



# Monthly Hydrological

## Bulletin Report (Mtera Dam)

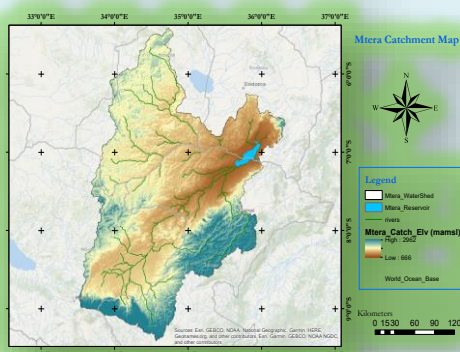
### August (2026)

#### 1 Summary of Water Status

The Mtera Reservoir receives inflows from three major gauged rivers: the Great Ruaha, Little Ruaha, and Kizigo, all of which are part of the Great Ruaha Catchment. These rivers are fundamental to hydropower generation, irrigated agriculture, domestic and industrial water supply, livestock production, and the preservation of downstream ecosystems, thereby supporting long-term environmental sustainability.

By the end of August 2026, inflows into the Mtera Reservoir were 62% of the long-term average (LTA) for the month, indicating near-normal hydrological conditions. This condition was supported by rainfall over the upstream catchments and effective water-resource management across the basin.

The Mtera Reservoir water level remained above the long-term average during August 2026. By 31 August 2026, the reservoir level reached 697.47 m amsl, equivalent to 100.63% of the long-term average for the month. The available storage continued to support hydropower generation and other water requirements.



#### 2 Weather Status

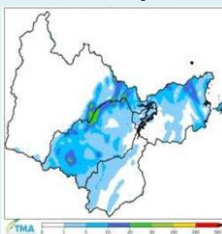
##### Rainfall – August 2026:

Rainfall records indicate that most parts of the Basin experienced dry conditions throughout August 2026. As a result, there was very little surface runoff, leading to reduced flows in rivers and streams, especially those that depend mainly on seasonal rainfall.

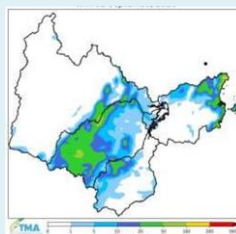
##### Weather Outlook – September 2026:

According to the Tanzania Meteorological Authority (TMA), light to moderate rainfall is expected across the Rufiji Basin during September 2026. The weekly rainfall forecast indicates that rainfall occurrence is expected to vary across different parts of the basin.

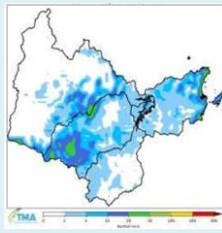
Rainfall Forecast  
Week 01 Sept, 2026



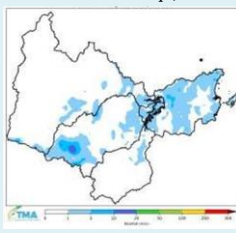
Rainfall Forecast  
Week 02 Sept, 2026



Rainfall Forecast  
Week 03 Sept, 2026



Rainfall Forecast  
Week 04 Sept, 2026



#### 3 River Flow Status

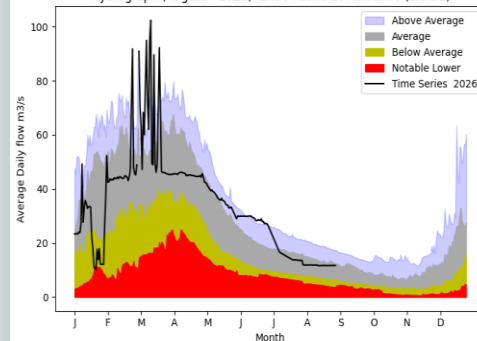
Average river flows during August 2026 were generally near normal, although some variations were observed among the major rivers. The Great Ruaha and Little Ruaha recorded flows within the average range, while the Kizigo River recorded a notably low flow.

Table1: Water Flow Statistics Analysis –August 2026

| No. | Station Code | River                   | Average Flow (m <sup>3</sup> /s) – August 2026 | LTA - August (2000–2025) | Remarks       |
|-----|--------------|-------------------------|------------------------------------------------|--------------------------|---------------|
| 1   | 1KA59        | Great Ruaha at Msembe   | 1.72                                           | 2.29                     | Average       |
| 2   | 1KA31        | Little Ruaha at Mawande | 11.74                                          | 10.69                    | Average       |
| 3   | 1KA42 A      | Kizigo at Chinugulu     | 0                                              | 0.64                     | Notable Lower |

Overall, most rivers in the Great Ruaha Catchment experienced declining flows during August 2026 due to the prevailing dry-season conditions. However, the Little Ruaha River at Mawande maintained flows slightly above its long-term average, supported by effective water-resource management and regulation of upstream water abstractions.

Hydrograph (August – 2026)- Little Ruaha at Mawande (1KA31)



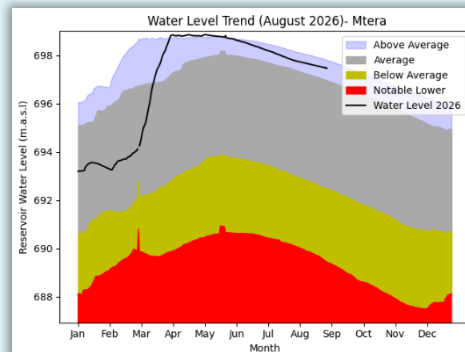
#### 4 Reservoir Water Status

As of the end of August 2026, the water level at Mtera Reservoir was 697.47 m above mean sea level (amsl), equivalent to 100.63% of the long-term average for the month.

##### Interpretation

Despite the decline in river inflows during the dry season, the reservoir water level remained above the long-term average. This indicates that reservoir operations and water-resource management were effective in maintaining adequate water storage.

The available water storage was sufficient to support hydropower generation while also meeting domestic, agricultural, industrial, livestock and environmental water requirements.



#### 5 Recommendations

- Continue effective water management and dam operation to ensure sufficient water is maintained for power generation and other water needs.
- Consider the El Nino rainfall forecast issued by TMA when making decisions on dam operation and water management, including releasing excess water safely without affecting infrastructure and communities downstream of the dam.