

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 1476
TO BE ANSWERED ON 02.08.2021

Heat waves due to climate change

1476. SHRI REWATI RAMAN SINGH:

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

- (a) whether it is a fact that there could be an increase of heat waves by three to four times, if Government does not take necessary steps to control climate change as per the recent report;
- (b) whether Government is aware of the fact that the above situation would not be suitable for India as we face most of the effects of climate change;
- (c) whether it is also a fact that the sea level could rise by 30-36 cm due to climate change; and
- (d) whether any review of such reports has been done by the Government?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) and (b) The Government has always been seized of the matter of heat waves keeping in mind the safety and health of all citizens. Increase in heat waves due to global warming will take place due to cumulative greenhouse gas emissions of the entire world. India has not contributed to the rise in temperatures in any notable manner, having contributed only about 4 per cent of these cumulative emissions from the pre-industrial period till 2018.

However, the Government monitors and assesses the impact of global warming through various Ministries and agencies. In this regard, the Ministry of Earth Sciences (MoES) has informed that its report titled "Assessment of Climate Change over the Indian Region" mentions that the frequency of summer (April–June) heat waves over India is projected to be 3 to 4 times higher by the end of the 21st century as compared to the 1976–2005 baseline period under the Representative Concentration Pathways-8.5 (RCP-8.5) which is a high concentration pathway i.e. an extreme scenario. Therefore the above contention regarding heat waves is not a fact, but rather a modeled projection in an extreme scenario.

(c) and (d): According to Indian National Centre for Ocean Information Services (INCOIS) on an average the sea level along the Indian coast is considered to be rising at about 1.7 mm/year. According to the above referred MoES report, sea level along the Indian coast is likely to rise due to thermal expansion of sea water by about 20 to 30 cm at the end of the twenty-first century (relative to 1986–2005) under a mid-range emission scenario.