Indian Elephants are dying on its Rail track.

BY

Saurabh Pandey

Junior research fellow (JRF)
NET, MA, B.TECH
3 Years teaching experience
UPSC Faculty
SSC and Bank Courses
- All Govt. Exams
- SSC & Bank Combo
- SSC Exams
- Bank Exams
- RBI Grade B
- Bank IT Officer
- SSC CGL - AAO
- SSC JE (Civil Engineering)

UPSC / CSE Courses
- UPSC Exams
- International Relations
- Geography GS
- History GS
- Science & Technology
- Ecology & ENV
- Economics

UPSC Optional Courses
- Psychology
- Geography
- Philosophy
- Sociology
- Political Science

State PSC Courses
- GPSC
- MPPSC : Coming Soon

Defence Exam Courses
- All Defence Exams
- NDA Exam
- SSB Exam
- CDS Exam

To know More
Visit: www.studyiq.com
+91 9580048004, +91 7291059476
011 41323204
• The Environment Ministry’s Elephant Task Force report estimated more than 100 elephants had died on the tracks during 2001-10.

• India’s 668 Protected (forest) Areas cover 1,61,222 sq km, less than 5% of the country’s area. And yet, many see attempts to make these stretches no-go zones as an impediment to growth.
• India’s 32 elephant reserves (ERs) are spread over 65,000 sq km, **but less than 30% of this area is legally protected forests.**

• In its 2010 report, the Centre’s Elephant Task Force recommended that the entire ER area be declared ecologically sensitive under the Environment Protection Act — **which would make another 46,000 sq km out of bounds for miners and developers.**
• National Highways run through 40 of India’s 88 identified elephant corridors, 21 have rail tracks, 18 have both.
• More than 1,200 passenger and freight trains crisscross through some of the country’s most sensitive wildlife habitat, particularly protected areas and corridors in central and eastern India that are home to critically endangered tigers and elephants amongst other animals.
• Under the South East Central Railway (SECR) zone in Central India, seven railway routes run a total length of 166 km. These routes pass close to or skirt the edges of Nagzira, Navegaon and Tadoba tiger reserves in Maharashtra.

• The other concentration is seen eastwards, under the South Eastern Railway zone spread across West Bengal and Jharkhand, and under the East Coast Railway across Odisha. More than 700 trains pass through wildlife habitats in these states, which also explains the high elephant casualties.

• These regions are also home to tiger reserves in Palamu in Jharkhand, Buxa in West Bengal and Satkosia and Similipal in Odisha.
• **Mining**, especially open cast mining, has severely affected elephant conservation in the country, especially in Central India in Singhbhum (Jharkhand), Keonjhar, Mayurbhanj, Dhenkanal, Angul and Phulbani (Orissa) and in Meghalaya in the Northeast.
Elephants are impacted in the East-Central India belt of Odisha, Jharkhand and Chattisgarh because of devastation of elephant habitat and corridors by iron ore and coal mining and industrial development.”
Identified Elephant Corridors of India

Elephant corridors identified by World Wide Fund-India in Wayanad region
• Railways cause direct loss of habitat, degradation of habitat quality, habitat fragmentation, population fragmentation/isolation and reduce access to vital habitats. In India also, a large number of wild species are being killed annually due to railways and highways.
Whether speed limit is an option?

- In North Bengal, the night speed limit once applied to a total **17.4 km** — a series of short stretches of 1-3 km each — in an 80-km segment between Siliguri and Alipurduar.
• Speed restrictions are feasible only in short, singular stretches, such as the 11km near Berhampore in Odisha, the 8-km segment through Jharkhand’s Palamu, or the 4-km in the Palghat Gap in the Western Ghats that connects Kerala’s Palakkad and Tamil Nadu’s Coimbatore. It is not an option on steep gradients, such as Assam’s Karbi Anglong, where to climb, trains must accelerate.
• Speed restrictions, **where practical**, work best when guided by real-time inputs on elephant movements. A protocol put in place in **Rajaji National Park** helped avert elephant casualties for many years.

• But where a track, or road, cuts across several wildlife corridors over a longer stretch, the solution is not feasible.
A study published in 2017 noted that “broad gauge allows trains to reach higher velocities, making it harder for elephants to avoid a moving train,” and that, “after gauge conversion, the maximum speed of trains increased from about 60 kph to over 100 kph.”

The study found that most accidents happened at night, suggesting that limiting train operations after sunset and making underpasses or tunnels for crossing could reduce casualties in the area.
• The upcoming Sevoke Rangpo line in Sikkim will go through Mahananda sanctuary and elephant corridors in the area. So this line should not be built without accompanying mitigation efforts, and hotspots for elephant activity will need to be identified beyond protected
• Assam government to curb highway roadkills, and the state recently said it had dedicated Rs 11 crore for mitigation in Kaziranga. Among other measures, a sensor system installed in the park now throws down a barrier in the path of a train when a large animal like an elephant is crossing.
Supreme Court asked the Centre to find a solution to reduce elephant deaths in corridors. “We cannot tell the elephants where they should go... they must have a corridor,” an apex court bench observed.
• It is the sovereign’s duty to protect the forests where elephants thrive, says the Manasollasa, a 12th century Sanskrit text attributed to the Western Chalukya king Someshvara III — because only the richest and widest of forests can support the large, long-ranging Elephas maximus
STEPS TO BE TAKEN

• Sensitization of the train drivers
• Use of signage
• Improving visibility for the train drivers

• Tall grasses along the track may be cut to enhance visibility of the train drivers. Steps can also be initiated for leveling of mounds in critical area
• **Joint patrolling**

Forest guards of the concerned Beat along with Railway staff can be entrusted to monitor presence of elephants in the critical areas.

• **Reducing the speed of trains in critical areas**

To ensure the safety of elephants, it is imperative for the Railways to limit the speed of trains in the critical areas.
Making the sides of railway track elephant friendly.

In critical areas where diverting the elephants is not possible, steps should be taken to make the sides of the track friendly to the elephants. Often elephants after climbing up, hesitate to climb down promptly because of the steep gradient. Thus, appropriate steps can be initiated to reduce the steepness on both the sides of railway tracks at critical areas. Also, in many cases, there is not enough space for elephants to move along the track (in hilly areas) so that even in case of emergency the elephants can avoid being hit by the trains.
• It is an irony that elephants are being killed by speeding trains, even though it has been declared as the heritage animal in India and an elephant calf is the mascot of Indian Railways.
• *Elephants will never abandon their friends or family, but man does. I guess that's what makes us civilized.*