

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:1443

ANSWERED ON:03.08.2010

CLIMATE CHANGE

Adsul Shri Anandrao Vithoba; Dharmshi Shri Babar Gajanan; Singh Shri Uday Pratap

Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the Government has not been able to properly address the impact of climate change on the agriculture and food sectors;
- (b) if so, the reasons therefor;
- (c) whether agriculture and food experts have observed that the agricultural productivity and food availability in the country is likely to fall due to climate change in the next few years; and
- (d) if so, the steps taken by the Government to adopt improved methods to increase agricultural productivity, keeping in view the threat from climate change?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF AGRICULTURE AND MINISTER OF THE STATE IN THE MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION (PROF. K.V. THOMAS)

(a) to (c): No, Madam. Government of India, Ministry of Agriculture had launched a "National Network Project on Climate Change (NNPCC)" during X Five Year Plan with the objective to study the impact of climate change on agriculture and food sectors including livestock, fisheries, horticulture and forestry at different locations spread across the country. The assessment of climate change and its impact on Indian Agriculture is on-going process and NNPCC is continuing in the present Plan Period also. Though there are no definite and conclusive evidence of the impact of climate change on agricultural productivity, the studies conducted under NNPCC indicate inter annual monsoon rainfall variability and slight change in mean annual temperature, which may affect agricultural production in future. The study also reveals that increase in temperature reduces crop duration, increase crop respiration rates, affects the equilibrium between crops and pests, hastens nutrient mineralization in soils, decreases fertilizer use efficiencies, and increases evapo- transpiration. The increase in Carbon Dioxide is beneficial for several crops such as wheat, rice, legumes and oilseeds. However, crops such as maize, jowar, bajra and sugarcane do not benefit from increase in Carbon Dioxide.

(d): With a view to enhance the agricultural productivity, sustaining foodgrain production and to address the various issues relating to climate change adaptation and mitigation in the agriculture and food sectors, Government of India, Ministry of Agriculture has intensified the implementation of various programmes/schemes, namely; Macro Management of Agriculture (MMA), National Food Security Mission (NFSM), National Horticulture Mission (NHM), Rashtriya Krishi Vikas Yojana (RKVY), Micro Irrigation (MI) etc.