

Launching of satellites

3710. MISS MABEL REBELLO:

SHRI B.J. PANDA:

Will the PRIME MINISTER be pleased to state:

(a) the achievements of the ISRO in launching satellites, successfully testing of launch vehicles the new initiatives in space applications during the year 2002; and

(b) whether these satellites can forecast natural calamities such as cyclones, earthquakes, cloud bursts and the like?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (SHRI SATYABRATA) MOOKHERJEE (a) The major achievements of ISRO during 2002 are:

Launch and operationalisation of INSAT-3C satellite in January, 2002 augmenting the communication, broadcasting and information infrastructure of the country.

Launch and operationalisation of dedicated meteorological satellite KALPANA-1 (METSAT) onboard India's Polar Satellite Launch Vehicle in September, 2002 towards improved data for weather forecasting.

Testing of indigenously developed cryogenic engine for the full flight duration. Initiatives in Space application including Tele-medicine – linking hospitals in the remote areas with the super specialty hospitals via INSAT satellites – and ground water prospect map preparation using satellite imagery to identify potential drinking water zones and ground water recharge structures.

(b) The data from meteorological satellite such as KALPANA are used operationally by India Meteorological Department for monitoring

and forecast of severe weather events including cyclones, cloud bursts and heavy rainfall. Forecasting earthquakes is still a subject of research globally and satellite data provides important inputs towards such studies.

Manned Lunar landing project

3711. SHRI SHANKAR ROY CHOWDHURY:
SHRI JANESHWAR MISHRA:

Will the PRIME MINISTER be pleased to state:

- (a) whether there is any proposal for a manned lunar landing project;
- (b) if so, its aims, objectives and the cost;
- (c) the time frame for such a project; and
- (d) the funds allotted for the project?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (SHRI SATYABRATA MOOKHERJEE): (a) and (b) There is no proposal at present for a manned lunar landing mission. However, the National Task Team set up to study a proposal for an unmanned orbiting spacecraft mission to moon has submitted its report. The proposal is to send an unmanned spacecraft to orbit the moon at a height of 100 km. The spacecraft will be launched using India's own launch vehicle. The mission is planned for the scientific objective of high-resolution remote sensing of the lunar surface in visible, near-infrared, low-energy X-ray and high-energy X-ray spectra.

(c) and (d) The time frame and funds allocations will be known only after the total review of the mission and the project report is finalized for the unmanned orbiting spacecraft mission.