

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 553
TO BE ANSWERED ON 06TH FEBRUARY, 2024

IMPACT OF GLOBAL WARMING ON AGRICULTURE

553. SHRI RAMDAS C. TADAS:

Will the Minister of AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government has taken note of the adverse impact of global warming on agriculture in the country which has led to abnormal trends like irregular rainfall and decreasing forest cover;
- (b) if so, the details thereof and the reaction of the Government thereto; and
- (c) whether the Government has assessed the impact of global warming on various agro-climatic zones of the country?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्री (SHRI ARJUN MUNDA)

(a) & (b): Yes, Sir. Government has taken note of the adverse impact of global warming on agriculture in the country. Indian Council of Agricultural Research under National Innovations in Climate Resilient Agriculture made climate change projections for India using bias corrected probabilistic ensemble of 33 global climate models. The Study revealed that *Kharif* rainfall is projected to increase in the range of 4.9-10.1% and 5.5-18.9% by the year 2050 and 2080, respectively, while *rabi* rainfall is projected to increase in the range of 12-17% and 13-26% by the year 2050 and 2080, respectively.

However, forest cover in India has increased from 6,92,027 sq.km in the year 2011 to 7,13,789 sq.km in the year 2021 due to adaptation measures viz. conservation, protection and afforestation, tree plantation drives, and agro-forestry etc.

To mitigate weather related challenges in the country, the Government of India implements National Mission for Sustainable Agriculture (NMSA),

which is one of the Missions within the National Action Plan on Climate Change (NAPCC). NMSA consists of three major components i.e. Rainfed Area Development (RAD); On Farm Water Management (OFWM); and Soil Health Management (SHM).

RAD focuses on Integrated Farming System (IFS) for enhanced productivity and reduced risks associated with climatic variability and also to mitigate the impacts of extreme weather events like drought and flood.

Government of India also implements Centrally Sponsored Scheme of Per Drop More Crop (PDMC) for enhanced water-use efficiency at farm level through Micro Irrigation Systems.

Soil Health Management (SHM) focuses on improvement in soil health for climate resiliency.

(c): Yes, Sir. ICAR-National Bureau of Soil Survey and Land Use Planning, Nagpur has assessed the impact/effect of global warming on various agro-ecological zones of India. Accordingly, the Agro-ecological map of India has been updated.
