

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 1489
TO BE ANSWERED ON 25.07.2017

Electro-Magnetic Radiation

1489. SHRI RAHUL KASWAN:

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

- (a) whether the Government has taken note of the fact that electromagnetic radiation generated through mobile towers are affecting birds and wild life in the country, if so, the details thereof;
- (b) whether the Government has taken steps to check the effects of electromagnetic radiation generated through mobile towers on humans, wild life and birds; and
- (c) if so, the details of guidelines issued by the Government in this regard?

ANSWER

MINISTER FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE
(DR. HARSH VARDHAN)

- (a), (b) and (c) 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. As per the report of the Expert Committee, there are indications that the Electromagnetic Radiations can affect biological systems of animals, birds and insects.

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**. 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), (b) AND (c) OF THE LOK SABHA UNSTARRED QUESTION NO. 1489 REGARDING 'ELECTRO-MAGNETIC RADIATION' RAISED BY SHRI RAHUL KASWAN, DUE FOR REPLY OF 25.07.2017

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.
