



Monthly Hydrological

Bulletin Report (Mtera Dam)

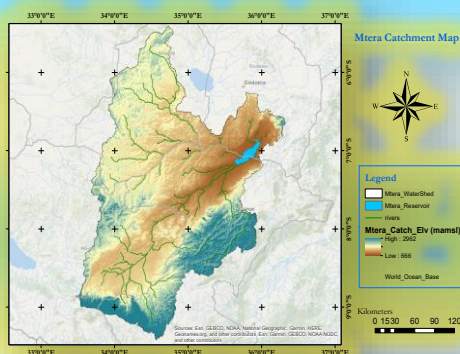
May (2026)

1 Summary of Water Status

Mtera Dam receives water from three main rivers Great Ruaha, Little Ruaha, and Kizigo which form part of the Great Ruaha catchment. These rivers are vital for hydropower generation, agriculture, domestic use, and ecological balance.

In May 2026, water levels were 143% above the long-term monthly average, mainly due to moderate rainfall across the catchment and sustainable water resource management during the *Masika* season (March–May 2026). The water level in the dam was 100.50% above the long-term average for May.

Water release from Mtera Dam began on **31 March 2026** and concluded on **14 May 2026**, lasting a total of **62 days**. During this period, 1.232 billion cubic meters of water were discharged, equivalent to 33.30% of the dam's full supply level of 3.7 billion cubic meters. Despite the increased downstream flow, no flooding incidents or livestock losses were reported, and river conditions remained stable, ensuring sufficient water availability for both social and economic uses.



2 Weather Status

Rainfall – May 2026:

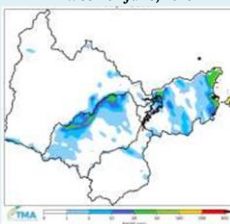
Rainfall recorded by meteorological stations across the Rufiji Basin ranged from **average to below average**, contributing to a gradual decline in river flow, especially in seasonal streams.

Forecast – June 2026:

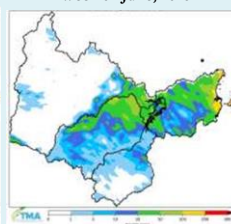
According to the **Tanzania Meteorological Authority (TMA)**:

- Extended **dry spells** are expected across most parts of the Rufiji Basin, with occasional **light rains** in eastern areas (Dar es Salaam, Coast, and parts of Morogoro).
- Average to **cool temperatures** will prevail, accompanied by dryness in the southern and central basin zones.

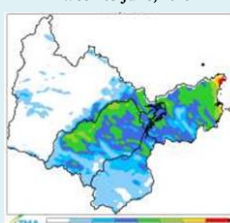
Rainfall Forecast
Week 01 June, 2026



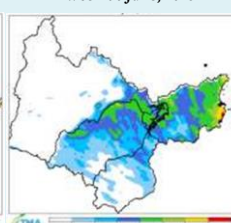
Rainfall Forecast
Week 02 June, 2026



Rainfall Forecast
Week 03 June, 2026



Rainfall Forecast
Week 04 June, 2026



3 River Flow Status

River flow volumes during May 2026 remained above the long-term average (LTA: 2000–2025). As shown in table 1, monitoring station data indicate increased discharge compared to historical averages.

Table1: Water Flow Statistics Analysis – May 2026

No.	Station Code	River	Average Flow (m ³ /s) – May 2026	LTA – May (2000–2025)	Remarks
1	1KA59	Great Ruaha at Msembe	79.6	51.5	Notable High
2	1KA31	Little Ruaha at Mawande	37.2	27.1	Above Average
3	1KA42A	Kizigo at Chinugulu	16.7	12.0	Above Average

Overall, May 2026 demonstrated **strong water resource stability** within the Great Ruaha Basin. River flows remained above long-term averages, and Mtera Dam maintained a water level exceeding **698.70 masl**, ensuring sufficient water for hydropower generation and other socio-economic uses.

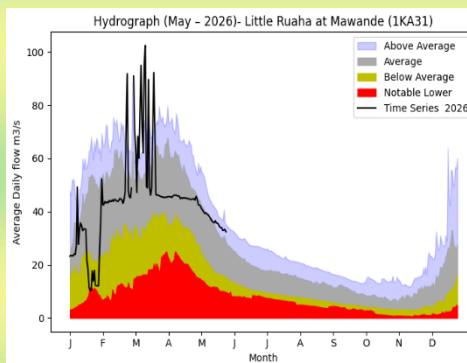
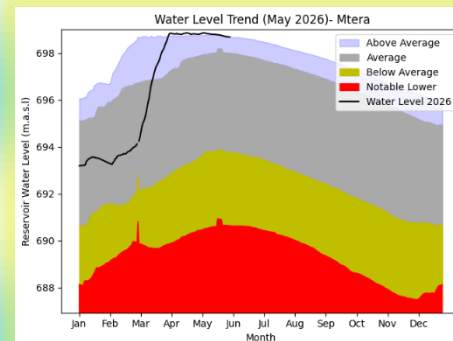
4 Reservoir Water Status

In May 2026:

- The water levels and volume of water in the dam remained above the **Maximum Operational Level**, supporting hydropower generation.
- Water release from Mtera Dam began on **31 March 2026** and concluded on **14 May 2026**, lasting a total of 62 days. Over this period, 1.232 billion cubic meters of water were released, equivalent to 33.30% of the dam's full supply capacity of 3.7 billion cubic meters.

Hydrological Analysis

- Overall, May 2026 demonstrated **stable management of dam infrastructure and water resources**.
- Despite **reduced inflows** into the dam, water levels remained above the **Maximum Operational Level**, and the water released was **successfully executed to safeguard dam safety and sustain electricity generation**.
- Although downstream river flows increased, no disasters were reported among communities or livestock.
- River conditions remained stable, with sufficient water available for social and economic uses.



5 Recommendations

- Continue integrated water resource management during the upcoming dry season (Kipupwe) to ensure sustainable dam operations and community water use.
- Maintain water levels within the maximum full supply level for hydropower generation to support efficient electricity production and other water uses.