

**GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA**

UNSTARRED QUESTION NO:5190

ANSWERED ON:05.09.2011

IMPACT OF CLIMATE CHANGE ON AGRICULTURE

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Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

- (a) whether the Government has conducted any study on effect of climate change on agriculture, rains and floods in the country;
- (b) if so, the details thereof;
- (c) the steps taken by the Government to mitigate the impact of climate change on agriculture, rains and floods;
- (d) whether agriculture itself is a major contributor to the climate change in the country; and
- (e) if so, the details of studies, if any, and the steps taken in this regard?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS (SHRIMATI JAYANTHI NATARAJAN)

(a) & (b) The Indian Council for Agriculture Research (ICAR) initiated a project titled "Impact, Adaptation and Vulnerability of Indian Agriculture to Climate Change" in 2004 to study the impact of climate change and global warming on agriculture crops, horticulture, forests, livestock, fishery etc.

(c) The Government has prepared the National Mission for Sustainable Agriculture under National Action Plan on Climate Change. The Mission identifies 10 key dimensions for promoting sustainable agriculture practices which will be realized by implementing a Programme of Actions that covers both adaptation and mitigation measures through four functional areas, namely Research & Development, Technology Products & Practices, Infrastructure and Capacity Building and sponsored research. In addition, a new scheme namely "National Initiative on Climate Resilient Agriculture (NICRA)" has been launched in year 2011 to enhance resilience of Indian agriculture against climate change.

(d) & (e) As per the Greenhouse Gas Emission Inventory 2007 published under the aegis of Indian Network for Climate Change Assessment (INCCA), agriculture sector contributes to 17% of the net green house gas emissions from India in 2007.

ICAR and different State Agriculture Universities have been evolving technologies to reduce emissions from agriculture sector without compromising the food grain production. These technologies include improved irrigation management techniques, cultivation of aerobic rice, System of Rice Intensification (SRI) and use of neem-coated urea.