

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:2899

ANSWERED ON:11.08.2010

CLIMATE CHANGE

M.Thambidurai Dr. ;Siddeswara Shri Gowdar Mallikarjunappa

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether changes in weather/climate pattern is the result of the global warming;
- (b) if so, the details thereof alongwith the regions in the country affected because of climate change;
- (c) whether the Government has instituted any scientific study in this regard;
- (d) if so, the outcome of such a study and;
- (e) the action plan of the Government to address this issue?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) MINISTRY OF SCIENCE AND TECHNOLOGY, MINISTRY OF EARTH SCIENCES, MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI PRITHVIRAJ CHAVAN)

(a) – (b) There is no conclusive evidence to attribute all observed weather and climate variability to the increased concentrations of Green House Gases (GHGs) and associated global warming and their projections to the future. However, gradual increasing trend in respect of surface temperature (maximum and minimum) across the globe is found to be in line with the rise of GHGs over the recent decades.

Daily mean temperature over the country is found to be increasing more or less at the same rate as the global mean (0.52°C since 1901). Spatial pattern of trends in the mean annual temperature shows significant positive (increasing) trend over most parts of the country except over parts of Rajasthan, Gujarat and Bihar, where significant negative (decreasing) trends were observed.

(c) Yes Madam.

(d) The major findings of various studies are:

i) The south-west monsoon rainfall over the country has decreased by nearly 4.7% during the period 1965-2006 as compared to the earlier period (1931-1964).

ii) Heavy rain events (>10 cm/day) over central India are increasing at about 1%/year while weak and moderate events (1-5cm/day) are decreasing at about the same rate over the past 50 years.

iii) No significant long-term trends are reported in the frequencies of large-scale droughts or floods in the summer monsoon season.

(e) The Government has undertaken the following steps to understand the phenomenon of Climate Change:

i) Prime Minister's Council on Climate Change has been constituted to coordinate national action for assessment, adaptation and mitigation of climate change.

ii) A National Action Plan on Climate Change (NAPCC) was released by the Prime Minister on 30th June 2008. Under the National Action Plan on Climate Change, it is proposed to establish a permanent institutional mechanism that will play a development and coordination role. NAPCC outlines eight missions in specific areas of Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Eco-system, Green India, Sustainable Agriculture and Strategic knowledge for Climate Change.

iii) Expert Committee on Climate Change impacts, which is headed by the Principal Scientific Advisor to the Government of India has been constituted.

iv) Launched a high-priority Programme to address the Science issues of Global and Regional Climate Change with a well equipped state-of-the-art Center for Climate Change Research (CCCR) at Indian Institute of Tropical Meteorology (IITM), Pune for inter-

disciplinary research and training in the area of science of climate change. Prioritized R & D efforts are initiated to comprehensively understand the causes for the aforementioned changes in the southwest monsoon rainfall and to improve the rainfall predictions in all time scales.