

1	2	3	4
5.	Saffron Mechanization (Nos.)		
	a. tractor	4	2
	b. Weeders	507	71
6.	Infrastructure Development (Nos.)		
	a. Vermi Compost Units	758	375
7.	Transfer of Technology (Nos.)		
	a. Demonstrations	200	151
	b. Literature/farmers Day etc.	16	7
8.	Saffron Park	1	*

\* The land for establishment for Saffron park has been handed over to the Agriculture Department. The demarcation has been completed and fencing is in progress. The consultancy agency has been identified by NHB. After the completion of park, Agriculture Department of J & K will operationalize the park.

### Impact of climate change

2815. SHRI N.K. SINGH: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether any studies have been performed to assess the impact of climate change on agriculture;
- (b) if so, the details thereof;
- (c) if not, the reasons therefor;
- (d) whether Government has undertaken or proposes to implement any adaptation measures in response to the impact of climate change on agriculture;
- (e) if so, the details thereof; and
- (f) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI TARIQ ANWAR): (a) and (b) Yes, Sir. ICAR has assessed the impact of climate change on agriculture using the crop simulation models under the Network Program on Climate Change. Reduction in crop yields has been projected for irrigated maize, wheat, irrigated and rainfed rice to the extent of 18, 6, 4 and 6 per cent respectively in 2020.

(c) Not applicable.

(d) and (e) Yes, Sir. The Indian Council of Agricultural Research (ICAR) under 'National Initiative on Climate Resilient Agriculture' (NICRA) has undertaken adaptation measures through demonstration of improved practices on farmers' fields in 130 districts to cope up with various climatic aberrations. Contingent plans for 400 districts have been completed out of targeted 572 districts in the country. Automatic weather stations have been established in 100 Krishi Vigyan Kendras (KVKs) located in vulnerable districts to improve the agro-advisory services to the farmers. Besides, 100 Village Climate Risk Management Committees (VCRMCs) and Custom Hiring Centers (CHCs) are being established. A total of 34 training programmes were conducted to train 1443 scientific personnel on climate resilient agriculture and more than 27,000 farmers were trained through 370 farmers' awareness programmes.

Department of Agriculture Cooperation, Ministry of Agriculture, Government of India has implemented various schemes/programmes, namely, Macro Management of Agriculture (MMA), Rashtriya Krishi Vikas Yojana (RKVY), National Food Security Mission (NFSM), National Horticulture Mission (NHM), and National Mission on Microirrigation (NMMI) etc. to make Indian Agriculture climate resilient by embedding and mainstreaming various adaptation measures. Besides, National Mission on Sustainable Agriculture (NMSA) is under consideration in Twelfth Plan for implementation of various interventions to address the issue of climate change.

(f) Not applicable.

#### **Twelfth plan for agriculture sector**

2816. SHRI HUSAIN DALWAI: Will the Minister of AGRICULTURE be pleased to state:

(a) whether the Twelfth Five Year Plan for agriculture sector has been finalized;

(b) if so, the salient features thereof;

(c) how the plan envisages increase in productivity of foodgrains as well as cash crops; and

(d) the details of the measures stipulated for the welfare of farmers in the plan?