GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 4609 TO BE ANSWERED ON 23.03.2018

Assessment of Climate Change

4609 SHRIMATI KAMLA DEVI PAATLE:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the Government has made any scientific assessment on climate change caused by global warming and if so, the details thereof;
- (b) whether mining activities is the major reason for climate change and if so, the details thereof:
- (c) whether the Government proposes to set up a National Institute for climate change and if so, the details thereof;
- (d) whether the Government has conducted any study to know the impact of climate change on monsoon; and
- (e) if so, the details thereof and the corrective measures being taken in this regard?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. MAHESH SHARMA)

- (a) A scientific study to assess the impact of climate change has been conducted and a report titled "Climate Change and India: A 4X4 Assessment A Sectoral and Regional Analysis for 2030s" was published in 2010 by the Ministry of Environment, Forest and Climate Change. The study assessed impact of climate change on four key sectors of Indian economy, namely, agriculture, water, forests and human health in four climate sensitive regions of India the Himalayan region, the Western Ghats, the Coastal region and the North-Eastern region. The study projects a variable rate of change in agricultural production including losses in some crops and change in the composition of the forests and net primary productivity. Extreme precipitation events are likely to increase in all the regions. Water yield is projected to increase in the Himalayan Region, whereas it is likely to be variable across other three regions. Malaria is projected to spread to new areas and threat of its transmission is likely to increase in duration.
- (b) The mining activities is not the major cause for climate change and greenhouse gas emissions from mining activities are small as compared to other sectors of the Indian economy. As per India's first Biennial Update Report submitted to United Nations Framework Convention on Climate Change in 2016, GHG emissions from mining and quarrying was $4313.44 \, \text{Gg CO}_2$ eq. in the year 2010, which accounted for 0.2% of the total greenhouse gas emissions.

- (c) The provision for National Institute for Climate Change Studies and Actions exists in the central sector scheme- Climate Change Action Programme. However, the details are not worked out.
- (d) Some recent studies suggest an increasing frequency and intensity of extremes in rainfall during past 40-50 years. However, their attribution to global warming is not confirmed. The inter-governmental Panel on Climate Change and our country's own assessment using regional climate models project that extreme rainfall events are likely to be more frequent in India in future.
- (e) To address the issues of climate change, Government of India is implementing the National Action Plan on Climate Change (NAPCC) which includes eight national missions, implemented by various Ministries in specific areas of Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and Strategic knowledge for Climate Change. It outlines a number of steps to simultaneously advance India's development and climate change related objectives of adaptation and mitigation. State Action Plans on Climate Change (SAPCC) prepared by 28 States and 4 Union Territories (UTs) are consistent with objectives of NAPCC.
