

- (ii) An Additional 52 nos. of technical officers/officials of Directorate of Plant Protection Quarantine and Storage have been deployed in the various circle office for assistance in control and survey works. In addition, Senior officers of the Department are camping in the infested area and supervising control operations.
- (iii) Further, the State Agriculture Department of Rajasthan has posted 77 nos. of staff including Agriculture Supervisor, Agriculture officers & Assistant Agriculture Officers to various offices in the Jaisalmer districts for assistance in locust control works. In addition the State Government has provided 22 control and surveillance vehicles. The State Government has also constituted various teams comprising senior officers for regular assessment and monitoring of locust situation.
- (iv) Various awareness programs have been organized by the various circle offices for state agriculture officers and farmers.
- (v) Regular Liaison is being maintained with the Forest Department, Border Security Force, State Agriculture Department, District administration and representatives of Gram Sabha/Panchayat.
- (c) Till date, no crop loss has been reported because of the Desert Locust.
- (d) Does not arise.
- (e) Does not arise.

Impact of climate change on agriculture

†3037. DR. KIRODI LAL MEENA:

SHRI SURENDRA SINGH NAGAR:

DR. R. LAKSHMANAN:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether food production and food security in the country are likely to get affected by climate change;

(b) if so, the details thereof and the reaction of Government thereto;

†Original notice of the question was received in Hindi.

(c) whether Government has asked the agricultural scientists to study the impact of climate change on agriculture in the country; and

(d) if so, the details thereof and the steps taken to protect agriculture from climate change?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) to (d) Yes, Sir. Agriculture sector in India is vulnerable to climate change. Higher temperatures tend to reduce crop yields and favour weed and pest proliferation. Climate change can have negative effects on irrigated crop yields across agro-ecological regions both due to temperature rise and changes in water availability. Rainfed agriculture will be primarily impacted due to rainfall variability and reduction in number of rainy days. Analysis of impact of climate change under National Innovations in Climate Resilient Agriculture (NICRA) project has found that climate change is expected to affect yields, particularly in crops like rice, wheat and maize.

Government of India has initiated various actions to mitigate affects of climate change:

- Varieties and cultivars tolerant to abiotic stresses are developed under strategic research component of NICRA.
- The technology demonstrations aim at enhancing the adaptive capacity of the farmers and also to cope with climate variability in the vulnerable districts to achieve climate resilient agriculture. Under NICRA, climate resilient technology demonstrations are implemented in 151 climatically vulnerable districts of the country.
- District Agriculture Contingency Plans have been prepared by ICAR-CRIDA, Hyderabad for 648 districts in the country to address the adverse weather conditions.

Conservation of water in agriculture

3038. PROF. M. V. RAJEEV GOWDA: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) the Ministry's plan and allocation of funds for specific horticulture crops which are water-use efficient and promote sustainable farming;