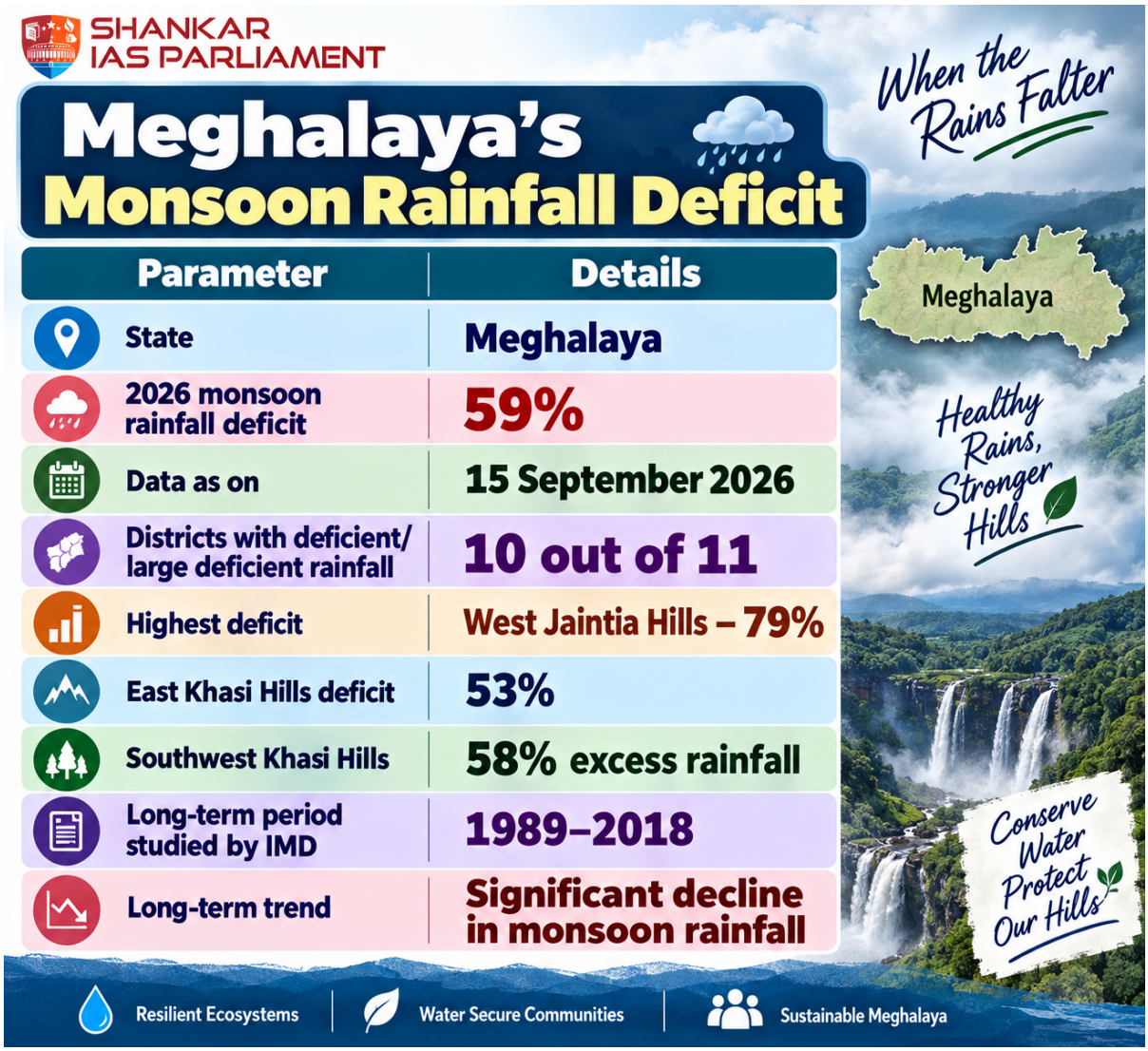
Meghalaya’s Monsoon Rainfall Deficit

Prelims: *Current events of national and international importance | Geography*

Why in News?

Meghalaya, one of India’s wettest states, recorded the highest rainfall deficit in India during the 2026 southwest monsoon.



- **Mawsynram and Cherrapunji**
  - Located in **Meghalaya's East Khasi Hills**.
  - They are recognized as some of the **rainiest places on Earth**.
  - However, the East Khasi Hills district experienced a **53% rainfall deficit** during the 2026 monsoon season.

- **West Jaintia Hills –** This district recorded the highest rainfall deficit at the district level, amounting to **79%**.
- **Southwest Khasi Hills –** The **only district** with excess rainfall:
  As of 15 September, rainfall was 58% above normal levels.
- **Primary Vulnerability –** Agriculture in Meghalaya largely depends on rainfall, which sustains streams and springs that provide irrigation and support crop production.
- **Springs –** Approximately **80% of villages** depend on springs as their primary sources of **drinking water and irrigation**.
- **Human activities such as:**
  - Mining,
  - Unsustainable agricultural practices, and
  - Forest resource extraction.
- These activities have contributed to the drying or reduced discharge of approximately **50% of springs**, as reported in the cited MBDA conference paper.
- **Significance**
- Approximately **77% of Meghalaya's working population** is engaged in agricultural activities.
- Agriculture accounts for approximately **21%** of the state's **gross domestic product.**
- The total cropped area constitutes **15.28%** of the state's geographical area.
- The approximate cropped area is 343,000 hectares.
- The net irrigated area is limited to 31,796 hectares.
- **IMD study –** A 30-year analysis (1989–2018) found a significant decreasing trend in monsoon rainfall in Meghalaya.
- The 2026 rainfall deficit is significant both as a single-season anomaly and as part of an ongoing long-term decline in rainfall.

Meghalaya State Action Plan on Climate Change (SAPCC)
• **Published in –** 2025. • **Period –** 2023-2030 • Agriculture and related sectors are among the **8 priority areas** identified for climate change mitigation and adaptation planning.

Reference

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