

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

**LOK SABHA**  
**UNSTARRED QUESTION NO.3416**  
TO BE ANSWERED ON THE 1<sup>ST</sup> JANUARY, 2019

**KISAN PROJECT USING SPACE SCIENCE**

3416. SHRI RAVINDRA KUMAR PANDEY:

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

- (a) whether the Government has introduced any Kisan Fasal Bima Project by using space technology, earth information science and UAV/Drone-based crop damage assessment system for better planning of crop cutting experiments and for improvement in assessment of production and crop damage;
- (b) if so, the details thereof; and
- (c) the manner in which such projects are likely to accrue benefit to the farmers in bringing transparency in the assessment of crop loss, responsibility and accuracy and ensuring timely payment of relief funds to the 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) to (c): Yes Madam. In 2015-16, the Government launched a pilot project called KISAN (C(K)rop Insurance using Space technology And geoinformatics). The project implemented by Mahalanobis National Crop Forecast Centre (MNCFC) aimed to use high resolution remote sensing data (from Satellite & Unmanned Aerial Vehicle-UAV) for better yield estimation. The objectives of Project were :

- To explore use of remote sensing derived yield zones data for planning of Crop Cutting Experiments (CCEs).
- To explore the use of UAV based high resolution imaging for crop assessment.
- To develop a composite (Weather cum Remote Sensing based) crop yield assessment model.
- To formulate optimum sampling plan for CCEs.
- To provide yield estimates at block level.
- To develop/evaluate an approach/index for index-based insurance.

The pilot study was carried out for rice, wheat and Rabi sorghum crops in 4 districts (1 district each) of 4 States (Haryana, Karnataka, Madhya Pradesh and Maharashtra) during Kharif 2015 and 8 districts (2 districts each) during Rabi 2015-16 season.

Such projects, which are based on smart technology like mobile app, satellite, UAV data, crop insurance portal to promote realtime data/image capture and transfer, has benefitted the current crop insurance programme namely, Pradhan Mantri Fasal Bima Yojana (PMFBY) launched in April, 2016 by bringing in more transparency and accountability in the process of loss assessment for claim calculation and can also be used for rationalization of premium rates and Crop Cutting Experiments (CCEs).