

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 2752**  
TO BE ANSWERED ON THE 19/03/2021

**USE OF SATELLITE IMAGERY-BASED YIELD AND CROP HEALTH ESTIMATION**

**2752. SHRI PRASHANTA NANDA:**

SHRI BHASKAR RAO NEKKANTI:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether the use of satellite imagery-based yield and crop health estimation for planning, validating and improving crop-loss estimation procedures recommended by a Committee set up by the Department of Agriculture and Cooperation in May, 2014 have been implemented;
- (b) if so, the details thereof; and
- (c) if not, the reasons therefor?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

(a) to (c) : The Dr. P K Mishra Committee was constituted in September, 2013 to review the implementation of crop insurance schemes in India. The Committee submitted its report in May, 2014 recommending the use of satellite remote sensing data for various applications related to yield and crop health estimation for crop insurance. In this regard, several activities have been carried out, such as -

- i. Use of satellite remote sensing derived yield values for smart sampling and optimization of Crop Cutting Experiments (CCEs) being conducted under Pradhan Mantri Fasal Bima Yojana (PMFBY).
- ii. Use of satellite remote sensing to assess the discrepancy between the actual sown area and the insurance area and compute the Areas Correction Factor (ACF).
- iii. Use of satellite imagery for resolving disputes between the State Governments and Insurance Companies related to crop yield estimates.
- iv. Yield data quality checking using remote sensing.
- v. Qualitative crop loss and health assessment using satellite remote sensing.
- vi. Use of satellite remote sensing for assessing the areas of preventive sowing or failure of crop emergence.
- vii. Use of long-term satellite remote data for risk assessment which have been used for clustering of districts.

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