GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 3389
TO BE ANSWERED ON MONDAY, MARCH 26, 2018

INACCURATE WEATHER FORECASTS BY IMD

3389. SHRI V. VIJAYASAI REDDY:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether Government has noted the complaints of farmers relating to inaccurate weather forecasts made by the India Meteorological Department (IMD), if so, the details thereof;
(b) whether Government has conducted a study to ascertain the impact of inaccurate forecasts made by the IMD on crop yields, if so, the details thereof;
(c) whether Government is proposing to deliver long-range forecasts at the block-level instead of district-level to improve their relevance to farmers; and
(d) whether new technologies being adopted by Government in getting accurate forecasts and these technologies are comparable with those available in advanced countries?

ANSWER
MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY
AND MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)

(a)-(b) Yes Sir. The Ministry is aware of the concerns of farmers related to the weather forecasts issued by India Meteorological Department (IMD). The National Center for Applied Economics Research (NCAER), in their recent assessment done in 2015 found that 95% of the farmers (surveyed) have been experiencing an improved reliability of the service in recent years. The incremental profit due to AAS is assessed to be 25% of their net income. The study also suggests that the scheme Gramin Krishi Mausam Sewa (GKMS) has the potential of generating net economic benefit up to Rs. 3.3 lakh crores on the 4-principal crops alone (wheat, paddy, sugarcane and cotton) when Agromet Advisory Service is fully utilized by agriculture-dependent and the faith of the farmers on IMD's forecast is increasing day by day.

(c) **IMD regularly reviews the operational long range forecasting system to improve it through in-house research and development activities & collaboration with various research institutions in the country and abroad.**

Under the National Monsoon Mission initiative, other institutions of Ministry of Earth Sciences (MoES) , Indian Institute of Tropical Meteorology (IITM) Pune, Indian National Centre for Ocean Information Services (INCOIS), Hyderabad and National Centre for Medium Range Weather Forecasting (NCMRWF), NOIDA have embarked upon to build a state-of-the art coupled ocean atmospheric climate model for a) improved prediction of monsoon rainfall on extended range to seasonal time scale (16 days to one season) and b) improved prediction of temperature, rainfall and extreme weather events on short to medium range time scale (up to 15 days) so that forecast skill gets quantitatively improved further for operational services of IMD. At present, IMD's forecast is at par with advanced countries in the world.

The Government has initiated a comprehensive modernization programme for IMD covering upgradation of (i) observation systems (ii) advanced data assimilation tools and dynamical models (iii) advanced communication and IT infrastructure (iv) high performance computing systems for undertaking the modelling work and (v) intensive/sophisticated training of IMD personnel to facilitate the implementation of advanced global/regional/ meso-scale prediction models for improving the accuracy of weather forecasts in all temporal and spatial scales and for quick dissemination of weather forecast assessments/warnings to the users.

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