

THE HINDU

LEFT, RIGHT, CENTRE!

Does India need a bullet train?



OCTOBER 06, 2017 00:15 IST

UPDATED: OCTOBER 05, 2017 23:55 IST

LEFT

This is a wasteful project which only serves to deliver an illusory feel-good perception among the wealthy



D. Raghunandan

The Mumbai-Ahmedabad bullet train is a vanity project which has little or no justification on the grounds of economic viability or public service. Even the

vanity angle — looking to position India among the ranks of developed countries — is a huge overreach. Only a handful of high-income countries with specific demographics have high-speed rail (HSR), while many have failed in their efforts, others have abandoned it after studying it. The main problem is viability, given the huge costs involved.

Failed and struggling projects

Japan's pioneering Shinkansen, which connects Tokyo to Osaka, passes through the biggest industrial and commercial centres, caters to almost 50% of Japan's population, and carries more than 150 million passengers annually. South Korea's Seoul-Busan HSR caters to almost 70% of the population, yet struggles with viability. France's fabled Paris-Lyon HSR service has had to periodically receive substantial subsidies. Taiwan's \$14 billion HSR service between Taipei and Tainan virtually became bankrupt after losses of over \$1 billion. It realised only 50% of the projected ridership and required government bailout. Argentina gave up on HSR ambitions on cost grounds, deciding instead to upgrade its entire railway system to medium-speed infrastructure, an option India should seriously consider. Even the U.S. is tentatively initiating a San Francisco-Los Angeles corridor, and is still unsure about the densely populated industrial-commercial Philadelphia-Boston-New York-Washington DC corridor. Turkey's Ankara-Istanbul HSR line is the only example from a middle-income country, and the jury is still out on its viability.

China is, of course, an exception, as it is in most things. While reliable data are hard to come by about its 20,000 km of HSR, it is known that fares have been revised downwards many times to match passenger pockets, and that the railways has run up an internal debt of over \$300 billion. Is India ready for such an eventuality?

For the rich

The Mumbai-Ahmedabad HSR costs around ₹1 lakh crore. Estimates in the project report by the Indian Institute of Management, Ahmedabad show that at least 1 lakh passengers at fares of ₹4,000-₹5,000 would be required daily for the project to break even. The tariff is too high — air fares between the two cities are around ₹2,500. Subsidies appear inevitable. Subsidies for agriculture, education and healthcare are taboo, but subsidies for the rich seem unproblematic.

Should India spend over ₹1 lakh crore for a 508-km HSR used by well-heeled passengers when over 90% of rail passengers in India travel by sleeper class or lower class for thousands of kilometres? Project supporters argue that one should

not view these as either-or propositions. Unfortunately, one is only seeing expensive projects for the upper classes so far, such as the misleadingly named 'smart cities'. When will the Railways see investment for new tracks and upgrading services for 90% of the travelling public?

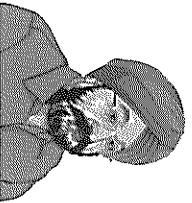
A myth being propagated is that this project will have knock-on effects on technology absorption by India through future HSR projects. Can anyone imagine India spending 15 times the present project cost for the pipe dream of 6,000 km of a "golden quadrilateral" of even less viable HSR tracks, as promised in the BJP's 2014 election manifesto? Another myth is that the Japanese funding at 0.1% interest with a 15-year moratorium is "almost free." Many business analysts have pointed out that the repayment amount will amount to ₹1.5 lakh crore over 20 years allowing for exchange rates and comparative inflation.

The bullet train is a wasteful project which only serves to deliver an illusory feel-good perception among the wealthy.

D. Raghunandan is Director, Centre for Technology and Development

RIGHT

High-speed rail will increase investment in infrastructure, ignite the economy, and create jobs



S.S. Khurana

When Prime Minister Narendra Modi and Japanese Prime Minister Shinzo Abe laid the foundation stone for India's first-ever bullet train project, which costs \$19 billion, it was like seeing a distant dream take shape. The credit for crystallising the high-speed rail (HSR) project squarely goes to Prime Minister Modi and his government. Before the National Democratic Alliance government, the United Progressive Alliance-led government had also committed itself to the bullet train, as was evident in the Railway Budget speeches of 2009, 2010 and 2012. The 'Vision 2020' document presented by former Railway Minister Mamata Banerjee to Parliament also speaks of HSR. In 2012, the High Speed Rail Corporation was set

up. In May 2013, during former Prime Minister Manmohan Singh's visit to Japan, it was decided that the two countries would co-finance a joint feasibility study for the Mumbai-Ahmedabad high-speed corridor.

It is unfortunate that despite being the third largest railway network in the world, in terms of kilometres of track and the number of passengers who travel, India does not have a single high-speed corridor. There are 15 countries worldwide in the exclusive high-speed rail fraternity.

There has been an ongoing debate on whether India should go for bullet trains or not. The basic argument stems from the spate of recent passenger train accidents which resulted in loss of lives. There is no denying that the present infrastructure of the Railways should be strengthened to avert accidents. The attitude of all those in the Railways, from a gangman to the Railway Minister, has to change to give highest priority to safety when it comes to investment, operation, maintenance of the rail network.

Safety first

The present system of running trains on a congested network at the cost of maintenance and safety has to give way to safety consciousness in operations. 'Safety first' should be the mantra of the Indian Railways if accidents like Utkal Express and the Elphinstone Road station stampede are to be averted. The government had announced a plan to spend ₹8.5 lakh crore in infrastructure in 2014 and it should be possible to renovate or upgrade all safety infrastructures in a span of two years by prioritising this investment.

Odious comparison

Comparing the investment in the bullet train project with investment in renovation and upgradation of conventional railways is odious. These investments are not comparable as these are not alternative choices at all. Both dimensions are necessary and we should take a cue from China which has developed a network of 22,000 km of HSR over the past 15 years. It plans to expand it to 30,000 km by 2020.

Comments such as "bullet trains like demonetisation will kill everything" are politically motivated rhetoric to score brownie points with the electorate. HSR is a growth multiplier as it leads to greater mobility. Unlike air travel, which is expensive and less energy-efficient, bullet trains will make the stations en route hubs for economic and industrial growth. HSR also means de-congestion of metropolitan cities as traffic will be diverted from road to rail. It is safer, faster,

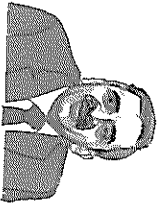
and economically viable with a 11.8% rate of return. It will increase investment in infrastructure, ignite the economy, and create jobs.

Let us realise the fact that HSR is a new dimension to transportation and it is a different and distinct business independent of conventional railways like the Metro Rail. Finances and management of HSR will have nothing to do with the conventional Indian Railways. Let's all get together and flex our muscles and display to the world our technological prowess in the field of bullet trains in the manner that we did in the space and satellites programme.

S.S. Khurana is former Railway Board Chairman

CENTRE

The project should be financially viable to run and could be upgraded by in-house expertise



Vivek Sahai

Mankind's fascination with speed is legendary. The growth of civilisation is linked intimately with growth in speed or mobility. The invention of the wheel, domestication of the horse, and harnessing of steam power for locomotion are all intricate links of the same chain. Railways emerged as the mainstay of the Industrial Revolution witnessed in the Western world in the 18th and 19th centuries.

A status symbol

The high-speed rail (HSR) owes its genesis to the competition railways faced from fast-moving automobiles and airplanes. Owning a HSR network has become a status symbol for nations. China leveraged this phenomena to the hilt by introducing high-speed trains on its network in the nineties, and can now boast of owning the world's largest HSR network.

It is but natural for India to aspire to join the exclusive club of nations having a HSR network. After all, it has the dream of becoming the third largest economy in

25 years. It already has a nuclear arsenal, a formidable missile programme, and has taken creditable strides in the field of space exploration.

So, why should it not have a modern HSR network as well?

Two birds, one stone

But, as they say, the devil always lies in the details. The HSR is a highly capital-intensive project. And above all, India just doesn't have the technology for running trains at high speeds. Japan, France and China all took a decade or more to upgrade their rail systems to reach a speed of 250 kmph and beyond to qualify for wearing the tag of having a HSR network.

By adopting the Shinkansen technology owned by Japan and wrangling a sizeable loan through the Japan International Cooperation Agency, India has tried to kill two birds with one stone. It will have the technology and the finances at one go. A loan of about \$14 billion at 0.1% interest with a payout time of 50 years and a moratorium of 15 years is the best that India has ever got. However, let us examine how realistic the projection of cost and time for construction are, because that is the Achilles' heel of all mega-projects in our country.

A capital-intensive project

In 2014-15, the cost of this project was envisaged at around ₹98,000 crore with 62% alignment on embankment pegging per km cost at ₹140 crore. It has now been decided to have the entire alignment on a viaduct design of construction. Such design adopted for construction of metro lines anywhere in India has always cost more than ₹250 crore per km, and that too for 100 kmph speed only. The per km cost of a viaduct capable of permitting 320-km speed is bound to be much higher. The project is now slated to cost ₹110,000 crore. A very conservative estimate shows that the project cost will go up by about ₹40,000 crore. Another dampener could be a time overrun in the project due to a long-drawn process for land acquisition.

If the project is actually going to cost around ₹150,000 crore, then its viability will come under a big question mark. An inflation in cost will compel the management to inflate the cost of the ticket when the operations commence. The experience world over is that no HSR line has become profitable until it garners a ridership of 50 million passengers a year. It would be instructive to assess whether at those anticipated ticket rates, so many passengers will embrace the HSR. Airfares might become very competitive in that scenario.

That the people of India need a high-speed rail network to give wings to trade and commerce can't be contested. But what is germane to the whole subject is that it should be ultimately financially viable to run and could be upgraded by in-house expertise.

Vivek Sahai is former Railway Board Chairman



Tokyo Rental Apartments

Furnished Apartments
from 65,000 JPY
Guesthouses from 45,000
JPY in Tokyo

