

Global Glacial Mass Loss

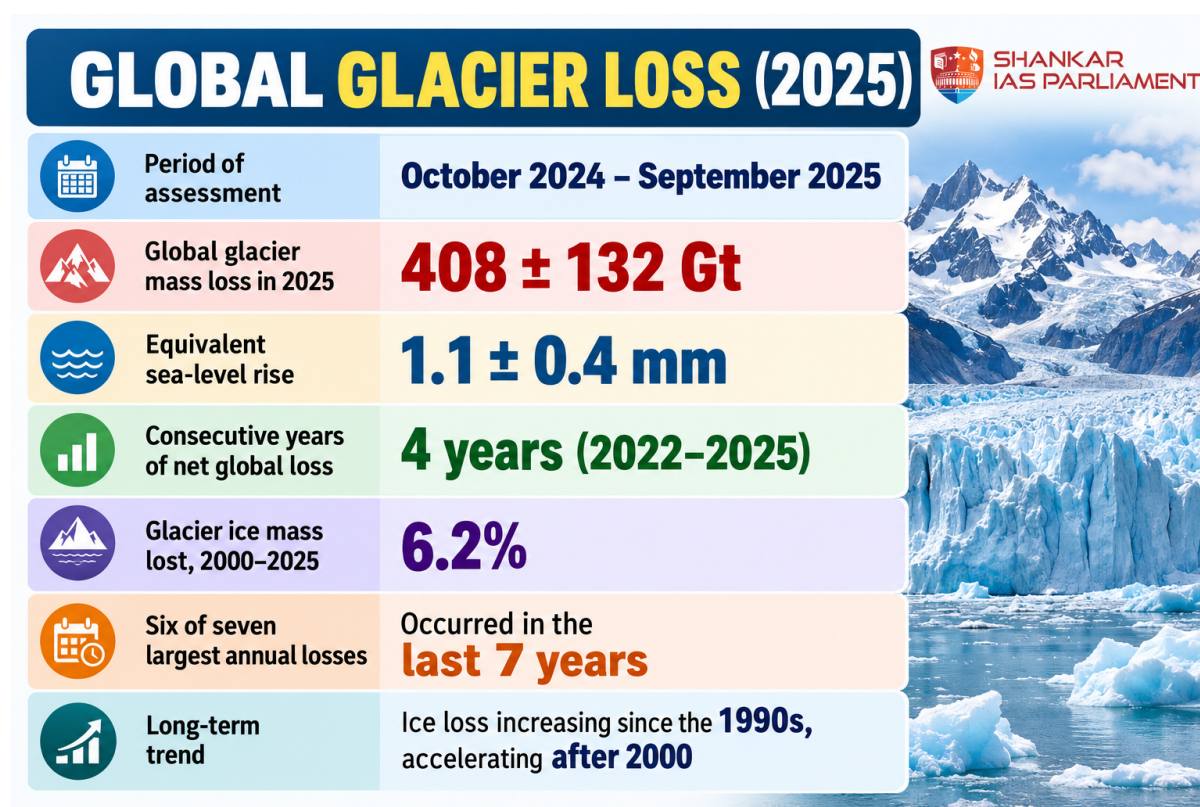
Prelims: Current events of national and international importance | Geography

Why in News?

Recent reports say that 2025 marked the fourth consecutive year in which all major glaciated regions recorded net ice-mass loss.

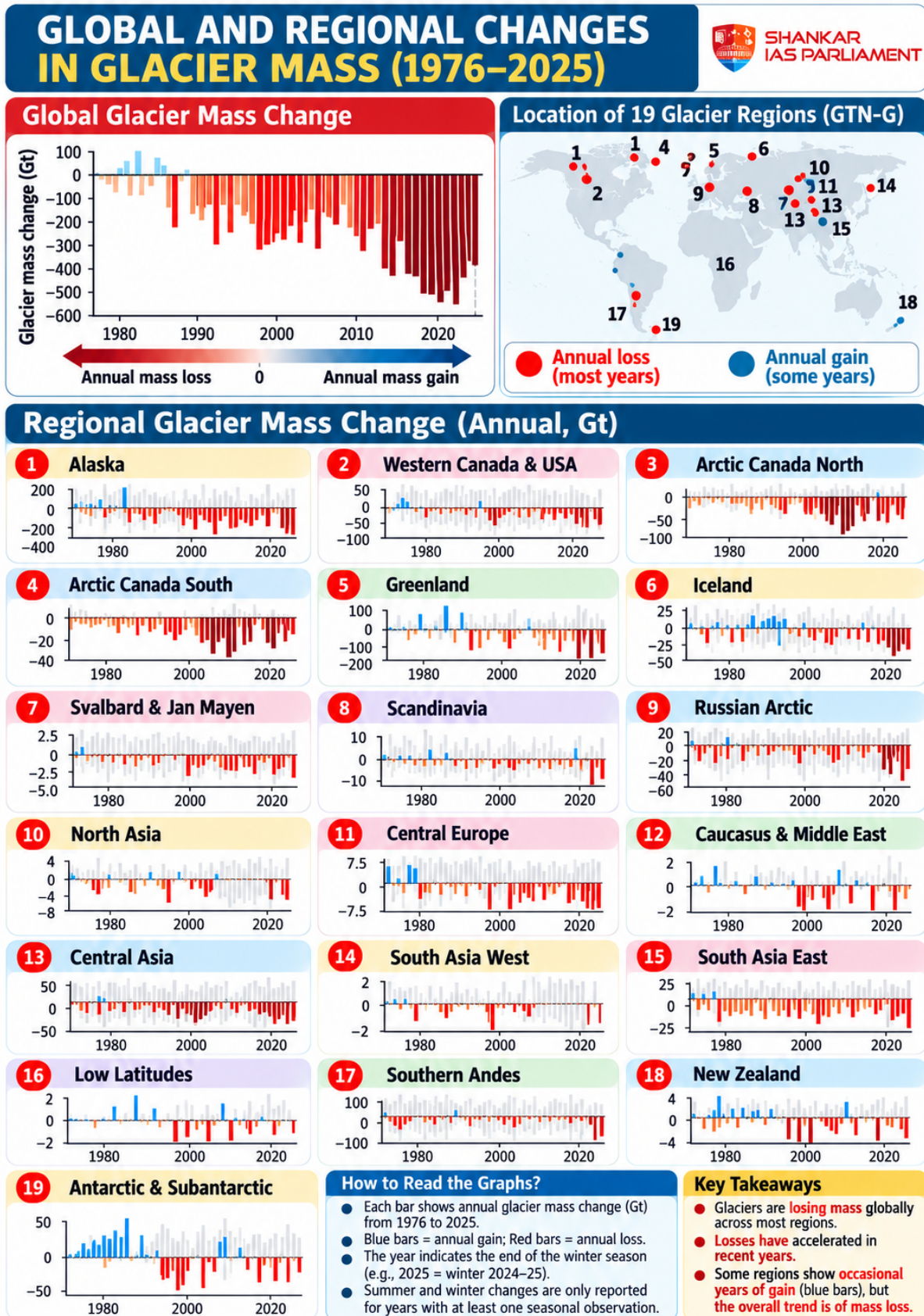
State of Global Water Resources 2025 report

- Released by - World Meteorological Organisation's (WMO)



- Key findings**
- Regions Exceptionally High Mass Losses** - In 2025, the following regions experienced annual mass balances that ranked among the **three most negative years on record**:
 - Central Asia
 - South Asia West
 - Russian Arctic
 - Iceland

- Western Canada & USA
- **Trends Since the 1990s**
 - Ice loss has increased across nearly all glaciated regions.
 - Summer melting now exceeds winter accumulation.
 - This imbalance has accelerated, especially since 2000.



- **Glacier Mass Balance** - It is defined as the difference between accumulation and ablation.
 - **Positive balance** - Accumulation > melting/loss
 - **Negative balance** - Melting/loss > accumulation
- **Peak Water** - It refers to the stage at which a glacier attains its **maximum meltwater runoff**.
- After peak water
 - Initially, increased glacier melting leads to greater water availability.
 - Once maximum runoff is reached, continued glacier shrinkage results in a decline in **meltwater contribution**.
- **Regions having reached peak water**
 - Caucasus
 - Western Canada & USA
 - Central Europe
- These regions have exhibited minimal or no increase, and in some cases a decline, **in minimum summer runoff** despite ongoing annual glacier mass loss.

Reference

[Down to Earth | WMO Report](#)

