

Sl. No.	State/UT	2011	2012	2013
29	Andaman and Nicobar Islands	0	0	0
30	Chandigarh	0	0	0
31	Dadra and Nagar Haveli	0	0	0
32	Daman and Diu	0	0	0
33	NCT Delhi	0	0	0
34	Lakshadweep	0	0	0
35	Puducherry	0	0	0
	TOTAL (UT)	0	0	0
	GRAND TOTAL (All India)	2444	901	459

Source: Reported by States Government and UTs.

NR = Not reported \*Total number of suicides by farmers (due to various reasons)

### Analysis of climate change impact on crop yields

1080. DR. K.V.P. RAMACHANDRA RAO: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that Indian Council of Agricultural Research (ICAR) has conducted climate change impact analysis on crop yields using crop simulation models incorporating future projections for 2020, 2050 and 2080;

(b) if so, the details thereof; and

(c) the action proposed to be taken to meet the contingency?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. SANJEEV KUMAR BALYAN): (a) and (b) Yes, Sir. The Indian Council of Agricultural Research (ICAR) has conducted climate change impact analysis on crop yields using crop simulation models incorporating future projections for 2020, 2050 and 2080. Simulation studies projected reduction in yields of irrigated rice by about 4% by 2020, 7% by 2050 and by 10% by 2080 scenarios. Rainfed rice yields in India are likely to be reduced by nearly 6% by 2020 scenario, but in 2050 and 2080 they are projected to decrease marginally (<2.5%). Similarly, climate change is projected

to reduce yield of irrigated wheat by about 6, 23 and 35 % in 2020, 2050 and 2080, respectively. The yields of irrigated kharif maize are projected to reduce by about 18% by 2020 and 2050 and about 23% by 2080 due to climate change. Rainfed sorghum yields are also projected to decline marginally (2.5%) by 2020 but by about 8% by 2050.

(c) The Government in order to meet the contingency has taken several steps under the National Initiative on Climate Resilient Agriculture, namely (i) development of stress tolerant varieties of major crops, (ii) development of district contingency plans (520 number completed), (iii) establishment of Village Climate Risk Management Committees (VCRMCs), Custom Hiring Centers (CHCs) and Automatic Weather Stations, (iv) agro-advisories on real time basis, (v) demonstrations of climate resilient technologies through Krishi Vigyan Kendras, and (vi) farmers' awareness programme. Besides, the Government is also addressing climate change related issues in agriculture under National Mission for Sustainable Agriculture (NMSA),

#### **Implementation of Recommendation of CACP**

1081. DR. K.V.P RAMACHANDRA RAO: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that the Commission for Agricultural Costs and Prices (CACP), in price policy for kharif 2013-14, has recommended fusion between Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and agricultural operations, with the cost of wages to be shared by the farmers and by the scheme;

(b) if so, the details thereof; and

(c) the action taken by Government to implement the recommendation?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. SANJEEV KUMAR BALYAN): (a) and (b) The Commission for Agricultural Costs and Prices (CACP) in its Report on Price Policy for Kharif Crops of 2013-14 Season had recommended fusion between Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and agricultural operations, wherein half of the wage is paid by the farmer and the other half by the scheme.

(c) Guidelines for convergence of MGNREGA with programmes of Ministry of Agriculture have been issued. Government has notified 30 new works under MGNREGA, majority of which relate to agriculture and allied activities.