

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO.105
TO BE ANSWERED ON 15.12.2017

Increase in Instances of Droughts and Heatwaves

105. SHRI KESINENI NANI:
SHRI R. PARTHIPAN:
SHRI HARINARAYAN RAJBHAR:
SHRI J. J. T. NATTERJEE:

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

- (a) whether instances of droughts and heatwaves have increased in the country including Uttar Pradesh;
- (b) if so, the details thereof along with its impact on water resources, agriculture and human settlements;
- (c) whether the Government has conducted any study on the increasing fluctuations of droughts and heatwaves especially in Andhra Pradesh, Maharashtra, Karnataka and Uttar Pradesh and if so, the major findings of the study;
- (d) whether the total number of deaths because of heatwaves is likely to increase manifold by 2020 in the country and if so, the details thereof and the corrective measures taken in this regard; and
- (e) whether the UN Climate Change Conference held in Bonn, Germany outlined a roadmap for “Talanoa Dialogue” to assess countries progress on climate change and if so, the details thereof?

ANSWER

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

(a) As per information provided by the Ministry of Earth Sciences, instances of heat wave have increased in many parts of the country, including Uttar Pradesh.

(b)&(c) The heat wave conditions in India are generally experienced during the period from April to June. During this period, north, northwest, central, east India and northeast Peninsula (together called Core Heat Wave Zone (CHZ)) are most prone to heat wave / severe heat wave with highest frequency during May. The CHZ covers states of Punjab, Himachal Pradesh, Uttarakhand, Delhi, Haryana, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, Orissa and Telangana and meteorological subdivisions of Marathwada, Vidarbha, Madhya Maharashtra and coastal Andhra Pradesh.

Significant increasing trends in the heat wave days are observed in many parts of CHZ. Observed trends in heat wave over India are in tune with similar trends observed over various parts of the world.

According to a study entitled ‘Climate Change and India: A 4x4 Assessment – A sectoral regional analysis for 2030s,’ published in 2010; droughts, floods, tropical cyclones, heavy precipitation events, hot extremes and heat waves are known to negatively impact agricultural production and farmer’s livelihood. Climate Change is also likely to exacerbate the existing stresses that human settlements face. National Water Mission which is a part of the National Action Plan on Climate Change, identifies the threat to water resources in India due to climate change in terms of the expected decline in the glaciers and snow fields in the Himalayas; increased drought like situations due to the overall decrease in the number of rainy days over a major part of the country.

(d) During unusually hot episodes, deaths from different causes can rise with the elderly at greater risk than others. India has experienced human deaths during heat wave episodes of years like 1971, 1987, 1997, 2001 & 2002. However, there is no noticeable trend in the time series of deaths during 1971 to 2010. It has been observed that recent decade (2001-2010) has registered highest number of deaths due to heat wave events as compared to previous 3 decades. As an adaptive measure, India Meteorological Department in collaboration with local health departments have started heat action plans in many parts of the country to forewarn about the heat waves and advising action to be taken during such events. The Government has launched the National Action Plan on Climate Change (NAPCC) in June 2008 to deal with the climate change and related issues. So far, 32 States and Union Territories (UTs) have also prepared State Action Plan on Climate Change in line with the objectives of the NAPCC and highlighting state specific issues relating to climate change.

(e) The Conference of Parties (COP) to United Nations Framework Convention on Climate Change at its 21st Session at Paris in 2015 decided to convene a facilitative dialogue (termed as Talanoa Dialogue in 23rd COP held at Bonn, Germany in November 2017) among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term temperature goal referred in the Paris Agreement and to inform the preparation of nationally determined contributions. The dialogue will be structured around current status, desired goals and means to achieve them.
