

**GOVERNMENT OF INDIA  
MINISTRY OF MINES  
LOK SABHA  
STARRED QUESTION NO. 317  
TO BE ANSWERED ON 21<sup>ST</sup> DECEMBER, 2015**

**MINERAL EXPLORATIONS**

**\*317. SHRI HARISHCHANDRA CHAVAN:  
SHRI RAMSINH RATHWA:**

Will the Minister of **MINES** be pleased to state:

- (a) the existing mechanism put in place for mineral explorations including imagery mapping;
- (b) whether the Government has signed any Memorandum of Understanding with the Indian Space Research Organization on using satellite data for mineral explorations in the country;
- (c) if so, the details thereof including the mineral reserves found, location and State/UT-wise; and
- (d) the steps taken by the Government for using the satellite survey technology for mineral explorations in the country?

**ANSWER**

**THE MINISTER FOR MINES AND STEEL (SHRI NARENDRA SINGH TOMAR)**

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

**STATEMENT REFERRED IN REPLY TO LOK SABHA STARRED QUESTION NO.317 FOR  
REPLY ON 21.12.2015 REGARDING 'MINERAL EXPLORATIONS' ASKED BY SHRI  
HARISHCHANDRA CHAVAN AND SHRI RAMSINH RATHWA**

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(a): The Geological Survey of India (GSI), an attached office of the Ministry of Mines, carries out regional and detailed mineral exploration in the country. Mineral Exploration Corporation Limited (MECL), a PSU under the Ministry of Mines, is also engaged in detailed exploration. Besides, the Directorates of Mining and Geology and some of the concerned PSUs of the State governments carry out mineral exploration. The exploration activities are coordinated through the mechanism of the Central Geological Programming Board (CGPB) and the State Geological Programming Boards (SGPBs).

As regards imagery mapping, GSI has been using remote sensing satellite data for delineation of target areas for mineralized zones in different parts of the country. This technique is being used as an important tool in geological survey and regional exploration of minerals. MECL also utilizes satellite data for mineral exploration projects.

(b): Yes, Madam.

(c): GSI has signed a Memorandum of Understanding (MoU) with Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organization (ISRO) on using satellite data for mineral exploration in the country. The MoU was signed on 14.9.2015 for two years. The objective of the MoU is to carry out a Project entitled " Application of multi-spectral and hyperspectral remote sensing studies for mapping of alteration/mineralized zones and building up of spectral library for the areas in parts of mineral rich belts in Rajasthan." As per the MoU, the projects will be initiated in April 2016. So far, no project has been started.

(d): GSI is carrying out mapping in different mineralized belts of the country using satellite data (hyperspectral, multispectral and multisensor) along with field spectro-radiometer for targeting alteration zones associated with mineralized belt. In addition, GSI has signed an MoU with ISRO on capacity building in the application of remote sensing in the field of mineral resource. It was signed in February 2013 and will be valid for a period of five years.

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