

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:129
ANSWERED ON:21.07.2015
Climate Smart Agriculture
Venugopal Shri K. C.

Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the Government has taken any initiative for climate smart agriculture to reduce the impact of global climate change in the agriculture sector in the country;
- (b) if so, the details thereof;
- (c) whether the Government has made any assessment regarding impact of climatic change on small scale agricultural system in the country, if so, the details thereof;
- (d) whether agriculture is currently responsible for the 10-12% global anthropogenic green house gas emissions; and
- (e) if so, the details thereof and the reaction of the Government thereto?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE
(DR. SANJEEV KUMAR BALYAN)

(a) Yes, Madam.

(b) The Government has taken a major initiative by launching National Initiative on Climate Resilient Agriculture (NICRA) in 2011 to adapt and mitigate the impact of global climate change on Indian agriculture. Besides, the Government is also addressing the issue of climate change through National Mission on Sustainable Agriculture (NMSA). Climate resilient interventions have been embedded and mainstreamed into Missions/Programmes/Schemes of Dept. of Agriculture & Cooperation (DAC) through a process of restructuring and convergence.

(c) Yes, Madam. The ICAR-Central Research Institute on Dryland Agriculture, Hyderabad has identified the districts most vulnerable to climate change. The results of the study has been published as "Atlas on vulnerability of Indian agriculture to climate change" and the same is available at www.crida.in.

(d) Agriculture sector contributes about 17% of the total greenhouse gas (GHG) emissions in the country. Important activities of agriculture that contribute to emissions are livestock production (63%), rice cultivation (22%) and agricultural soils & field burning of crop residues (15%).

(e) A number of initiatives are taken by Government to reduce GHG emissions and improve agricultural productivity. Examples include promoting rice cultivation under System of Rice Intensification (SRI) and Direct Seeded Rice (DSR) and shifting area from transplanted rice to other cereals, pulses and oilseeds especially in Punjab, Haryana and western Uttar Pradesh. Further, location and crop specific efficient management practices for conservation agriculture (CA), resource conservation technologies (RCT), broad bed furrow (BBF) method of sowing, micro irrigation have been developed and demonstrated by ICAR institutes which reduce GHG emission from crops and have been demonstrated through Front Line Demonstrations (FLD) as well as in 130 NICRA villages.
