

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 3115
TO BE ANSWERED ON 19.03.2026

Elephant deaths

3115. SHRI S NIRANJAN REDDY:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) the details of elephant fatalities due to railway accidents during the last five years, State-wise;
- (b) whether Government plans to develop and deploy an Intelligent Elephant Movement Detection and Alert System, similar to one successfully piloted at the Rajaji Tiger Reserve using seismic sensing and thermal imaging to prevent elephant deaths near railway tracks; and
- (c) if so, the timeline and budget for developing and implementing such a system?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a)to(c)The management of wildlife is primarily the responsibility of the concerned State Government/Union Territory Administration. The State Government/Union Territory Administration is the first responder in wild animal deaths and maintains the data related to such incidents and the species involved. The number of elephant deaths due to train collisions in the last five years, as reported by the States/UTs, are placed at **Annexure**.

As per the information received from Ministry of Railways, an Artificial Intelligence (AI)-enabled Intrusion Detection System (IDS) for detecting presence of elephants on Railway tracks using Distributed Acoustic Sensing (DAS) has been deployed. The system has currently been implemented in 141 Route Kilometres (RKms) section and further tenders have been awarded for 981 RKms section of Indian Railways. The system is designed to generate alerts for loco pilots, station masters and Control Room about the movement of elephants in proximity of railway tracks, for taking timely preventive action.

The Government of India, through the Ministry of Environment, Forest and Climate Change under Project Elephant, is supporting the use of modern technologies for tracking and conflict mitigation. Technologies such as GPS and radio collaring of wild elephants, AI-enabled camera traps, thermal cameras, early-warning sensor systems, drone-based surveillance, and mobile-based alert applications are being implemented in selected human–elephant conflict-prone areas to monitor elephant movement patterns and facilitate timely preventive action.

Additionally, a comprehensive report titled “Suggested Measures to Mitigate Elephant & Other Wildlife Train Collisions on Vulnerable Railway Stretches in India” has been prepared after field surveys across 127 identified railway stretches spanning a total of 3,452.4 km. Based on the intensity of wildlife movement, 77 railway stretches covering 1,965.2 km across 14 States

have been prioritized for mitigation along with site-specific interventions. The report containing the details of the identified stretches and the mitigation measures has been also shared with the State Governments and the Ministry of Railways.

Further, the Wildlife Institute of India, Dehradun in consultation with the Ministry of Environment Forest, and Climate Change and other stakeholders has published a document namely 'Eco-friendly Measures to Mitigate Impacts of Linear Infrastructure' to assist project agencies in designing linear infrastructure, including railways lines, in a manner that reduces human-animal conflicts.

The Ministry of Environment, Forest and Climate Change (MoEFCC), in collaboration with the Wildlife Institute of India, organized a two-day national workshop on "Policy Implementation for Minimizing Elephant Mortalities on Railway Tracks" at the Wildlife Institute of India (WII), Dehradun, on 10-11 March 2026.

Elephant casualties due to train collisions

State	2020-21	2021-22	2022-23	2023-24	2024-25
Assam	5	8	7	2	3
West Bengal	0	0	1	4	0
Tamil Nadu	1	3	0	0	0
Jharkhand	1	0	1	1	2
Kerala	0	0	2	0	2
Odisha	4	3	3	5	3
Tripura	0	0	0	1	1
Uttarakhand	2	6	1	4	0
Uttar Pradesh	0	0	0	0	1
Karnataka	1	1	0	0	0
Total	14	21	15	17	12