

Railways on the Right Track on Train Manufacture

Why in news?

In the latest Budget, there was an announcement of 400 new-generation Vande Bharat trains to be built in three years.

What are Vande Bharat trains?

- Vande Bharat is a semi-high speed (maximum speed of 160 kmph), indigenously designed and manufactured train each of 16 coaches.
- The train is self-propelled as they do not require an engine.
- Also dubbed as **Train 18**, they operate without a locomotive and are based on a propulsion system called distributed traction power technology.
- Distributed power gives the train higher acceleration and deceleration compared to loco-hauled trains, which take a much longer time to reach top speed or to gradually come to a halt.
- The first Vande Bharat was manufactured by the Integral Coach Factory (ICF), Chennai, in about 18 months as part of the 'Make in India' programme, at a cost of about ₹100 crore.
- It has an intelligent braking system with power regeneration for better energy efficiency thereby making it cost, energy and environment efficient.
- The current Vande Bharat trains have seating only in two classes — chair car and executive chair car.
- It incorporate passenger amenities including on-board WiFi entertainment, GPS-based passenger information system, CCTVs, automatic doors, rotating chairs and bio-vacuum type toilets.
- Currently, two Vande Bharat Expresses are operational —one between New Delhi and Varanasi and the other from New Delhi to Katra.

What is the government's approach towards the railways?

- The massive jump in investments in railway projects reflects the government's resolve to invest in key sectors of the economy.
- It is clear that the government is betting strongly on Vande Bharat trains.
- While 104 rakes would be manufactured mainly at the ICF and its other factories, there is speculation that the 400 trains were to be manufactured by rolling stock majors of the world and their associates in India.
- However, the government is not following up on its recent radical projects like
 - Operation of private trains
 - Corporatisation of the Railways' production units (PUs) into a corporation called Indian Railways Rolling Stock Company
- Also, efforts by the Railways to engage major rolling stock manufacturers through a tender for modern train sets under PPP at Kancharapara had ended in vain.

What big moves lie ahead?

- Recently, there was news of tendering for a massive 90,000 freight wagons at a cost of ₹30,000 crore.
- This was followed by the notice to manufacture 1,200 locomotives at its Dahod factory in PPP mode.
- It has become increasingly clear that the government would pursue its vision to order 400 trains from the private sector at a cost of ₹52,000 crore.
- The Railways has floated a large tender of around ₹26,000 crore for the procurement of 200 upgraded equivalents of Vande Bharat trains to be built by a contractor in ICF and at Latur factory.
- It is expected that bids would be called for another lot of 200 aluminium Vande Bharat trains since aluminium trains are lighter, aesthetically-superior and more energy-efficient.
- But, a judicious mix of government and private play for manufacture of trains is necessary.

References

1. <https://www.thehindubusinessline.com/opinion/railways-on-the-right-track-on-train-manufacture/article65388007.ece>
2. <https://www.thehindu.com/news/national/explained-when-will-new-vande-bharat-trains-be-launched/article38385706.ece>
3. <https://indianexpress.com/article/explained/budget-2022-vande-bharat-target-7757873/>