

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

LOK SABHA
UNSTARRED QUESTION NO. 3275
TO BE ANSWERED ON 16/03/2021

AGRICULTURAL RESEARCH

3275. SHRI DUSHYANT SINGH:

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

- (a) whether agricultural research programmes have been undertaken by the Ministry in collaboration with agricultural universities present in the country;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) the amount being spent on agricultural research as a percentage of the total budget outlay;
- (d) whether the Ministry has launched internship programmes for students in the field of agricultural research;
- (e) if so, the universities from which the students have been selected for the internship and the details regarding the internships offered by the Ministry;
- (f) if not, the reasons therefor; and
- (g) the initiatives taken by the Government to improve the research quality in the country and promote young minds in conducting studies in the field of agriculture?

A N S W E R

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

- (a) Yes, Sir.
- (b) The major agricultural research programmes taken up in Collaboration with Agricultural Universities are as follows:-
 - (i) ICAR-All India Coordinated Research Projects (ICAR-AICRP) have centres in different State Agricultural and Horticultural Universities (SAUs and SHUs) functioning on different

agricultural and horticultural crops. At present, 59 AICRP and 19 Network Projects on Agriculture & its allied subjects are collaborating with 59 Agriculture, Horticulture and Animal Science Universities at different locations of the country.

(ii) Apart from these, National Agricultural Science Fund Scheme is also operated in ICAR for basic and strategic research in the field of Agriculture in consortium mode. Presently, 19 Research Projects are in operation in collaboration with Agricultural Universities as lead / co-operating centres (**Annexure-II**).

(iii) In last 4 years, ICAR-National Institute of Agricultural Economics and Policy Research (NIAP) collaborated with nearly 25 agricultural universities in the country in major research projects.

(c) The proportion of budgetary allocation of Department of Agricultural Research and Education (DARE) out of total budget outlay in 2020-21 is 0.22%.

(d) As an initiative to empower the youth in agricultural and allied subjects, the Student *Rural Entrepreneurship Awareness Development Yojana* (READY) programme was started in 2015-16. Student READY is an essential course module for the award of degree at Bachelors level to ensure hands on training and practical experience depending on the requirements of respective discipline in Agricultural Universities.

(e) & (f): Details of the students enrolled under RAWE/ in Plant training/internship university wise is at **Annexure-I**.

The Department, under ICAR-National Agricultural Higher Education Project (NAHEP), has also been organising international training programs for students in the field of agricultural research. So far, 388 students have visited 27 countries in last year and got trained on 160 subject areas.

(g) Specific strategic areas in education, research are being supported under Plan scheme "*Strengthening and Development of Higher Agricultural Education in India*" under the Niche Area of Excellence and Post graduate students are encouraged to conduct research in these programmes supported in AUs on competitive basis.

Junior & Senior Research Fellowships are being provided to attract the talented and young minds towards agricultural research.

To promote the young minds in conducting studies in the field of agriculture, NAHEP has organised National Level Ag-Tech Hackathon to promote innovation in Farm Mechanisation in Dec'20. Further, the ICAR provides fellowships such as ICAR-PG scholarships to Masters students and ICAR-JRF/SRF to Doctoral students.

Annexure-I
[Part (e) & (f) of Lok Sabha USQ No.3275 dated 16/03/2021]

Number of students undergoing training under various component of Student READY during 2019-20

S.No.	State	University	RAWE	Inplant training	Internship	Total.
1.	AP	ANGRAU, Hyderabad	488	187	40	715
2.	AP	DYSRHU, Vgudem	241			241
3.	AP	SVVU, Tirupati	0	57		57
4.	AS	AAU, Jorhat	230	63	184	477
5.	BR	BASU, Patna			108	108
6.	BR	BAU, Sabour	155			155
7.	BR	DRPCAU, Pusa	66	33		99
8.	CG	CGKV, Durg		69	77	146
9.	CG	IGKV, Raipur	303			303
10.	GJ	AAU, Anand	181	161	145	487
11.	GJ	JAU, Junagadh	270	208	27	505
12.	GJ	KU, Gandhinagar			37	37
13.	GJ	NAU, Navsari	306		40	346
14.	GJ	SDAU, Dantiwada	104	81	79	264
15.	HP	CSKHPKV, Palampur	81			81
16.	HP	DYSPUHF, Solan	195	79	36	310
17.	HR	CCSHAU, Hisar	251			251
18.	HR	LUVAS, Hisar			63	63
19.	HR	NDRI, Karnal			28	28
20.	JH	BAU, Ranchi	65			65
21.	JK	SKUAST, Jammu	66			66
22.	JK	SKUAST, Srinagar	130	70	80	280
23.	KA	KVAFSU, Bidar		70	104	174
24.	KA	UAHS, Shivamogga	190			190
25.	KA	UAS, Bangalore	590	0	0	590
26.	KA	UAS, Dharwad	280	23	54	357
27.	KA	UAS, Raichur	170			170
28.	KA	UHS, Bagalkot	287			287
29.	KL	KAU, Thrissur	250			250
30.	KL	KUFOS, Kochi	51			51
31.	KL	KVASU, Wayanad		38		38
32.	MH	DBSKKV, Dapoli	144	68		212
33.	MH	DPDKV, Akola	380	51		431
34.	MH	MAFSU, Nagpur		131	170	301
35.	MH	MPKV, Rahuri	210	150	108	468
36.	MH	VNMKV, Prabhani	301	134	37	472

S.No.	State	University	RAWE	Implant training	Internship	Total.
37.	MN	CAU, Imphal	103	118	74	295
38.	MP	JNKVV, Jabalpur	218	201		419
39.	MP	NDPCVV, Jabalpur			153	153
40.	MP	RVSKVV, Gwalior	223			223
41.	NL	NU, Dunheboto	64			64
42.	OR	OUAT, Bhubaneswar	212	156	65	433
43.	PB	GADVASU, Ludhiana		80	70	150
44.	PB	PAU, Ludhiana	189			189
45.	RJ	AU, Jodhpur	41			41
46.	RJ	AU, Kota	64			64
47.	RJ	MPUAT, Udaipur	163	75		238
48.	RJ	RAJUVAS, Bikaner			55	55
49.	RJ	SKNAU, Jobner	134			134
50.	RJ	SKRAU, Bikaner	92			92
51.	TN	TNAU, Coimbatore	1013			1013
52.	TN	TNJFU, Naggapattinam		70		70
53.	TN	TNVASU, Chennai		18	180	198
54.	TS	PJTSAU, Hyderabad	408	53	92	553
55.	TS	PVNRTVU, Hyderabad	63	32	125	220
56.	TS	SKLTSHU, Hyderabad	63			63
57.	UK	GBPUAT, Pantnagar	202	0	80	282
58.	UK	VCSGUUHF, Bharsar	20			20
59.	UP	AMU, Aligarh			30	30
60.	UP	BHU, Varanasi	169			169
61.	UP	BUAT, Banda	101			101
62.	UP	CSAUAT, Kanpur	127			127
63.	UP	DUVASU, Mathura		2	40	42
64.	UP	ANDUAT, Ayodhya	111		54	165
65.	UP	RLBCAU, Jhansi	9			9
66.	UP	SVBPUAT, Meerut	105			105
67.	WB	BCKV, Nadia	261	60		321
68.	WB	UBKV, Cooch Behar	78	16		94
69.	WB	VBU, Birbhum	51			51
70.	WB	WBUAFS, Kolkata	30			30
		Grand Total	10299	2554	2435	15288

Annexure-II
[Part (b) of Lok Sabha USQ No.3275 dated 16/03/2021]

DETAILS OF PROJECTS AND FUNDED INSTITUTES

S. No.	Title of the projects	Centre Name	Lead or Co-operating centre	Duration	
				From	To
1.	ICT based extension strategies for nutrition sensitive agriculture in the states of UP and Odisha	ICAR-IARI, New Delhi	Lead	Nov 2018	Oct 2021
		ICAR-IASRI, New Delhi	Co-operating	Nov 2018	Oct 2021
		ICAR-ATARI, Kanpur	Co-operating	Nov 2018	Oct 2021
		OUAT, Bhubaneswar	Co-operating	Nov 2018	Oct 2021
2.	Studies on thermal degradation of crop residues for kinetics, bio-polymeric transitions and value added products	ICAR-CIAE, Bhopal	Lead	April 2019	March 2022
		TERI, New Delhi	Co-operating	April 2019	March 2022
		TNAU, Coimbatore	Co-operating	April 2019	March 2022
3.	Utilization and refinement of haploid/doubled haploid induction systems in rice, wheat and maize involving molecular and in-vitro strategies	ICAR-NRRI, Cuttack	Lead	Feb 2018	Jan 2022
		PAU, Ludhiana	Co-operating	Feb 2018	Jan 2022
		ICAR-VPKAS, Almora	Co-operating	Feb 2018	Jan 2022
4.	Genetic improvement of rice for yield, NUE, WUE, abiotic and biotic stress tolerance through RNA Guided Genome Editing (CRISPR-Cas9/Cpf1)	ICAR-IARI, New Delhi	Lead	Feb 2018	July 2021
		ICGEB, New Delhi	Lead	Feb 2018	July 2021
		ICAR-NIPB, New Delhi	Co-operating	Feb 2018	July 2021
		ICAR-NRRI, Cuttack	Co-operating	Feb 2018	July 2021
		ICAR-IIRR, Hyderabad	Co-operating	Feb 2018	July 2021
		TNAU, Coimbatore	Co-operating	Feb 2018	July 2021
5.	Effective delivery of nutrients, insecticides and fungicides through nanoparticulates and its effect on uptake and yield in groundnut and chilli	ANGARU, IFT, RARS, Tirupati	Lead	Aug 2018	July 2021
		ICAR-IIHR, Bengaluru	Co-operating	Aug 2018	July 2021
6.	Identification of super donors and alleles for spikelet fertility and low chalkiness under thermal stress in rice	DU, South Campus, Delhi	Lead	Aug 2018	July 2021
		ICAR-IARI, New Delhi	Co-operating	Aug 2018	July 2021
		IGKV, Raipur	Co-operating	Aug 2018	July 2021
		DU, North Campus, Delhi	Co-operating	Aug 2018	July 2021
		PJTSAU, Hyderabad	Co-operating	Aug 2018	July 2021
7.	Exploiting alien genetic resources for developing climate resilient wheat and understanding mechanism of heat tolerance	ICAR-IIWBR, Karnal	Lead	Aug 2018	July 2021
		PAU, Ludhiana	Co-operating	Aug 2018	July 2021
		ICAR-NIPB, New Delhi	Co-operating	Aug 2018	July 2021

8.	Assessing the potential impact of climate change and management on soil carbon and nitrogen storage in selected ecosystems of India	ICAR-IISS, Bhopal	Lead	Aug 2018	July 2021
		BCKV, West Bengal	Co-operating	Aug 2018	July 2021
9.	Identifying the genomic regions and genes for drought and heat tolerance in groundnut	UAS, Dharwad	Lead	Aug 2018	July 2021
		ICRISAT, Hyderabad	Co-operating	Aug 2018	July 2021
		IFT, RARS, Tirupati	Co-operating	Aug 2018	July 2021
10.	Developing climate resilient adaptive strategies for empowerment of farmers	UAS, Dharwad	Lead	April 2019	March 2022
		ICAR-IGFRI, Dharwad	Co-operating	April 2019	March 2022
		ANGRAU, Guntur	Co-operating	April 2019	March 2022
11.	Causes and Consequences of e-National Agriculture Market (e-NAM) on the Economic Development of Indian Agriculture – A Case Study	TNAU, Coimbatore	Lead	June 2019	May 2022
		ANGRAU, Tirupathi	Co-operating	June 2019	May 2022
		PJTSAU, Hyderabad	Co-operating	June 2019	May 2022
		CCSHAU, Hisar	Co-operating	June 2019	May 2022
12.	Women Empowerment and Gender Sensitization – Developing a Model for Bridging Gender Gap	CCSHAU, Hisar	Lead	Nov 2019	Oct 2022
		ICAR-CIWA, Bhubaneswar	Co-operating	Nov 2019	Oct 2022
13.	Development of electrochemical Sensor tools for soil health analysis	CSIR-CERI, Tamil Nadu	Lead	Nov 2019	Oct 2022
		TNAU, Tamil Nadu	Co-operating	Nov 2019	Oct 2022
14.	Identification of QTLs for subcomponent traits of WUE through strategic utilization of whole genome sequences and accurate phenotyping in rice	UAS, Bengaluru	Lead	Dec 2019	Nov 2022
		TNAU, Tamil Nadu	Co-operating	Dec 2019	Nov 2022
		ICAR-NIPB, New Delhi	Co-operating	Dec 2019	Nov 2022
15.	Improving rural livelihood security of tribal and resource constrained farmers of North Bihar through low cost technology of Animal Husbandry and allied sector	BASU, Patna	Lead	Dec 2019	Nov 2022
		ICAR-CARI, Izatnagar	Co-operating	Dec 2019	Nov 2022
16.	Development and Validation of Need Based Technology Delivery Model through Farmers' Producer Organization for Eastern Region of India	ICAR-RCER, Patna	Lead	Dec 2019	Nov 2022
		ICAR-RCER (RC), Ranchi	Co-operating	Dec 2019	Nov 2022
		ICAR-IIVR, Varanasi	Co-operating	Dec 2019	Nov 2022
		UBKV, West Bengal	Co-operating	Dec 2019	Nov 2022
17.	Paddy straw residues management through in-situ and ex-situ microbial decomposition and mechanical interventions	ICAR-NRRI, Cuttack	Lead	March 2020	Feb 2023
		ICAR-IARI, New Delhi	Co-operating	March 2020	Feb 2023
		PAU, Ludhiana	Co-operating	March 2020	Feb 2023
		CCSHAU, Hisar	Co-operating	March 2020	Feb 2023

18.	Identification and validation of newer approaches for the management of whitefly <i>Bemisia tabaci</i> (Hemiptera: Aleyrodidae)	ICAR-NBAIR, Bengaluru	Lead	Aug 2020	July 2023
		ICAR-IARI, New Delhi	Co-operating	Aug 2020	July 2023
		ICAR- IHR, Bengaluru	Co-operating	Aug 2020	July 2023
		PAU, Ludhiana	Co-operating	Aug 2020	July 2023
19.	Production of double-muscled mass farm animals using CRISPR	ICAR-CIRB, Hisar	Lead	Jan 2021	Dec 2023
		ICAR-CIRG, Makhdum	Co-operating	Jan 2021	Dec 2023
		SKUAST-Kashmir	Co-operating	Jan 2021	Dec 2023
		ICAR-NDRI, Karnal	Co-operating	Jan 2021	Dec 2023
