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

LOK SABHA UNSTARRED QUESTION NO. 3811

TO BE ANSWERED ON 12TH AUGUST, 2025

RESEARCH ACTIVITIES BY NATIONAL AGRICULTURAL RESEARCH COUNCIL

3811. SHRI ASHISH DUBEY:

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

- (a) whether the National Agricultural Research Council is creating latest research on a large scale across the country;
- (b) if so, the details thereof, State-wise; and
- (c) the progress report of the last ten years of ICAR-Directorate of Weed Research (ICAR-DWR) and Agricultural Technology Application Research Institute (ATARI) operating in Jabalpur, Madhya Pradesh?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

- (a) & (b): Yes, Indian Council of Agricultural Research (ICAR) through its network of 113 institutes spread across the various states focus on various aspects of agricultural research, from specific crops to animal sciences and fisheries. Some notable examples are the development of bio-fortified and climate resilient varieties, improved farm implements, integrated farming practices, enhancement of product quality and value addition through processing, improving livestock breeds, developing vaccines & diagnostic kits, enhancing the quality of dairy products etc. Further, a network of 731 Krishi Vigyan Kendras (KVKs) also, established in the Country that demonstrates and provide training on the advanced agricultural technologies and practices as well as helps in capacity development of farmers. State wise details of ICAR Research Institutes and KVKs are at **Annexure-I**.
- (c): The details of the activities of ICAR-DWR and ATARI, Jabalpur during last ten years are at **Annexure-II**.

[Part (a) & (b) of Lok Sabha USQ No. 3811 dated 12^{TH} AUGUST, 2025]

State Wise ICAR Institutes and KVKs List

S.No.	State	ICAR Institutes and ATARIs	KVKs
1.	Andaman & Nicobar Islands	1	3
2.	Andhra Pradesh	2	24
3.	Arunachal Pradesh	1	17
4.	Assam	2	26
5.	Bihar	4	44
6.	Chhattisgarh	1	28
7.	Delhi	7	1
8.	Goa	1	2
9.	Gujarat	2	30
10.	Haryana	6	18
11.	Himachal Pradesh	2	13
12.	Jammu & Kashmir	1	20
13.	Jharkhand	3	24
14.	Karnataka	6	33
15.	Kerala	5	14
16.	Ladakh	-	4
17.	Lakshadweep	-	1
18.	Madhya Pradesh	6	54
19.	Maharashtra	11	50
20.	Manipur	-	9
21.	Meghalaya	2	7
22.	Mizoram	-	8
23.	Nagaland	1	11
24.	Odisha	5	33
25.	Puducherry	_	3
26.	Punjab	3	22
27.	Rajasthan	7	47
28.	Sikkim	2	4
29.	Tamil Nadu	2	32
30.	Telangana	8	16
31.	Tripura	-	8
32.	Uttar Pradesh	15	89
33.	Uttarakhand	3	13
34.	West Bengal	4	23
	TOTAL	113	731

[Part (c) of Lok Sabha USQ No. 3811 dated 12TH AUGUST, 2025]

The progress report of the last IO years of ICAR-Directorate of Weed Research (ICAR-DWR), Jabalpur, Madhya Pradesh

i. Research & Technology Development

- Developed and demonstrated 38 numbers of sustainable weed management technologies for field crops (*kharif, rabi* and summer), and horticultural crops.
- Developed integrated weed management technologies for Conservation Agriculture-based 05 major cropping systems of the country.
- Evaluated 15 numbers of new herbicide molecules for their bio-efficacy and residual effects in soil-water-plant system to facilitate the herbicide industries for registration in CIB&RC.
- Developed methodology for quick estimation of residues in 34 herbicide molecules at a time.
- Developed and successfully demonstrated a model for phytoremediation of heavy metal-polluted water using aquatic weeds.
- Bio-control technology for managing aquatic weeds using Neochetina spp. for Water hyacinth (300 hectares in Madhya Pradesh, Karnataka, Bihar, Telangana) and Cyrtobagous salviniae for Salvinia (1652 hectares in Madhya Pradesh, Maharastra and Chhattisgarh), resulted in eco-friendly weed management and resulted in improvement of livelihood of fishermen and restoration of biodiversity.
- Technology developed for management of herbicide resistant *Phalaris minor* in wheat in Punjab and Haryana states (approximately 3.60 million ha) has resulted in generating additional income of Rs. 5985 crores annually.
- Technologies for management of herbicide resistant weeds in soybean (Madhya Pradesh) and rice (Chhattisgarh and Kerala).
- Developed SOPs for herbicide application through Drones in different field crops, and also imparted trainings for capacity building.
- Developed microbial consortia to manage parasitic weed (Striga) in sugarcane.
- Low-cost weeding tools developed and commercialized.
- Understood the mechanisms of crop-weed interaction and herbicide efficacy under changing climate.

ii. Certification & IP Protection:

- ICAR has certified 12 technologies
- Institute has received 09 copyrights and 02 patents granted,
- Developed 03 Mobile Apps (Weed Manager, DWR-HerbCal, Weedseed Guru),
- Commercialized 03 technologies.

iii. Infrastructure & Capacity Building

• Established State of the Art facilities, viz, tissue culture lab, containment and insect quarantine, weed seed genebank, FACE facility, agricultural drone, LC-MS-MS, plant growth chambers, etc.

iv. Collaborations:

• SAUs, other Universities, DBT, DST, ICFRE, IRRI, State Forest Department, MPBT and Herbicide industries.

v. New AICRP Centres:

• Opened new AICRP on Weed Management Centres at MPUAT, Udaipur; BCKV, Kalyani; PDKV, Akola and SKUAST, Jammu.

vi. Outreach & Human Resource Development

- Organized 543 capacity-building programs, benefitting over 117,409 trainees.
- Conducted 8,616 field demonstrations and trained 15,415 farmers through MGMG, FFP, and other initiatives.
- Nationwide campaign for creating awareness about the ill effects of *Parthenium* and its management strategies for the last 20 years.
- Disseminated technologies via Kisan Mobile Sandesh (SMS), farmer's fairs, exhibitions, and digital platforms.

vii. Publications:

• 120 research papers in high impact journals, 18 books and 19 technical bulletins.

viii. Certified seed production:

• Produced 1,024.67 tons of rice, wheat, mustard, and pulses seed.

The progress of Agricultural Technology Application Research Institute (ATARI), Jabalpur for the last 10 years is as follows:

- **New KVKs established:** During last 10 years, 16 new Krishi Vigyan Kendras (KVKs) were established in the jurisdiction of ATARI, Jabalpur
- Total 195402 frontline demonstrations (FLDs) conducted at farmers' fields successfully showcased new technologies that enhance productivity and sustainability.
- KVKs undertook 58259 training programmes covering more than 23.95 lakh participants that include farmers, farm women, rural youth and 121729 extension functionaries.
- KVKs also produced 157952 q seeds of field crops and 412.56 lakh planting materials of horticultural crops.
- Total 14.66 lakh farmers visited to KVKs.
- Total 10.03 lakh soil heath cards were issued to farmers
- **Farmer FIRST Project** is operated at seven centers in Madhya Pradesh and Chhattisgarh. The projects have benefitted 69836 farming families.
- Seed Hub Project on pulses is functional in 16 KVKs (9 in Madhya Pradesh and 7 in Chhattisgarh). Under Seed hub, total 45432 q pulse seed was produced by KVKs.
- Cluster Frontline Demonstration (CFLD) on Pulses: Under CFLD pulses, total 84027 demonstrations were conducted to demonstrate improved pulses varieties and package of practices.
- Cluster Frontline Demonstration (CFLD) on Oilseed: Under CFLD Oilseeds, 74390 demonstrations were conducted to demonstrate improve oilseeds varieties and package of practices. In addition, under Special CFLD (SAP Programme) in 2019-20, total 12598 demonstrations were conducted.
- Out-scaling of Natural Farming through KVKs: The project was implemented in 48 KVKs (32 in MP, 16 in Chhattisgarh) during the year 2022-24. Total 2783 awareness programmes were carried out by involving 156558 participants. Furthermore, 497 training programmes were organized involving 20455 participants for capacity building on Natural farming practices, while 939 demonstrations were conducted on various crops.
- Nutri-Sensitive Agricultural Resources and Innovation (NARI) Programme: To ensure access to diverse
 and nutrient-rich vegetables and fruits, total of 1,765 activities were conducted for establishment of
 nutrition gardens in Nutri-Smart Villages involving 6,631 households. For capacity building, 1,508
 training programmes on topics like nutrition-sensitive agriculture were conducted benefiting 43,178
 participants.
- Attracting and Retaining Youth in Agriculture (ARYA): ARYA project is operational in 12 KVKs in Madhya Pradesh (8) and Chhattisgarh (4). Total 10511 youths were trained in different agricultural and allied enterprises. Total 1656 new entrepreneurial units were established under different agricultural and allied enterprises in which 4973 youth were associated.
- Technology Demonstration Component under National Innovations on Climate Resilient Agriculture (NICRA): NICRA is presently operational in 11 KVKs in the states of Madhya Pradesh (8) and Chhattisgarh (3). Through various planned activities, total 175320 farmers were benefited in 19865 ha area through technological interventions under NICRA.
- Award and Recognition to KVKs: Four KVKs received ICAR- National KVK Award.