

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

**LOK SABHA**  
**UNSTARRED QUESTION NO. 6127**  
TO BE ANSWERED ON 11/04/2017

**ASSISTANCE UNDER NICRA**

6127. SHRI LAXMI NARAYAN YADAV:

Will the Minister of AGRICULTURE AND FARMERS WELFARE  
कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government is providing any assistance to farmers affected by climate change under the National Initiative for Climate Resilient Agriculture (NICRA);
- (b) if so, the details thereof; and
- (c) the assistance provided to the farmers thereunder during the last three years, State-wise?

**A N S W E R**

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री  
(SHRI SUDARSHAN BHAGAT)

**(a) & (b):** Yes. The government is providing assistance to farmers affected by climate change under the National Initiative for Climate Resilient Agriculture (NICRA) under Technology Demonstration Component (TDC). The Indian Council of Agricultural Research (ICAR) has initiated a project, National Initiative on Climate Resilient Agriculture (NICRA) during 2010-11 to develop adaptation and mitigation practices, for demonstration of technologies on farmers' fields and creating awareness amongst farmers and other stakeholders to minimize the climatic change impacts on agriculture. The project aims to address the issue of climate change and to provide assistance by developing and demonstrating location specific agricultural technologies.

(c) The assistance is in the form of technology demonstrations for minimizing the impacts of climate change in various states of the country. Technology demonstrations were taken up in climatically vulnerable districts of the country by taking a representative village from each district. The number of districts involved in each state in the technology demonstration are given in **Annexure-I**.

Zone wise distribution of districts taking part in the technology demonstrations under NICRA

<b>ATARI zones</b>	<b>States and the number of districts</b>	<b>Total districts involved in each zone</b>
I : Ludhiana	Haryana (2), Himachal Pradesh (4), Jammu & Kashmir (3), Punjab (4)	13
II : Kolkata	A & N Islands (1), Bihar (7), Jharkand (6), West Bangal (3)	17
III : Barapani	Arunachal Pradesh (3), Assam (5), Manipur (5), Meghalaya (3), Nagaland (4), Sikkim (1), Tripura (2), Mizoram (2)	23
IV : Kanpur	Uttar Pradesh (13), Uttarakhand (2)	15
V : Hyderabad	Andhra Pradesh (5), Telangana (2), Maharashtra (8)	15
VI : Jodhpur	Rajasthan (5), Gujarat (5)	10
VII : Jabalpur	Chhattisgarh (3), Madhya Pradesh (9), Odisha (5)	17
VIII : Bengaluru	Tamil Nadu (4), Karnataka (6), Kerala (1)	11
<b>Total</b>	<b>28 + 1 UT</b>	<b>121</b>

### **Technology demonstrations in NICRA under four modules**

Climate resilient practices and technologies demonstrated in each of the district can be categorized under four modules: natural resource management, crop production systems, livestock & fisheries production systems and institutional mechanisms.

#### **Module I: Natural Resource Management**

This module consists of interventions related to *in-situ* moisture conservation, biomass mulching, residue incorporation instead of burning, brown and green manuring, water harvesting and recycling for supplemental irrigation, improved drainage in flood prone areas, conservation tillage where appropriate, artificial ground water recharge and water saving irrigation methods.

#### **Module II: Crop Production**

This module consists of introducing drought/temperature tolerant varieties, advancement of planting dates of *rabi* crops in areas with terminal heat stress, water saving paddy cultivation methods (SRI, aerobic, direct seeding), frost management in horticulture through fumigation, staggered community nurseries for delayed monsoon, custom hiring centers for timely completion of farm operations, location specific intercropping systems with high sustainable yield index.

#### **Module III: Livestock and Fisheries**

Use of community lands for fodder production during droughts/floods, augmentation of fodder production through improved planting material, improved fodder/feed storage methods, fodder enrichment, prophylaxis, improved shelters for reducing heat stress in livestock, management of fish ponds/tanks during water scarcity and excess water and promotion of livestock component as a climate change adaptation strategy.

#### **Module IV: Institutional Interventions**

This module consist of institutional interventions either by strengthening the existing ones or initiating new ones relating to community seed bank, fodder bank, commodity groups, custom hiring centre, collective marketing group, introduction of weather index based insurance and climate literacy through a village weather station. The program also aims at development of an enabling mechanism at the village level for continued adoption of such practices in a sustainable manner.