GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA UNSTARRED QUESTION No. 1797 TO BE ANSWERED ON MONDAY, MARCH 12, 2018

INITIATIVES FOR MEDIUM RANGE WEATHER FORECASTING

1797. SHRI NARAYAN LAL PANCHARIYA:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government has taken any steps for research in medium range weather forecasting;
- (b) if so, the details thereof and if not, the reason therefor;
- (c) whether Government has made any allocation for this purpose in the recent budget
- (d) if so, the details thereof and if not, the reasons therefor;
- (e) whether initiatives in medium range weather forecasting will strengthen exiting mechanism for draught forecasting in vulnerable areas such as Rajasthan; and
- (f) if so, the details thereof and if not, the reasons therefor?

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

- (a) Yes Sir.
- (b) Research in medium range weather forecasting is being carried out at National Centre for Medium range Weather Forecasting (NCMRWF), a subordinate office of the Ministry of Earth Sciences (MOES).

Research and developmental work is being carried out on various aspects of prediction of weather.

- (c) Yes Sir.
- (d) Numerical Modelling of Weather and Climate (NMWC), a flagship project of NCMRWF, which is mainly dedicated for R&D on Medium Range Weather Forecasting has been approved for 2017-2020 with a budget allocation of Rs. 95 crores and the BE for 2018-19 is Rs. 33 crores.

Apart from this, a high performance computing system, an essential tool for research on medium range forecasting based on numerical models is being augmented time to time. In January 2018, the new HPC of 6.8 petaflops computational power was installed at two MoES Institutes: 4.0 petaflops facility (Pratyush) at IITM, Pune and 2.8 petaflops facility (Mihir) at NCMRWF, Noida.

- (e) Yes Sir.
- (f) Current global model medium range forecast data captures the dry conditions (associated drought) for North-West regions well. Implementation of high resolution global ensemble model will also provide the quantification of uncertainties associated with the prediction of high impact weather including droughts.

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