

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

LOK SABHA
UNSTARRED QUESTION NO. 2396
TO BE ANSWERED ON 02/01/2018

RESEARCH PROJECTS UNDER ICAR

2396. SHRI RADHESHYAM BISWAS:

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

- (a) the details of research centres and projects undertaken by the Indian Council of Agricultural Research (ICAR) in the country including rural and backward areas, State-wise;
- (b) the details of the expenditure incurred by the Government on the said centres and the projects during the last three years and the current year;
- (c) whether agricultural production has increased from the said centres; and
- (d) if so, the details thereof along with the steps taken by the Government to promote the research in agriculture sector?

A N S W E R

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्रालय में राज्य मंत्री
(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) & (b): Indian Council of Agricultural Research (ICAR) has overall 103 institutions (Research Institutes 68, Bureau 6, Directorates 14 and National Research Centres 15) and 81 All India Coordinated Research Projects (AICRPs)/Network Projects (NPs) in the areas of field and horticultural crops, animal species, Fisheries, Engineering, Natural resources management and several other areas of research that are in operation spreading all over the country including rural and backward areas. The funds are allocated project/scheme-wise and not the institute or state wise as some of the schemes are running in more than one state which are running under these Institutions. The state wise list of the ICAR Institutes is given in **Annexure-I**, List of AICRPs/NPs is given in **Annexure-II** and the details regarding the expenditure incurred by the Government on the research centres is given in enclosed as **Annexure-III**.

(c) & (d): Yes, Madam.

- The ICAR has played a pioneering role in ushering Green Revolution and subsequent developments in agriculture in India through its research and technology development that has enabled the country to increase the production of food grains by 5 times, horticultural crops by 9.5 times, fish by 12.5 times, milk 7.8 times and eggs 39 times since 1951, thus making a visible impact on the national food and nutritional security. The research efforts of the Institutes/Centres/AICRPs have led to the development and released of 672 high yielding, stresses (biotic & abiotic) tolerant varieties/hybrids in different field crops for cultivation under different agro-climatic conditions during 2014-2017. Approximately, 350514 quintals of breeder seeds of improved varieties of field crops and 18.5 lakh grafted plants, 12 lakh rooted cuttings and tuber crops, 90 tonnes of breeder/truthfully labelled seeds of vegetable crops, 5500 tonnes of breeders seed of potato and tropical tuber crops were produced and distributed during 2014-15 to 2016-17 for sustaining the effective seed chain in the states. These varieties and improved management practices have contributed significantly in increasing the production in field crops e.g. the production of total food grain increased from 252.02 million tons in 2014-15 to 275.68 million tons in 2016-17. In case of individual commodity also the increased production is recorded like, rice production has increased from 105.48 million tonnes in 2014-15 to 110.15 million tonnes in 2016-17, wheat production increased from 86.52 million tonnes in 2014-15 to 98.38 million tonnes in 2016-17. Similarly the research achievements in pulses led to the increase in pulses production from 17.15 million tonnes in 2014-15 to 22.95 million tonnes in 2016-17. The vegetable production increased from 166.6 million tonnes in 2014-15 to 176.2 million tonnes in 2016-2017. Similarly fruits production increased from 89.5 million tonnes in 2014-15 to 93.7 million tonnes in 2016-2017.
- During the last 3.5 years ICAR developed and released 13 improved poultry, pig and sheep varieties/breeds which include; 4 backyard poultry: Kamrupa in Assam, Narmadanidhi in MP, Jharsim in Chhattisgarh and Himsamridhi in HP; 8 pig varieties: HD-K75, Rani and Asha in Assam; Jharsuk in Jharkhand; Mannuthy White in Kerala; Lumsniang in Meghalaya; TANUVAS KTM Gold Crossbred Pig (Large White Yorkshire x Desi) in Tamil Nadu and “SVVU-T 17 Crossbred Pig”, (Large White Yorkshire x Desi) in Telangana besides one prolific and high producing breed of sheep ‘Avishan’
- To increase productivity, reduce cost of cultivation, reduce drudgery, improve value addition, conserve resources and provide alternate means for energy generation through improve farm mechanisation, ICAR developed 72 new farm equipment/machines/gadgets and 34 new products/ process protocols and supplied over 16500 prototypes of agricultural machinery to farmers/ entrepreneurs. Due to these efforts steady growth has occurred in adoption of efficient manually operated tools, animal operated implements, and equipment operated by

mechanical and electrical power sources in the country. ICAR trained 710 rural youth for establishing Custom Hiring Centres in different parts of the country out of which 652 entrepreneurs established Custom Hiring Centres. ICAR equipped 194 startup companies and agri-entrepreneurs by providing necessary training and skills to start their new agri-ventures.

- ICAR has developed and validated 623 district contingency plans and conducted skill development programs for 40.9 lakh farmers. *Mridaprarikshak* a minilab for soil analysis developed to support Government's initiative of Soil Health Card. ICAR has also developed 45 Integrated Farming Systems (IFS) models in 23 states and 1 Union Territory covering all the 15 agro-climatic regions of the country. These models were tested and further validated in the fields of 1250 farmers each under various different agro ecologies covering 23 states of the country.
- For delivering the benefits of research to the farmers, the ICAR has established a network of 681 Krishi Vigyan Kendras (KVKs) in the country. Through this network the technologies/ products being evolved are demonstrated by organizing various extension programmes like farmers fair, Krishi Mahotsav, exhibitions, exposure visits, animal check-up camps and diagnostic and advisory services for soil, water and infected plant samples and also training of farmers to update their knowledge and skill. These programmes have also benefited the farmers in terms of increased crop production and improved farm income.
- For strengthening the Government's initiative on Bringing Green Revolution to Eastern India, a new Indian Agriculture Research Institute (IARI) has been established at Barhi, Jharkhand on the lines of IARI, PUSA, New Delhi and another IARI is being established in Assam, Rajendra Agricultural University has been upgraded to Dr. Rajendra Prasad Central Agricultural University, six new colleges opened under Central Agricultural University, Imphal, National Research Centre for Integrated Farming established in Motihari (Bihar) and National Organic Farming Research Institute established in Tadong (Sikkim). Besides this, ICAR established six new Regional Research Stations in MP, Karnataka, Andhra Pradesh, Gujarat and West Bengal. Financial support has been extended to Telangana, Andhra Pradesh, and Haryana Governments for the establishment of new Agriculture and Horticulture Universities.

A new, state of the art Phonemics Facility has been created at ICAR-IARI, New Delhi. International fellowships for Ph.D. programmes in frontier areas of agricultural sciences were given to 105 young scientists to train them in the identified best laboratories of the world. The research collaboration with various national and international agencies including CG Centres strengthened, a new scheme of Emeritus Professor with 100 positions initiated and the slots for emeritus scientists doubled from 50 to 100 and the honorarium enhanced from Rs. 25,000 to Rs. 50,000 per month. To attract and retain talent in agriculture sciences, a new National Talent Scholarship has also been introduced for PG students from 2016-17.

State wise List of ICAR Research Institutions

State	Institute Name
Maharashtra	1. Central Institute for Cotton Research P.B.No.2, Shankarnagar P.O., Nagpur
	2. Directorate of Floricultural Research
	3. Directorate of Onion and Garlic Research, Pune
	4. Central Citrus Research Institute , Post Box No.464, Shankar Nagar
	5. National Research Centre for Grapes, PB No.3, Manjri Farm Post, Solapur
	6. National Research Centre on Pomegranate, NH-65 Solapur
	7. National Bureau of Soil Survey & Land Use Planning, Amravati
	8. National Institute of Abiotic Stress Management, Malegaon, Baramati
	9. Central Institute for Research on Cotton Technology, Adenwala
	10. Central Institute of Fisheries Education Mumbai
West Bengal	11. Central Research Institute for Jute & Allied Fibres, Barrackpore, Kolkata
	12. National Institute of Research on Jute & Allied Fibre Technology
	13. Central Inland Fisheries Research Institute, Barrackpore, Kolkata
Odisha	14. National Rice Research Institute, Bidyadharpur, Cuttack
	15. Indian Institute of Water Management, Opposite Rail Vihar, Chandrashekharpur
	16. Central Institute for Women in Agriculture, Plot No.50-51, Mauza-Jokalandi
	17. Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar
Andhra Pradesh	18. Central Tobacco Research Institute, Dr. N.C. Gopalachari Road, Bhaskar Nagar
	19. Indian Institute of Oil Palm Research, Near Jawahar Navodaya Vidyalaya
Gujarat	20. Directorate of Groundnut Research, Ivnagar Road, P.B.No.5, Junagadh
	21. Directorate of Medicinal & Aromatic Plants Research
Telangana	22. Indian Institute of Oilseeds Research, Rajendranagar, Hyderabad
	23. Indian Institute of Millets Research, Rajendranagar, Hyderabad
	24. Central Research Institute for Dryland Agriculture, Santoshnagar, Saidabad
	25. National Academy of Agricultural Research Management, Rajendranagar
	26. Directorate of Poultry Research, Rajendranagar
	27. National Research Centre on Meat, Chengicherla
	28. Indian Institute of Rice Research, Rajendranagar, Hyderabad
Rajasthan	29. Directorate of Rapeseed–Mustard Research, Sewar, Bharatpur
	30. Central Institute for Arid Horticulture
	31. NRC on Seed Spices, Tabiji Farm, Ajmer
	32. Central Arid Zone Research Institute, Jodhpur
	33. Central Sheep & Wool Research Institute, Avikanagar, via Jaipur
	34. National Research Centre on Camel, P.B. No.07, Jorbeer, Bikaner
Uttar Pradesh	35. Directorate of Seed Research, Village-Kushmaur, Post- NBAIM, Mau
	36. Indian Grassland & Fodder Research Institute, Near Pahuj Dam, Gwalior
	37. Indian Institute of Pulses Research, Kalyanpur, Kanpur
	38. Indian Institute of Sugarcane Research, Raebareli Road, P.O. Dilkusha, Lucknow
	39. National Bureau of Agriculturally Important Microorganisms, Kushmaur
	40. Central Institute for Subtropical Horticulture
	41. Indian Institute of Vegetable Research, P.B. No. 01, PO Jakhini

	42. Central Agroforestry Research Institute, Jhansi
	43. Indian Institute of Farming Systems Research, Modipuram
	44. Central Avian Research Institute, Izatnagar, Bareilly
	45. Central Institute for Research on Cattle, PB No.17, Grass Farm Road, Meerut
	46. Central Institute for Research on Goats, Makhdoom, PO Farah, Mathura
	47. Indian Veterinary Research Institute, Izatnagar, Bareilly
	48. National Bureau of Fish Genetic Resources Lucknow
Madhya Pradesh	49. Directorate of Soybean Research, Near IT Park, Khandwa Road, Indore
	50. Directorate of Weed Science Research, Maharajpur, Adhartal
	51. Indian Institute of Soil Science, Nabi Bagh, Berasia Road, Bhopal
	52. Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal
	53. National Institute of High Security Animal Diseases, Anand Nagar, Bhopal
New Delhi	54. Indian Agricultural Research Institute, Pusa
	55. Indian Institute of Maize Research, Pusa
	56. National Bureau of Plant Genetic Resources, Pusa
	57. National Research Centre for Integrated Pest Management, LBS Bldg, Pusa
	58. National Research Centre on Plant Biotechnology, LBS Bldg., Pusa
	59. Indian Agricultural Statistics Research Institute, Library Avenue, Pusa
	60. National Institute of Agricultural Economics & Policy Research, DPS Marg, Pusa
	61. Directorate of Knowledge Management in Agriculture, KAB-I, Pusa
Jharkhand	62. Indian Institute of Agricultural Biotechnology, Garhkhatanga, Ranchi
	63. Indian Institute of Natural Resins and Gums, Namkum, Ranchi
	64. IARI, Hazari Bagh
Haryana	65. Indian Institute of Wheat and Barley Research, P.B. No. 158, Kunjpura
	66. Central Soil Salinity Research Institute, Zarifa Farm, Kachhwa Road, Karnal
	67. Central Institute for Research on Buffaloes, Sirsa Road, Hisar
	68. National Bureau of Animal Genetic Resources Karnal
	69. National Dairy Research Institute, Karnal
	70. National Research Centre for Equines, Hisar
Karnataka	71. National Bureau of Agricultural Insect Resources
	72. Directorate of Cashew Research
	73. Indian Institute of Horticultural Research, Hassaraghatta
	74. National Institute of Animal Nutrition & Physiology, Hosur
	75. National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI Bengaluru)
Chhatisgarh	76. National Institute of Biotic Stress Management, Baronda, Raipur
Tamil Nadu	77. Sugarcane Breeding Institute, Coimbatore
	78. National Research Centre for Banana, Thogamalai Main Road, Thayanur
	79. Central Institute of Brackishwater Aquaculture Chennai
Uttarakhand	80. Vivekanand Parvatiya Krishi Anusandhan Sansthan, Almora
	81. Indian Institute of Soil & Water Conservation, 218, Kaulagarh Road, Dehradun
	82. Project Directorate on Foot and Mouth Disease, IVRI Campus, Mukteswar
	83. Directorate of Coldwater Fisheries Research, Bhimtal, Nainital
J&K	84. Central Institute of Temperate Horticulture, Srinagar
Andaman & Nicobar Islands	85. Central Island Agricultural Research Institute, Port Blair

Kerala	86. Central Plantation Crops Research Institute, Kudlu
	87. Central Tuber Crops Research Institute
	88. Indian Institute of Spices Research, Marikunnu
	89. Central Institute of Fisheries Technology, Matsyapuri
	90. Central Marine Fisheries Research Institute Kochi
Himachal Pradesh	91. Central Potato Research Institute, Shimla
	92. Directorate of Mushroom Research, Solan
Bihar	93. National Research Centre for Litchi, Mushahari Farm, Mushahari
	94. ICAR Research Complex for Eastern Region, ICAR Parisar
	95. National Research Centre on Integrated Farming, Motihari
Sikkim	96. 1-National Research Centre for Orchids, Pakyong, Gangtok
	97. National Organic Farming Research Institute, Gangtok
Meghalaya	98. ICAR Res. Complex for NEH Region, Umroi Road, Umiam
Goa	99. Central Coastal Agricultural Research Institute, Ela
Punjab	100. Central Institute of Post-Harvest Engineering & Technology Ludhiana
Nagaland	101. National Research Centre on Mithun, Jharnapani, Medziphema
Assam	102. National Research Centre on Pig, Rani, Guwahati
Arunachal Pradesh	103. National Research Centre on Yak, Dirang, West Kameng

List of All India Coordinated Research Projects/Network Projects

S.No.	Name of AICRPs
1.	AICRP on Maize, New Delhi
2.	AICRP on Nematodes in Cropping System, New Delhi
3.	All India Coordinated Rice Improvement Project, Hyderabad
4.	AICRP on Chickpea, Kanpur
5.	AICRP on MULLaRP, Kanpur
6.	AICRP on Pigeon Pea, Kanpur
7.	AICRP on Wheat & Barley, Karnal
8.	AICRP on Forage Crops and Utilization, Jhansi
9.	AICRP Sorghum , Hyderabad
10.	AICRP on Pearl Millets, Jodhpur
11.	AICRP on Small Millets, Bangalore
12.	AICRP on Sugarcane, Lucknow
13.	AICRP on Cotton, Coimbatore
14.	AICRP on Groundnut, Junagarh
15.	AICRP on Soybean, Indore
16.	AICRP on Rapeseed & Mustard, Bharatpur
17.	AICRP on Oilseed, Hyderabad
18.	AICRP on Linseed, Kanpur
19.	AICRP on Sesame and Niger, Jabalpur
20.	AICRP on Biocontrol of Crop Pests, Bengaluru
21.	AICRP - Honeybees and Pollinators, New Delhi
22.	AICRP NSP(Crops), Mau
23.	AICRP Fruits (Tropical and Sub Tropical), Bengaluru
24.	AICRP Arid Zone Fruits, Bikaner
25.	AICRP Mushroom, Solan
26.	AICRP Vegetables, Varanasi
27.	AICRP Potato, Shimla
28.	AICRP Tuber Crops, Thiruvananthapuram
29.	AICRP Palms, Kasargod
30.	AICRP on Cashew, Puttur
31.	AICRP Spices, Calicut
32.	AICRP Floriculture, Pune(in Directorate)
33.	AICRP on Micro Secondary & Pollutant Elements in Soils and Plants, Bhopal
34.	AICRP on Soil Test Crop Response, Bhopal
35.	AICRP on Long Term Fertilizer Experiments, Bhopal
36.	AICRP on Salt Affected Soils & use of Saline Water, Karnal
37.	AICRP on Irrigation Water Management Research, Bhubaneswar
38.	AICRP Dryland Agriculture, Hyderabad
39.	AICRP on Agrometeorology, Hyderabad
40.	AICRP on Integrated Farming System, Modipuram
41.	AICRP on Agroforestry, Jhansi
42.	AICRP on Weed Management, Jabalpur
43.	AICRP on Farm Implements and Machinery, Bhopal
44.	AICRP on Ergonomics and Safety in Agriculture, Bhopal
45.	AICRP on Energy in Agriculture and Agro based Industries , Bhopal

46.	AICRP on Utilization Animal Energy, Bhopal
47.	AICRP on Placticulture Engineering and Technology, Ludhiana
48.	AICRP on Post Harvest Engineering and Technology, Ludhiana
49.	AICRP on Goat Improvement, Mathura
50.	AICRP on Improvement of Feed Sources & Nutrient Utilisation, Bengaluru
51.	AICRP on Cattle Research, Meerut
52.	AICRP Foot & Mouth, Mukteshwar
53.	AICRP on Poultry, Hyderabad
54.	AICRP ADMAS, Bengaluru
55.	AICRP on Pig, Guwahati
56.	AICRP Home Science
Name of Network Projects	
57.	AIC Research Network on Potential Crops, New Delhi
58.	Network Project on Transgenics
59.	AINP on Soil Arthropod Pests, Durgapura, Rajasthan
60.	AINP on Agricultural Acarology
61.	AINP on Pesticides Residues, New Delhi
62.	AINP on Arid Legumes, Kanpur
63.	All India Network Research Project on Tobacco, Rajamundry
64.	AINP on Jute and Allied Fibres, Barrackpore
65.	AINP on Vertebrate Pest Management, Jodhpur
66.	Network on Insect Biosystematics, New Delhi/Bengaluru
67.	Application of Micro-organisms in Agriculture and Allied Sectors(AMAAS) +Microbial Genomic Resources repository network, Mau
68.	Network O&G (included in Directorate)
69.	Network on Medicinal & Aromatic Plants, Anand
70.	AINP on Biofertilizer, Bhopal
71.	Network Programme on Organic Farming, Modipuram
72.	Network project on Harvesting, Processing and Value Addition of Natural Resins & Gums, Ranchi
73.	Network Project on Conservation of Lac Insect Genetic Resources, Ranchi
74.	Network project on Animal Genetic Resources, Karnal
75.	Network on Sheep Improvement, Avikanagar
76.	Network Project on Buffalo Improvement, Hissar
77.	Network on Gastro Intestinal Parasitism, Izatnagar
78.	Network on Haemorrhagic Septicemia, Izatnagar
79.	Network Programme on Blue Tongue Disease, Izatnagar
80.	All India Network Program on Neonatal Mortality in Farm Animal(NNM), Izatnagar
81.	All India Network Program on Diagnostic Imaging and Management of Surgical Condition in Animals, Izatnagar

Annexure-III

[Part (a) & (b) of Lok Sabha USQ No.2396 for 02/01/2018]

**Details of the expenditure incurred by the Government on Research Centres
during the last three years and the current year**

(Rs. In Crores)

Year	Revised Estimate	Actual Expenditure
2014-15	2500.00	2268.57
2015-16	3000.00	2735.33
2016-17	3166.58	2960.50
2017-18 (Plan+ Non Plan)	6992.00	4891.56 (up to Nov. 2017)
