GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 3223
TO BE ANSWERED ON 12.07.2019

Greenhouse Gas Emissions

3223. SHRI RAJIV PRATAP RUDY:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether the Government has taken note of the increasing anthropogenic greenhouse gas emissions in the country including Agriculture sector;

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

(c) whether the Government has made any assessment regarding impact of climatic change on small agricultural system in the country, if so, the details thereof; and

(d) whether the Government has taken any initiatives for introducing climate smart agriculture techniques to reduce the impact of global climate change on the agriculture sector in the country and if so, the details thereof ?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI BABUL SUPRIYO)

(a) and (b) As per India's second Biennial Update Report (BUR) submitted under United Nations Framework Convention on Climate Change in December 2018, net annual greenhouse gas (GHG) emissions have increased from 1.88 billion tonnes (Bt) of Carbon dioxide equivalent (CO_2e) in 2010 to 2.31 Bt of CO_2e in 2014. However, as a result of India's proactive and sustained actions on climate change mitigation, the emission intensity of India's GDP has reduced by 21% over the period of 2005-2014. The share of agriculture sector in total GHG emissions was 0.42 Bt of CO_2e in 2014 (16.1% of total GHG emissions) as compared to 0.39 Bt of CO_2e (18.3% of the total GHG emissions) in 2010.

To combat climate change, Government of India is implementing the National Action Plan on Climate Change (NAPCC) which includes eight national missions being implemented by various Ministries in specific areas of Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and Strategic knowledge for Climate Change. The National Mission on Sustainable Agriculture (NMSA) under NAPCC focuses on agriculture sector with the objectives including resource conservation, restoration of soil fertility and productivity

focusing on integrated farming, water use efficiency and soil health management especially in rain-fed agriculture areas and contributes to co-benefits of mitigation. Other schemes and programmes addressing climate change related issues include Pradhan Mantri Krishi Sinchayee Yojna (PMSKY), Soil Health Card, Paramparagat Krishi Vikas Yojna (PKVY), Agricultural Contingency Plans and National Innovations on Climate Resilient Agriculture (NICRA), and Sub-mission on Agro-forestry.

(c) Agriculture is dependent on many climatic factors like temperature, rainfall, humidity, sunshine duration etc. The climatic variations may impact crops both positively and negatively depending on the nature of crop. However, various national and global studies have shown declining trends in yield depending upon magnitude and distribution of warming.

(d) Yes. Government of India through Ministry of Agriculture and Farmers Welfare; Department of Agricultural Research and Education (DARE) and Indian Council of Agricultural Research (ICAR) has established climate resilient villages in 151 districts of India as Model villages towards overall objective of climate change adaptation in Agriculture sector. These model villages are being replicated in several states of India towards the adaptation of agriculture to climate change and climate change impacts.

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