



# Vande Bharat for Katra-Srinagar Route

## Why in News?

Recently, **the Railway Board** unveiled a [Vande Bharat Express train](#), specially designed to operate seamlessly in the challenging winter conditions of Jammu & Kashmir, for the upcoming **Katra-Srinagar rail route**.

## Key Points

- **Climate-Specific Features:**
  - The Vande Bharat Express, stationed at Shakurbasti coaching depot in New Delhi, has been **specially designed for Jammu & Kashmir's extreme winter conditions**.
  - It features **advanced heating systems** to prevent the freezing of water and bio-toilet tanks, ensure the vacuum system and laboratories remain warm, and **optimize air-brake system** functionality in sub-zero temperatures.
- **Passenger Amenities:**
  - The train also **includes all amenities** found in existing Vande Bharat Express trains, such as fully air-conditioned coaches, automatic plug doors, and mobile charging sockets.
- **Symbol of Connectivity:**
  - The train connects the Kashmir Valley more effectively to the national railway network, symbolizing India's commitment to bridging geographical and economic gaps.

## Vande Bharat Trains

- It is an **indigenously designed and manufactured semi high speed**, self-propelled train that is touted as the next major leap for the Indian Railways in terms of speed and passenger convenience since the introduction of Rajdhani trains.
- The first Vande Bharat was **manufactured by the Integral Coach Factory (ICF), Chennai** as part of the ['Make in India' programme](#), at a cost of about Rs. 100 crore.
- The Vande Bharat was **India's first attempt at adaptation of the train set technology** compared with conventional systems of passenger coaches hauled by separate locomotives.
- The train set configuration, though complex, is faster, easier to maintain, consumes less energy, and has greater flexibility in train operation.

## About Indian Railways

- It was **established in 1853** and is **one of the largest railway networks globally**.
- The **first train in India** ran over a distance of 21 miles, connecting **Bombay and Thane**.
- India has the **3<sup>rd</sup> largest metro-rail network** in the world after **China and the US**. By 2050, India is projected to account for **40% of the global rail activity**.

