

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 2556
TO BE ANSWERED ON 07.08.2024**

UNNATURAL ELEPHANT DEATHS BY TRAIN COLLISIONS

† 2556. SHRI CHAVDA VINOD LAKHAMSHI:

Will the Minister of RAILWAYS be pleased to state:

- (a) whether the Government is aware of the fact that train collision are the second largest cause of unnatural elephant deaths;**
- (b) if so, whether the Government has taken steps on speed restrictions in elephant corridors and use of technologies like AI surveillance and sensors;**
- (c) whether 'Gajaraj Suraksha' (Intrusion Detection System) introduced by the government has been successful in avoiding train-elephant collisions;**
- (d) if so, the details thereof; and**
- (e) if not, the reasons therefor?**

ANSWER

**MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND
ELECTRONICS & INFORMATION TECHNOLOGY**

(SHRI ASHWINI VAISHNAW)

(a) to (e): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO.2556 BY SHRI CHAVDA VINOD LAKHAMSHI TO BE ANSWERED IN LOK SABHA ON 07.08.2024 REGARDING UNNATURAL ELEPHANT DEATHS BY TRAIN COLLISIONS.

(a) to (e) Indian Railways has taken up various measures in close coordination with Forest department, so that no harm is caused to wild animals during train operation. These measures include imposition of suitable speed restrictions in identified locations of animal corridors, regular meetings with concerned forest officials to update and sensitize the train crew and station master for alertness and awareness, clearance of vegetation and edible items surrounding the track within railway land etc. Elephant trackers are also installed/ engaged by Forest department which give timely alert to station master for further communication to loco pilots.

Other measures like construction of underpasses and ramps for the movement of elephants at identified locations, provision of fencing along the track etc. have been taken up. Installation of innovative Honey bee buzzer device at crossing locations in elephant corridor areas to prevent the movement of wild animals/ Elephants near Railway tracks has been done. This device acts as a repellent to move away elephants from track and 96 such Honey Bee buzzers are operational in various locations of Northeast frontier Railway. Thermal vision camera has also been developed for detecting presence of wild animals on straight track during night/poor visibility which alerts loco pilots for presence of wild animals. LED lights with solar system are also provided in forest area near track to prevent entry of elephants.

Indian Railways has taken up the work for installation of Optical Fiber Cable based Distributed Acoustic Sensors (DAS) also known as AI enabled Intrusion Detection System (IDS) for detecting presence of Elephants/ wild animals on track or nearby track at identified corridor locations. This system helps to get advance intimation regarding movement of Elephants/ wild animals for taking timely action and transmitting alerts to loco pilots, station master and control room. The development and effectiveness of Intrusion Detection System (IDS) is a continuous and ongoing process and RDSO is working to further improve system functionality and reliability.

So far, the above system has been installed in about 54 Route Km length of Northeast Frontier Railway. Further, a work of installation of this system in various zonal railways has been sanctioned at a cost of Rs. 208 Crore.
