

**GOVERNMENT OF INDIA  
AGRICULTURE  
LOK SABHA**

UNSTARRED QUESTION NO:297

ANSWERED ON:02.08.2011

IMPACT OF CLIMATE ON AGRICULTURE

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**Will the Minister of AGRICULTURE be pleased to state:**

(a) whether it has been reported by the Indian Council of Agricultural Research that an increase in the temperature and decline in rainfall would lead to a fall in the net agriculture revenue in the coming years;

(b) if so, the details thereof;

(c) whether the Government has initiated any plan to tackle such impact on agriculture; and

(d) if so, the details thereof and the follow up action proposed by the Government in this regard?

**Answer**

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE, FOOD PROCESSING INDUSTRIES AND PARLIAMENTARY AFFAIRS(SHRI HARISH RAWAT)

(a) & (b): The Indian Council of Agricultural Research (ICAR) initiated a Network Project 'Impacts, Adaptation and vulnerability of Indian Agriculture to Climate Change' in 2004 to study the impact of climate change and global warming on agricultural crops, horticulture, forests, livestock, fisheries, etc. The limited studies indicated an estimated loss of about 4-5 million tons in wheat production in the country with every rise of 1°C temperature throughout its growing period. The milk production of crossbred cows is also projected to be affected with the rise in maximum and minimum temperatures above 2°C.

(c) & (d): To enhance resilience of Indian Agriculture against climate change, a new scheme 'National Initiative on Climate Resilient Agriculture (NICRA) with an outlay of Rs.350 crores for the period 2010-12 has been launched by the Government. The scheme aims at evolving cost effective adaptation and mitigation strategies against climate change through

(i) strategic research on natural resources, major food crops, livestock, marine and freshwater fisheries for adaptation and mitigation;

(ii) demonstration of available climate resilient practices on farmers' fields in 100 most vulnerable districts of the country

(iii) strengthen research infrastructure and capacity building of scientists for undertaking long term research on climate change adaptation; and

(iv) sponsored research.

The salient features of the scheme include

(i) use of state of the art phenomics system for rapid screening of a large number of elite germplasm for multiple abiotic stress tolerance;

(ii) participatory testing of climate resilient practices; and

(iii) vulnerability assessment of the different production zones including crops, natural resources and socio-economic component.