

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:5370
ANSWERED ON:05.05.2008
FORECASTING OF AGRICULTURAL PRODUCTION
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Will the Minister of AGRICULTURE be pleased to state:

- (a) whether projects like Crop Acreage and Production Estimation (CAPE) and Forecasting Agricultural Output Using Space, Agro-meteorology and Land-based Observation (FASAL) in coordination with the Department of Space for authentic forecasting of agricultural production by remote sensing is on the anvil;
- (b) if so, the details thereof;
- (c) the details of the funds incurred on such projects and progress thereof as on date;and
- (d) the time by which the project is likely to be completed?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTI LAL BHURIA)

(a) & (b): A Plan scheme `Crop Acreage and Production Estimation (CAPE)` was introduced by Department of Agriculture & Cooperation in collaboration with Department of Space (DOS) in 1998. This aims at developing and upgrading the Methodology of area and pre-harvest production assessment of crops using remote sensing technology. A New project/scheme called `Forecasting Agricultural Output Using Space, Agro-meteorology and Land based Observation` (FASAL) has been launched in August 2006. This project aims at integrating agro-meteorology, land space borne measurements, using the techniques of econometrics, to make early and in-season multiple forecasts of area and production of major crops. The earlier scheme CAPE has been merged with FASAL.

(c): An amount of Rs. 17.5 crores has been incurred on these projects during last 5 years. CAPE project is being implemented by Ministry of Agriculture (MOA) through Department of Space (DOS) for district level pre-harvest production forecasting of certain principal crops viz., wheat, rice, sorghum, cotton, potato, mustard and groundnut since 1998. Based on the experience of CAPE, since 2006, FASAL is being implemented to arrive at in-season multiple crop forecasts of selected crops at State and National levels. The CAPE project is based predominantly on the analysis of data of Indian Remote Sensing Satellite (IRS), along with limited collateral information. Whereas, FASAL project utilizes econometric inputs and agro- meteorological information in the early stages of sowing and crop growth; subsequently ingests spectral inputs from IRS data; and finally, when the crop canopy emerges dominantly on the surface, utilizes more of the IRS data, along with weather/meteorological and other collateral information for the multiple, in-season acreage estimation and production forecasting. Institute of Economic Growth, India Meteorological Department, concerned State agencies, such as State Remote Sensing Application Centers (S-RSACs), Agriculture Universities and ICAR Institutions are also involved in this effort.

(d): FASAL project is expected to be implemented in three phases of two years each.