## GOVERNMENT OF INDIA SPACE LOK SABHA

UNSTARRED QUESTION NO:1706 ANSWERED ON:04.08.2010 WATER ON MOON Banerjee Shri Ambica;Lagadapati Shri Rajagopal

## Will the Minister of SPACE be pleased to state:

- (a) whether water on Moon was first discovered by Indian Payload onboard Chandrayaan-I;
- (b) if so, whether ISRO has failed to publish the above discovery in the international journals as a result of which it delayed the announcement:
- (c) if so, the reasons therefor;
- (d) whether similar discovery was also made by American Payloads after Chandrayaan-I and published it much before the Indian paper;
- (e) if so, the reaction of the Government thereto; and
- (f) the steps taken/being taken by the Government to ensure that the ISRO gets its due credit?

## **Answer**

MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS, MINISTRY OF PARLIAMENTARY AFFAIRS, MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI PRITHVIRAJ CHAVAN):

- (a), (b) The Chandrayaan-I spacecraft carried Indian as well as foreign instruments.
- (c) & (d) Two instruments from NASA, USA namely, the Moon Mineralogy Mapper (M3) and Miniature Synthetic Aperture Radar (Mini-SAR) were the primary instruments that found water on Moon.

For the instruments carried on board the Chandrayaan-I, there were investigators identified from India as well as the other countries. As regards detecting water molecules on the moon, a joint paper was written by the American and the Indian investigators/ scientists together. However, the first press statement was issued in USA, and then in India. In fact, this was in accordance with the understanding between the two agencies namely ISRO and NASA of USA.

Further, analysis of the data from the Moon Mineralogy Mapper (M3), collected over a period of three months, helped detecting unambiguous signal of water molecules on the lunar surface. The result of this study was subsequently brought out as a joint Indo-US publication.

- (e) Does not arise.
- (f) It is the Chandrayaan-I project in general, and the joint India-USA team who designed the scientific experiments that resulted into detecting water on the moon that gets the credit.