

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1926**  
TO BE ANSWERED ON 17/03/2023

**PROCESS FOR ESTIMATING AGRICULTURAL PRODUCTION**

1926. SMT. VANDANA CHAVAN:

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

- (a) the process through which Government estimates the total agricultural production including the various sources;
- (b) the frequency with which this data is published;
- (c) whether Government is considering using satellite imagery, remote sensing vegetation indices and other such digital method for estimation such that its credibility and frequency is increased; and
- (d) if so, the details thereof and if not, the reasons therefor?

**ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

(a)&(b): Government of India has a statistically sound system of estimation of crop area, production and yield. For every agricultural year (July-June), Department of Agriculture and Farmers Welfare releases four Advance Estimates (AE) followed by Final Estimates of production of identified 28 major and 3 minor agricultural crops at state and national level. The crop production estimates at all-India level are prepared on the basis of crop-wise data on area, production and yield furnished by State/UT Governments. While finalizing all-India level estimates, the crop-wise data on area, production and yield received from State Governments are thoroughly scrutinized on the basis of information from alternative sources on area, production and yield, rainfall conditions, previous crop-wise trends of area, production and yield in the respective States as well as commodity-wise trends in prices, procurements etc. The time of release of each of these estimates is as under:-

<b>Estimates</b>	<b>Month of Release</b>
1 <sup>st</sup> AE (Kharif crops only)	September
2 <sup>nd</sup> AE	February
3 <sup>rd</sup> AE	April-May
4 <sup>th</sup> AE	July-August
Final	February of the following year

(c)&(d): The Government is implementing “Forecasting Agricultural output using Space Agro-meteorology and Land based observations (FASAL)” scheme for the use of advanced technologies like Remote Sensing, Agromet and Econometric models for generation of crop production estimates to supplement the existing efforts. At present, the Mahalanobis National Crop Forecast Centre (MNCFC), DAC&FW is providing Remote Sensing technology based forecast at National/State/District level for 9 crops viz. (i) Rice (Kharif/Rabi), (ii) Wheat, (iii) Sugarcane, (iv) Cotton, (v) Jute, (vi) Rapeseed & Mustard, (vii) Rabi Sorghum, (viii) Rabi Pulses and (ix) Tur. The forecast generated by MNCFC is based on the yield models developed by IMD and the area coverage based on the Remote Sensing technology.

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