

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO.1551
TO BE ANSWERED ON THE 12TH FEBRUARY, 2019

USE OF SPACE TECHNOLOGY IN AGRICULTURE SECTOR

1551. SHRI SUDHEER GUPTA:
SHRI T. RADHAKRISHNAN:
SHRI GAJANAN KIRTIKAR:
SHRI ASHOK SHANKARRAO CHAVAN:
SHRI S.R. VIJAYAKUMAR:
SHRI S. RAJENDRAN:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government is using space technology in agriculture sector in the country;
- (b) if so, the details thereof and the areas identified by the Government for this purpose;
- (c) the details of the advantages of using space technology in agriculture and allied sector;
- (d) whether the Mahalanobis National Crop Forecast Centre (MNCFC) has launched a pilot project called KISAN using space technology for better yield estimation;
- (e) if so, the details thereof and the outcome of the project; and
- (f) the further steps being taken by the Government for use of space technology in agriculture and allied sectors for the betterment of farmers?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री (SHRI PARSHOTTAM RUPALA)

(a) & (b): Yes, Madam. The Ministry of Agriculture and Farmers Welfare, has been pro-active in using the space technology in agricultural sector. The Ministry, since early 80s has been funding various projects, under which Indian Space Research Organisation developed methodologies for Crop Production Forecasting. The Department of Agriculture, Cooperation and Farmers Welfare established a Centre, called Mahalanobis National Crop Forecast Centre, in 2012, for operationalisation of the space technology developed in the Indian Space Research Organization, for crop production forecasting. The Department has another centre

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called Soil and Land Use Survey of India, which uses satellite data for soil resources mapping. Currently, the Department is using space technology for its various programmes/ areas, such as, Forecasting Agricultural Output using Space, Agro-meteorology and Land-based Observations (FASAL) project, Coordinated programme on Horticulture Assessment and Management using geoinformatics (CHAMAN) project, National Agricultural Drought Assessment and Monitoring System (NADAMS), Rice-Fallow Area Mapping and intensification, geo tagging of infrastructure and assets created under Rashtriya Krishi Vikas Yojana, and Crop Insurance.

(c): The space technology helps getting fast and unbiased information about the crop situation in the country. It provides digital data, which is amenable to various analysis. Because of its synoptic view, it provides images of the whole country in a very short duration. Hence, this data can be used for various programmes, which need information on crop type, crop area estimates, crop condition, crop damages, crop growth etc.

(d) & (e): The Department of Agriculture, Cooperation and Farmers Welfare had launched KISAN [C(K)rop Insurance using Space technology And geoinformatics] project during October 2015. The project envisaged use of high-resolution remote sensing data for optimum crop cutting experiment planning and improving yield estimation. Under this project, pilot studies were conducted in 4 districts of 4 States viz. Haryana, Karnataka, Maharashtra and Madhya Pradesh. The study provided many useful inputs [for smart sampling, yield estimation, optimum number of Crop Cutting Experiments (CCEs) etc.], which were used to define Standard Operating Procedures for use of satellite data in the revised guidelines of Pradhan Mantri Fasal Bima Yojna (PMFBY).

(f): The Department is carrying out a large number of pilot studies, through government and non-government agencies for use of space technology in optimising CCEs, a major requirement for PMFBY. The Department is also using satellite remote sensing data for monitoring agricultural situation of 29 double risk districts.
