

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 4227
TO BE ANSWERED ON 28.03.2017

Impact of Communication Towers

4227. SHRIMATI POONAM MAHAJAN:

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

- (a) whether any expert committee has been constituted by the Government to study the possible impact of communication towers on wildlife including birds and bees;
- (b) if so, the details thereof along with the recommendations made by the Expert Committee;
- (c) whether the recommendations of the Expert Committee have been implemented to minimise the harmful effects of Electro Magnetic Field (EMF) radiation on birds, bees, insects and other wild animals; and
- (d) if so, the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ANIL MADHAV DAVE)

- (a) and (b) The Ministry of Environment, Forest and Climate Change had constituted an 'Expert Committee to study the possible impacts of communication towers on wildlife including Birds and Bees' on 30th August 2010 under the chairmanship of Dr. Asad Rahmani, Director, Bombay Natural History Society. The 'Expert Committee submitted its report to the Ministry in September 2011. The important recommendations of the Expert Committee are at **Annexure-1**.
- (c) and (d) The Ministry has issued an advisory on use of Mobile Towers to minimize their impact on wildlife including birds and bees vide Office Memorandum dated 9th August 2012. The contents of the advisory are given in the **Annexure-2**. The advisory has been circulated by the Ministry to the concerned organizations including State Environment and Forest Departments, and local bodies, Ministry of Panchayati Raj and the Department of Telecommunications, for their information and requisite action.

**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) AND (b) OF THE LOK SABHA
UNSTARRED QUESTION NO. 4227 REGARDING 'IMPACTS OF COMMUNICATION
TOWERS' RAISED BY SHRIMATI POONAM MAHAJAN, DUE FOR REPLY OF
28.03.2017**

**Important Recommendations of the Expert Committee to study the possible impacts
of communication towers on wildlife including Birds and Bees**

- 1) EMF should be recognized as a pollutants/ regular auditing of EMF should be conducted in urban localities /educational /hospital /industrial /residential / recreational premises and around the protected areas and ecologically sensitive areas.
- 2) Introduce a law for protection of urban flora and fauna from emerging threats like ERM/EMF as conservation issues in urban areas are different from forested or wildlife habitats.
- 3) Bold signs and messages on the dangers of Cell phone tower and radiation which is emitted from it are displayed in and around the structures where the towers are erected. Use visual daytime markers in areas of high diurnal raptor or waterfowl movements.
- 4) To avoid bird hits, security lighting for on-ground facilities should be minimized and point downwards or be down-shielded.
- 5) Independent monitoring of radiation levels and overall health of the community and nature surrounding towers is necessary to identify hazards early. Access to tower sites should be allowed for monitoring radiation levels and animal mortality, if any.
- 6) Procedure for removal of existing problematic mobile towers should be made easy, particularly in and around protected area or urban parks and centres having wildlife.
- 7) Strictly control installation of mobile towers near wildlife protected areas, Important Bird Areas, Ramsar Sites, turtle breeding areas, bee colonies, zoos, etc up to a certain distance that should be studied before deciding and should also be practical. Ecological assessment / review of sites identified for installing towers before their installation also may be considered in wildlife / ecologically / conservational important areas.
- 8) The locations of Cell phone towers and other EMF radiating towers along with their frequencies should be made available on public domain. This can be at city/ district/ village level. Location wise GIS mapping of all cell phone towers be done by DoT. This information will help in monitoring the population of birds and bees in and around the mobile towers and also in and/or around wildlife protected areas.

- 9) Public consultation to be made mandatory before installation of cell phones towers in any area. The Forest Department should be consulted before installation of cell phone towers in and around PAs and zoos. The distance at which these towers should be installed should be studied case by case basis.
- 10) Awareness drive with high level of visibility in all forms of media and regional languages should be undertaken by the Government to make people aware about various norms in regard to cell phone towers and dangers from EMR. Such notices should be placed in all wildlife protected areas and in zoos.
- 11) To prevent overlapping high radiations fields, new towers should not be permitted within a radius of one kilometer of existing towers.
- 12) If new towers must be built, construct them to be above 80 ft and below 199 ft. tall to avoid the requirement for aviation safety lighting. Construct unguyed towers with platforms that will accommodate possible future co-locations and build them at existing 'antenna farms', away from areas of high migratory bird traffic, wetlands and other known bird areas.

**ANNEXURE REFERRED TO IN REPLY TO PARTS (b) AND (c) OF THE LOK SABHA
UNSTARRED QUESTION NO. 4227 REGARDING 'IMPACTS OF COMMUNICATION
TOWERS' RAISED BY SHRIMATI POONAM MAHAJAN, DUE FOR REPLY OF
28.03.2017**

**Advisory on use of Mobile Towers in a way to minimize their impacts on Wildlife including
Birds and Bees**

An '*Expert committee to Study the possible Impacts of Communication Towers on Wildlife including Birds and Bees*' was constituted by the Ministry of Environment and Forests, Government of India on 30th August 2010. The report of the expert committee has been submitted to the Ministry of Environment and Forests.

The review of the available scientific information by the Expert Committee in the report indicates that the Electro-Magnetic Radiations (EMR) interfere with the biological systems. On the basis of the report of the Expert Committee and subsequent deliberations with the stakeholders, a list of actions to be undertaken by various agencies involved in providing, regulating, and dealing in any other manner with, the EMR based services, has been prepared. Main objective of the listed actions is to avoid and mitigate the impacts of EMR. The Ministry of Environment and Forests accordingly requests the concerned Departments, State Governments, user agencies, and the public at large to take following actions:

I. Ministry of Environment and Forests:

1. The Electro Magnetic Radiations from the communication towers may have varying negative impacts on wildlife especially birds and bees. Accordingly, the information on the impacts related to different forms of wildlife as well as humans, should be provided to the concerned agencies for regulating the norms for notification of standards for safe limits of EMR taking into consideration the impacts on living beings.

II. State/Local Bodies:

1. Regular auditing and monitoring of EMR should be conducted in urban localities/ educational/hospital/industrial/residential/recreational premises and especially around the Protected Areas (PAs) and ecologically sensitive areas w.r.t. notified norms of Department of Telecommunications. Problematic towers from EMR point of view should be got suitably relocated/removed.
2. Bold signs and messages on the dangers of cell phone towers and associated radiations are displayed in and around the structures of the towers. In addition to these signs, use of visual daytime markers in areas of high diurnal raptor or waterfowl movements, should also be promoted.
3. Before according permission for construction of towers, ecological impact assessment and review of installation sites will be essential in wildlife and/or ecologically important areas. The Forest Department should be consulted before installation of cell phone towers in and around PAs and zoos.

III. State Environment and Forest Departments:

1. Regular awareness drive with high level of visibility through all forms of media, and in regional languages should be undertaken by the State Governments and concerned Departments to make people aware about various norms and standards with regard to cell phone towers and dangers of EMR from the same. Such notices should also be placed in all wildlife protected areas and zoos by the Forest Department.

IV. Department of Telecommunications:

1. To prevent overlapping of high radiation fields, new towers should not be permitted within a radius of one kilometre of the existing towers. Sharing of passive infrastructure if made mandatory for Telecom Service Providers can minimize need of having additional towers. If new towers must be built, these should be constructed with utmost care and precautions so as not to obstruct flight path of birds, and also not to increase the combined radiations from all towers in the area.
2. The location and frequencies of cell phone towers and other towers emitting EMR, should be made available in public domain. This can be at city/ district/ village level. Location-wise GIS mapping of all cell phone towers should be maintained which would, *inter alia*, help in monitoring the population of birds and bees in and around the mobile towers and also in and/or around wildlife protected areas.
3. There is an urgent need to refine the Indian standard on safe limits of exposure to EMR, keeping in view the available literature on impacts on various life forms. Till such time the Indian standards are reformed, a precautionary approach shall be preferred to minimize the exposure levels and adopt stricter norms possible, without compromising on optimum performance of the networks.

V. All concerned agencies:

1. Security lighting for on-ground facilities should be minimized, and as far as possible, point downwards or be down-shielded to avoid bird hits.
2. Any study conducted on impact of EMF radiation on wildlife needs to be shared with Forest Department and Department of Telecommunications to facilitate appropriate policy formulations.
