

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 3508
TO BE ANSWERED ON 10.08.2026

Scientific and Technology-based Systems for Wildlife Conservation

3508. SHRI MANOJ TIWARI:
SMT. SHOBHANABEN MAHENDRASINH BARAIYA:
SHRI KOTA SRINIVASA POOJARY:
SHRI P P CHAUDHARY:
SHRI ALOK SHARMA:
SMT. MAHIMA KUMARI MEWAR:
SHRI MAHESH KASHYAP:
DR. SANJAY JAISWAL:
SHRI JANARDAN MISHRA:

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

- (a) whether the Government has undertaken any measures to strengthen scientific and technology-based systems for wildlife conservation, biodiversity protection and effective management of human-wildlife conflicts, if so, the details thereof including the major wildlife conservation programmes in which such technologies are being utilised;
- (b) the present status and progress achieved in utilisation of advanced genetic research facilities, digital biodiversity databases and wildlife information systems set up for prevention of wildlife crimes for wildlife conservation planning and biodiversity management including the location of such facilities, State/UT-wise;
- (c) whether any institutional mechanism has been established to strengthen research, forensic capabilities and evidence-based decision-making in wildlife conservation, if so, the details thereof;
- (d) the manner in which these initiatives are expected to improve biodiversity conservation, wildlife monitoring and ecological management across the country particularly in Rajasthan specially in Kumbhalgarh area, Sehore district and Bhopal Lok Sabha Constituency; and
- (e) whether the Government is running any special programme to promote wildlife conservation, biodiversity management, research, capacity building and technical cooperation in collaboration with Forest Departments of States, research institutes, universities and other scientific organisations, if so, the details thereof?

ANSWER

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

(a) & (b): The management of wildlife including mitigation of human-animal conflicts is primarily the responsibility of the concerned State Government/Union Territory Administration. The State Government/UT Administration are the first responders to any conflict situation.

The Ministry provides financial assistance to State Governments and Union Territory Administrations under the Centrally Sponsored Scheme of Integrated Development of Wildlife Habitats for managing human-wildlife conflict which *inter-alia* supports procurement of early warning systems, construction and erection of physical barriers such as solar powered electric fencing, bio-fencing, trenches,

boundary walls, capture and relocation of problematic wild animals, creation of infrastructure for translocated animals and monitoring and driving away such animals.

Further, the Government has taken several measures to strengthen scientific and technology based systems for wildlife and biodiversity conservation besides for human-wildlife conflicts which include camera traps, GPS/satellite based radio telemetry, smart applications like M-STrIPES, geographical information systems, remote sensing, drones/UAVs for monitoring and surveillance, artificial intelligence based species segregation tools for estimation, hydrophones for dolphin assessment besides others. In addition conservation genetics is being utilized to validate wildlife corridors, address wildlife crime as well as ascertain the genetic composition of India's wildlife which facilitates active management and translocation operations.

(c) & (d): Wildlife conservation is grounded in science and evidence based information through species specific initiatives and action plans besides the All India Tiger Estimations is used in decision making.

(e): The Ministry administers the Centrally Sponsored Scheme of "Integrated Development of Wildlife Habitats" which includes the components of "Development of Wildlife Habitats" and "Project Tiger & Elephant" to promote wildlife conservation across the country apart from assisting research through the Wildlife Institute of India, State Forest Research Institutes and other scientific organizations
