



Chenab Bridge

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Why in News

Recently, **Indian Railways** completed the **arch closure of the iconic Chenab Bridge in Jammu & Kashmir.**

Key Points

About Chenab Bridge:

- It is the **world's highest railway bridge** and is part of the **Udhampur-Srinagar-Baramulla rail link project (USBRL).**

The Project was **declared as a Project of National Importance in March 2002.**

- This bridge is **1,315-metre long** and is the highest railway bridge in the world being **359 metres above the river bed level.**
- The completion of the steel arch is a major leap towards the completion of the **111 km long winding stretch from Katra to Banihal.**

It is arguably the **biggest civil-engineering challenge** faced by any railway project in India in recent history.



Unique Features of this Bridge:

- Bridge designed to **withstand high wind speed up to 266 Km/Hour.**
- Bridge designed for **blast load in consultation with DRDO** for the first time in India.
- Bridge designed to **bear earthquake forces of highest intensity zone-V** in India.
- First time on Indian Railways, **Phased Array Ultrasonic Testing machine** used for testing of welds.
- First time on Indian Railways, **National Accreditation Board for Testing and Calibration Laboratories (NABL)** accredited lab established at site for weld testing.
- Extensive **health monitoring and warning systems** planned through state of art instrumentation.

Chenab River

- **Source:** It rises in the upper Himalayas in the **Lahaul and Spiti district of Himachal Pradesh** state.
 - The river is **formed by the confluence of two rivers, Chandra and Bhaga**, at Tandi, 8 km southwest of Keylong, in the Lahaul and Spiti district.
 - The **Bhaga river originates from Surya taal lake**, which is situated a few kilometers west of the Bara-lacha la pass in Himachal Pradesh.
 - The **Chandra river originates from glaciers east of the same pass** (near Chandra Taal).
- **Flows Through:** It flows through the Jammu region of Jammu and Kashmir into the plains of Punjab, Pakistan, before flowing into the Indus River.
- Some of the **important projects/dams on Chenab:**
 - **Ratle Hydro Electric Project**
 - **Salal Dam- hydroelectric power project** near Reasi
 - **Dul Hasti Hydroelectric Plant-** power project in Kishtwar District
 - **Pakal Dul Dam (under construction)-** on a tributary **Marusadar River** in Kishtwar District.



Source:PIB