# GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

# LOK SABHA UNSTARRED QUESTION NO. 3139

ANSWERED ON 04.08.2016

### ELECTROMAGNETIC SYSTEM FOR GROUND WATER RESERVES

### 3139. SHRI FEROZE VARUN GANDHI

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) whether the Council for Scientific and Industrial Research (CSIR) has come up with a new plan to find groundwater reserves through an electromagnetic survey;
- (b) if so, the details thereof;
- (c) the extent to which the finding of groundwater reserves through the said system is an effective mechanism; and
- (d) the regions being covered in the new survey and the details of the timeline proposed for the completion of the project?

#### **ANSWER**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION (DR. SANJEEV KUMAR BALYAN)

- (a) & (b) Yes, Madam. Council of Scientific & Industrial Research (CSIR) through its constituent Laboratory namely, National Geophysical Research Institute (CSIR-NGRI), Hyderabad is preparing a draft plan to survey the sub-surface using Helicopter Borne Transient Electromagnetic to obtain the geophysical mapping of the sub-surface up to a depth of 300 meters.
- (c) This geophysical mapping provides a 3D High Resolution image of the aquifer and its geophysical characteristics. The groundwater reserves are then estimated with the help of geological and hydrogeological investigations.
- (d) CSIR is planning to take up this geophysical survey initially in Rajasthan, Punjab, Haryana, Bundelkhand, Marathwada and mid-Ganga plains. The Geophysical part is planned to be carried out in a period of 5 to 6 years.