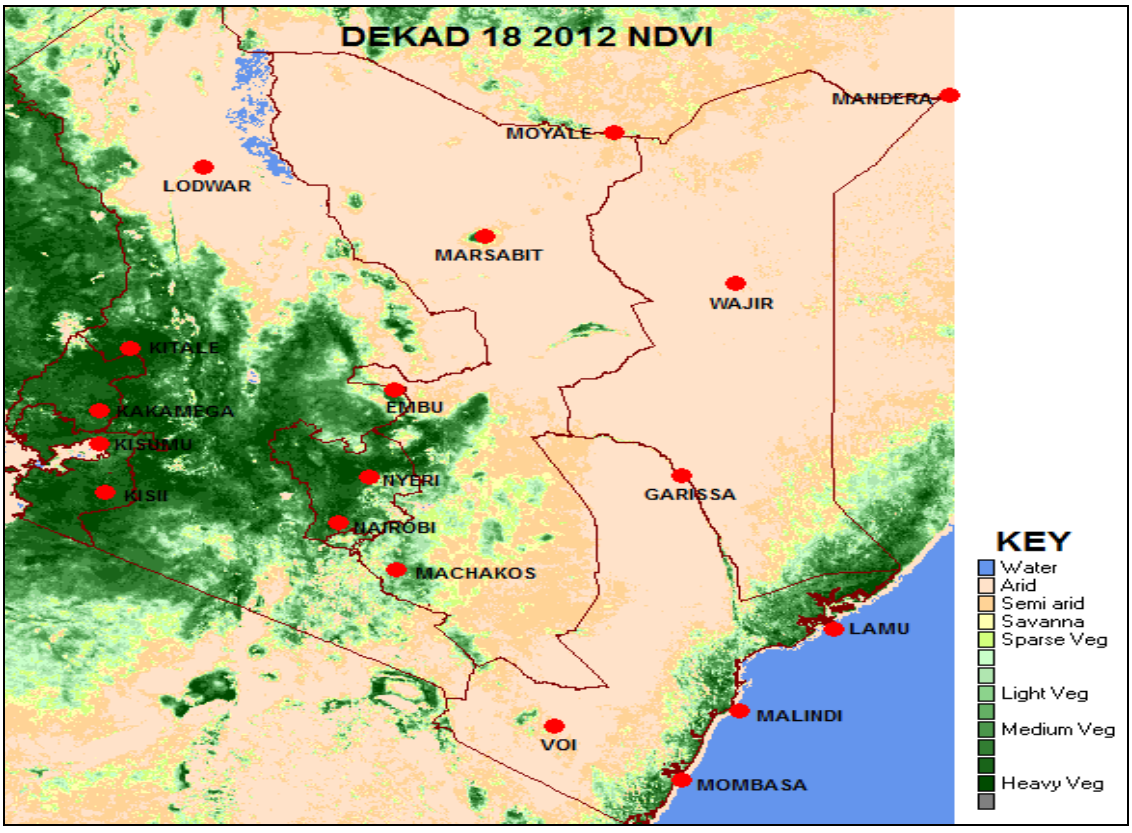

Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01 - 10 JULY 2012

- **Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Central and south Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Migori, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Nyandarua, etc**) , are expected to experience sunny intervals in the morning and afternoon/night showers accompanied by thunderstorms over several places for much of the period. The rainfall is expected to be heavy around Mt.Elgon and the Nandi Hills for much of the forecast period.

  The showers will continue flourishing the crops which are in maturing stages.

- **Over the Northwestern counties (Turkana, West Pokot etc)** ,are expected to experience sunny intervals in the morning and afternoon showers over several places in the afternoon in the first two days, reducing to few places mainly bordering Uganda for the rest of the forecast period . The showers are expected to be heavy in areas boardering Sudan on the first day of the of the forecast period.

  The showers will continue to replenish the pasture and general vegetation of the region.

- **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc) ,** are expected to experience cool and cloudy morning with light rains/drizzle over few places and mainly short sunny intervals in the afternoon for much of the forecast period. Light to moderate afternoon/night showers are expected in the first half of the forecast period.

  The rains will continue benefiting the growing crops in the region especially maize which is approaching the maturity stage.

- **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** are expected to experience sunny intervals throughout the forecast period.

  The continued sunny conditions have started having a negative impact on the pasture and crops grown in this region.

- **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Sunny intervals are likely to be experienced throughout the forecast period.

  The sunny intervals have started having a negative impact on the pasture for livestock kept in this region.

- **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** ,are expected to experience light to moderate showers over several places in the first half of the forecast period. Sunny intervals will predominate the second half of the forecast period.

For feedback or further guidance, Contact:

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