

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

STARRED QUESTION NO:248

ANSWERED ON:21.07.2009

EFFECT OF CLIMATE CHANGE ON AGRICULTURE PRODUCTION

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Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the climate change is likely to affect foodgrains production and food security in the country;
- (b) if so, the details thereof and the reaction of the Government thereto;
- (c) whether the Government has urged the agricultural scientists to conduct a study on the effect of climate change on the country's agriculture; and
- (d) if so, the details thereof and the steps taken to safeguard Indian agriculture from the vagaries of climate change?

Answer

MINISTER OF AGRICULTURE (SHRI SHARAD PAWAR)

(a) to (d): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO.248 DUE FOR REPLY ON 21-07-2009.

(a) to (d): The 4th assessment report (2007) of Intergovernmental panel on Climate Change (IPCC) projected that the global food production potential could increase with increase in global average temperature upto three degrees, but above this could decrease the production of food grains. The modeling studies of Indian Council of Agriculture Research (ICAR) also predicted the likelihood of adverse affect of increase in temperature on production and productivity of food grains especially rice and wheat.

The Indian Council of Agricultural Research (ICAR) initiated a Network Project on 'Impact, Adaption and Vulnerability of Indian Agriculture to Climate Change' at different ICAR Institutes/State Agricultural Universities during X Plan period. The Project aimed to study the impact of climate change on land & water resources, crops livestock and fisheries etc. Central Rice Research Instaitute (CRRRI), Cuttack and Directorate of Rice Research (DRR), Hyderabad have been conducting Intensive studies on affects of Climate Change including increase in temperature, carbon dioxide and other gases on production of rice and other crops. National Wheat Programme of Directorate of Wheat Research, Karnal has been conducting research on development of high temperature tolerant wheat genotypes particularly for late sown conditions. Superior genotypes possessing high temperature tolerance have been identified and are being used in breeding programme for high temperature environments. Wheat varieties such as WH730, HD2808, RAJ3765, NW-2036,NW-1014, HW2045, HD-2643, K-8962 that are heat tolerant and DBW 14, a thermo tolerant genotype are developed by ICAR.

Ministry of Earth Sciences also launched a project "Integrated Agro met Advisory Services in the Country" from April 2007 for issuing district level weather forecast and agromet advisories to the farmers.

Furthermore, the National Action Plan on Climate Change (NAPCC) was released by the Prime Minister on 30th June, 2008 outlining a strategy to meet the challenges of Climate Change.

Under National Food Security Mission farmers are trained through Farmers Field Schools for adoption of improved seed and better cultural practices for increasing the production of food grains.