GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA

UNSTARRED QUESTION No. 170 TO BE ANSWERED ON THURSDAY, FEBRUARY 25, 2016

HOTTEST YEAR ON RECORD GLOBALLY

170. SHRI A. K. SELVARAJ:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether this year is not only in line to the hottest on record globally but also in India as per India Meteorological Department;
- (b) whether the country has lived through its hottest September, October and November last year; and
- (c) whether the countrywide mean temperature in November last year was 1.25 degree Celsius above normal, the highest ever for the month since record keeping began, if so, the details thereof?

ANSWER

MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI Y. S. CHOWDARY)

- (a) No Sir. The global-average near-surface temperature for 2015 is the warmest on record. The global average temperature for the year was around 0.76 ± 0.10°C above the 1961-1990 average of 14.0°C and approximately 1°C above the 1850-1899 period.
 - The climate of India was significantly warmer than normal during 2015 in line with the warmer than normal global climate observed during the period. The annual mean land surface air temperature averaged over the country during 2015 was $\pm 0.67^{\circ}$ C above the 1961-1990 average, thus making the year 2015 as the third warmest year on record since nation-wide records commenced in 1901. The warmest ever annual mean temperature was recorded in 2009 ($\pm 0.77^{\circ}$ C) followed by 2010 ($\pm 0.75^{\circ}$ C). The other 9 warmest years on record in order are: 2009 (0.77), 2010 (0.75), 2003(0.61), 2002(0.59), 2014 (.53), 1998(0.49), 2012(0.48), 2006(0.43) and 2007(0.41).
- (b) Yes sir. The analysis of meteorological data suggests during 2015, the months of September, October and November were the hottest for India, since 1901.
- (c) Yes Sir. The country averaged monthly temperatures were warmer than normal in November with an anomaly of 1.25°C, the highest ever for the month since record keeping began.

Maximum temperature was above normal over most parts of the country except for parts of northern/northwestern region and parts of southeast peninsula. It was above normal by 1 to 2 °C over the entire central and adjoining north peninsular and northern parts of the country. Over parts of Jammu & Kashmir, West Rajasthan and Tamil Nadu it was below normal by more than 1°C. Some stations of Peninsular India, even recorded highest maximum temperatures for the month.
