

Yankti Kuti valley

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In news— According to a new study, multiple events of glacial advances have been witnessed from the Yankti Kuti valley situated in the extreme eastern part of **Pithoragarh district, Uttarakhand**, since 52 thousand years that synchronises with climate variability.

Key findings-

- **Scientists of the Wadia Institute of Himalayan Geology, an autonomous institute of the Department of Science and Technology has reported first time the oldest glacial advance during 52 Kilo years from the Central Himalaya**, as the evidence of glacial advance during the Last Glacial Maxima and subsequently younger time periods have already been reported from many parts of the Central Himalaya.
- **They found that moisture-deficient valleys of semi-arid Himalayan regions respond sensitively to enhance precipitation.**
- **The study suggests a regional synchronicity of glacier response to climate variability since MIS 3.**
- The term MIS 3 refers to the alternating warm and cool periods that occurred during the Earth's Palaeoclimate found through oxygen isotope data reflecting temperature fluctuations.
- **The study can help enhance the existing knowledge of the relationship between Himalayan climate and glacier dynamics** and can help assess the **role of Indian Summer Monsoon (ISM) versus westerlies in driving the valley glaciers** in the Central Himalayan region.

About Yankti Kuti valley-

- Kuthi Yankti is **one of the two headwaters of the Kali River**, the other being the Kalapani River that flows

down from the Lipulekh Pass.

- It **emerges from slopes near Wilsha, below the Limpiyadhura range**, and passes Lake Jolingkong at an altitude of 4,630 m, to the Kuti village.
- It flows southeast to merge with the Kalapani River near the Gunji village to form the Kali River (or Sharada River).
- High Himalayan passes of **Mangsha Dhura** (5,490 m) and **Limpiya Dhura** (5,530 m) are situated along the northern border of the Kuthi valley joining it with Tibet.
- Shin La pass and Nama pass join Darma Valley to Kuthi valley from the south.
- **Jolingkong and Parvati are main alpine lakes.**
- **Sangthang Peak** is the highest along the line of peaks forming the northern boundary of the valley with Tibet.
- Among the peaks forming the southern boundary of the valley, notable peaks are Brammah Parvat (6,321 m), Cheepaydang (6,220 m) and Adi Kailash (5,945 m).