

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

LOK SABHA
UNSTARRED QUESTION NO. 2011
TO BE ANSWERED ON 1st AUGUST, 2023

IMPACT OF CLIMATE CHANGE ON CROP YIELDS

2011. SHRI BRIJENDRA SINGH:

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

- (a) whether the Government has undertaken any study to measure the impact of climate change on crop yields;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether the Government has identified the most vulnerable regions and crops;
- (d) if so, the details thereof and if not, the reasons therefor;
- (e) whether the Government has formulated any policies to promote climate-resilient farming practice; and
- (f) if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) and (b): Yes Sir. The Government has studied the projected impact of climate change on crop yields under ICAR's network project on National Innovations in Climate Resilient Agriculture (NICRA). The details are as under:

Crops	Projected reduction in crop yield (%)	
	2050 Scenario	2080 Scenario
Rainfed rice	20.0	47.0
Irrigated rice	3.5	5.0
Wheat	19.3	40.0
<i>kharif</i> maize	18.0	23.0
Rainfed sorghum	8.0	-
Mustard	7.9	15.0

(c) and (d): Yes Sir. ICAR, following the framework of Intergovernmental Panel on Climate Change (IPCC), has carried out the climate vulnerability analysis and identified 109 districts in the 'very high' risk category and 201 districts in 'high' risk category under ICAR's network project on NICRA. The most vulnerable crops are rainfed rice, wheat, *kharif* maize and mustard.

(e) and (f): Yes Sir. The Government under National Mission for Sustainable Agriculture (NMSA), one of the missions of National Action Plan of Climate Change (NAPCC), is promoting climate resilient farming practices to make Indian agriculture more resilient to the changing climate.