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Role of ICAR in Indian Agricultural Development

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Agriculture is locomotive of our economy and a prosperous rural economy based on agriculture will ultimately make the nation prosperous." -Sadar Vallabhbhai Patel. The Indian Council of Agricultural Research (ICAR) is an autonomous organization under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare, Government of India. Formerly known as Imperial Council of Agricultural Research, it was established on 16 July 1929 as a registered society under the Societies Registration Act, 1860 in pursuance of the report of the Royal Commission on Agriculture. The ICAR has its headquarters at New Delhi. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country. With 103 ICAR institutes (ICARI-70+NB-6+NRC-15+PDs-12) and 61 agricultural universities spread across the country this is one of the largest national agricultural systems in the world. 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 foodgrains by 5 times, horticultural crops by 9.5 times, fish by 12.5 times, milk 7.8 times and eggs 39 times since 1951 to 2014, thus making a visible impact on the national food and nutritional security. It has played a major role in promoting excellence in higher education in agriculture. It is engaged in cutting edge areas of science and technology development and its scientists are internationally acknowledged in their fields.

Milestones:

- Initiation of the first All-India Co-ordinated Research Project on Maize in 1957
- Status of Deemed University accorded to IARI in 1958
- Establishment of the first State Agricultural University on land grant pattern at Pantnagar in 1960
- Placement of different agricultural research institutes under the purview of ICAR in 1966
- Creation of Department of Agricultural Research and Education (DARE) in the Ministry of Agriculture in

1973

- Opening of first Krishi Vigyan Kendra (KVK) at Puducherry (Pondicherry) in 1974.
- Establishment of Agricultural Research Service and Agricultural Scientists' Recruitment Board in 1975
- Launching of Lab-to-Land Programme and the National Agricultural Research Project (NARP) in 1979
- Initiation of Institution-Village Linkage Programme (IVLP) in 1995
- Establishment of National Gene Bank at New Delhi in 1996
- The ICAR was bestowed with the King Baudouin Award in 1989 for its valuable contribution in ushering in the Green Revolution. Again awarded King Baudouin Award in 2004 for research and development efforts made under partnership in Rice Wheat Consortium.
- Launching of National Agricultural Technology Project (NATP) in 1998 and National Agricultural Innovation Project (NAIP) in 2005
- As of July, 2006 it has developed a vaccine against bird flu. The vaccine was developed at the High Security Animal Disease Laboratory, Bhopal, the only facility in the country to conduct tests for the H5N1 variant of bird flu. It was entrusted with the task of developing a vaccine by the ICAR after the Avian Influenza outbreak in February. The ICAR provided Rs. 8 crore for the purpose.
- In December 2009, it announced that it was considering a policy to provide open access to its research.
- In March 2010, ICAR made its two flagship journals (Indian Journal of Agricultural Sciences and Indian Journal of Animal Sciences) as Open Access Journals.
- On 13 September 2013, it announced the Open Access Policy and committed for making all the public funded scholarly research outputs openly available via open access repositories.
- ICAR scientists were the first in the world to sequence the pigeonpea genome. It was a purely indigenous effort by 31 scientists led by Nagendra Kumar Singh of NRCPB (National Research Centre on Plant Biotechnology, New Delhi). The first draft of the sequence was published in Journal of Plant Biochemistry and Biotechnology.

Our mandate:

- To plan, undertake, aid, promote and co-ordinate education, research and its application in agriculture, agroforestry, animal husbandry, fisheries, home science and allied sciences.
- To act as a clearing house of research and general information relating to agriculture, animal husbandry, home science and allied sciences, and fisheries through its publications and information system; and instituting and promoting transfer of technology programmes.
- To provide, undertake and promote consultancy services in the fields of education, research, training and dissemination of information in agriculture, agroforestry, animal husbandry, fisheries, home science and allied sciences.
- To look into the problems relating to broader areas of rural development concerning agriculture, including postharvest technology by developing co-operative programmes with other organizations such as the Indian Council of Social Science Research, Council of Scientific and Industrial Research, Bhabha Atomic Research Centre and the universities.
- To do other things considered necessary to attain the objectives of the Society.

Organization:

- Union Minister of Agriculture is the ex-officio
 President of the ICAR Society
- Secretary, Department of Agricultural Research and Education, Ministry of Agriculture, Government of India and Director General, ICAR is the Principal

Sr. No.	Abbreviation	Full form	Number
1.	ICARI (Instt.)	Indian Council of Agricultural Research Institute	70
2.	NB	National Bureau	6
3.	NRC	National Research Centre	15
4.	PDs	Project Directorates	12
5.	SAU	State Agricultural University	61
6.	DU	Deemed University	5
7.	CUFA	Central University having Faculty of Agriculture	4
8.	CAU	Central Agricultural University	3
9.	ZPD	Zonal Project Directorate	8
10.	KVK	Krishi Vigyan Kendra	639
11.	AICRP	All India Coordinated Research Project	60
12.	NP	Network Project	21
13.	STICARI	Sub-Station of ICAR Institute	159

Stat	e Jammı	ı and I	Kashmi	r									
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	CITH	0	0	0	SKUAS&T (Jammu)	0	0	0	0	19	0	1	3
2.	0	0	0	0	SKUAS&T (Srinnagar)	0	0	0	0	0	0	0	0

(a) CITH: Central Institute of Temperate Horticulture (Srinagar) (b) SKUAS&T: Sher-E –Kashmir University of Agricultural Sciences and Technology-Jammu (c) SKUAS&T: Sher-E –Kashmir University of Agricultural Sciences and Technology-Srinagar; Network –project on (1) temperate fruits-Srinagar

State	e Punjab												
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	CIPET	0	0	0	PAU	0	0	0	1	20	2	0	5
2.	IIMR	0	0	0	GADUV&AS	0	0	0	0	0	0	0	0

(a) CIPET: Central Institute on Post-harvest Engineering and Technology (Ludhiana) (b) Indian Institute of Maize Research-Ludhiana (c) PAU: Punjab Agricultural University, Ludhiana (d) GADUV&AS: Guru Angad Dev University of Veterinary and Animal Sciences, Ludhiana. (e) ZPD (I): - Atari, Ludhiana; AICRP-(1) on plasticulture engineering and technologies-Ludhiana (2) Post-harvest engineering and technology-Ludhiana

Executive Officer of the Council

- Governing Body is the policy-making authority
- Agricultural Scientists' Recruitment Board
- Deputy Directors-General (8)

Additional Secretary (DARE) and Secretary (ICAR)

- Additional Secretary and Financial Advisor
- Assistant Directors-General (24)

State	Haryana												
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	CIRB	NBAGR	NRCE		CCSHAU	NDRI				18	2	2	5
2.	CSSRI				LLRU&VAS								
3.	IIWBR												
4.	NDRI												

(a) CIRB: Central Institute for Research on Buffaloes (Hissar) (b) CSSRI: Central Soil Salinity Research Institute (Karnal) (c) IIWBR: Indian Institute of Wheat and Barley Research (Karnal) (d) ICAR-NDRI: ICAR-National Dairy Research Institute, Karnal: (e) NBAGR: National Bureau of Animal Genetic Resources (Karnal) (f) NRCE: National Research Centre on Equines (Hisar) (g) CCSHAU: Chaudhary Charan Singh Haryana Agricultural University-Hisar; (h) LLRU&VAS: Lala Lajpat Rai University of Veterinary and Animal Science-Hisar (i) NDRI: National Dairy Research Institute, Karnal: AICRP-(1) on wheat and barley improvement project, Karnal (2) management of salt affected soils and use of saline water in agriculture Karnal; Network project-on (1) animal genetic resources –Karnal (2) buffaloes improvement –Hisar:

State	Rajasthar												
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	CAZRI		NRCC	DRMR	MPUA&T				1	42	4	3	9
2.	CIAH		NRCSS		SKRAU								
3.	CSWRI				SKNAU								
4.					AU-Jodhpur								
5.					RUV&AS								
6.					AU-Borkhera			_					

(a) CAZRI: Central Arid Zone Research Institute (Jodhpur) (b) CIAH: Central Institute of Arid Horticulture (Bikaner) (c) CSWRI: Central Sheep and Wool Research Institute (Avikanagar) (d) NRCC: National Research Centre on Camel (Bikaner) (e) NRCSS: National Research Centre on Seed Spices (Ajmer) (f) DRMR: Directorate of Rapeseed and Mustard Research (Bharatpur) (g) MPUA&T: Maharana Pratap Univ. of Agriculture and Technology, Udaipur (h) SKRAU: Swami Keshwanand Rajasthan Agricultural University, Bikaner: (i) SKNAU-Shri Karan Narendra Agriculture University-Jobner (j) AU-Agricultural University-Jodhpur;(k) RUV&AS-Rajasthan University of Veterinary and Animal Science-Binaker (l) AU-Agricultural University- Borkhera (h) ZPD (VI)- Jodhpur; AICRP-on (1) arid zone fruits-Bikaner (2) pearl millets-Jodhpur (3) rapeseed and mustard-Bharatpur (4) Mega sheep seed project-Avikanagar: Network project-on (1) soil arthropod pests-Durgapura (2) Vertebrate pest management-Jodhpur (3) sheep improvement-Avikanagar;

State	Gujara	t											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.		_									_		
1.				DGR	SDAU					28	2	0	9
2.				DMAPR	NAU								
3.					JAU								
4.					AAU								
5.					KU								

(a) DGR: Directorate of Groundnut Research (Junagadh) (b) DMAPR: Directorate of Medicinal and Aromatic Plants Research (Anand) (c) SDAU: Sardarkrushinagar Dantiwada Agricultural University- Sardarkrushinagar (d) NAU: Navsari Agricultural University-Navsari (e) JAU: Junagadh Agricultural University- Junagadh (f) AAU: Anand Agricultural University-Anand: KU-Kamdhenu University-Gandhinagar; AICRP-on (1) groundnut-Junagadh (2) medicinal and aromatic plants including betelvine-Anand

- National Director, National Agricultural Innovation
 Project
- Directorate of Knowledge Management in Agriculture

Conclusion : Agriculture sector occupies the centre stage of India's social security and overall economic welfare. Since Independence, India has witnessed significant

increase in foodgrain production (green revolution), milk (white revolution), oilseeds (yellow revolution), fish (blue revolution) and fruits and vegetables (golden revolution). All these became possible owing to the application of cutting edge of science coupled with the positive policy support, and hard work of Indian farmers. The Indian Council of Agricultural Research (ICAR), an apex

Stat	e Maharash	ıtra											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.					,								,
1.	CICR	NBSSLUP	NRCG	DFR	DBSKKV	CIFE				44	1	1	6
2.	CIRCT		NRCP	DOGR	DPDKV								
3.	NIASM				MAS&FU								
4.	CCRI				MPKV								
5.	CIFE				VNMAU								

(a) CICR: Central Institute of Cotton Research, Nagpur (b) CIRCT: Central Institute of Research on Cotton Technology, Mumbai (c) NIASM: National Institute of Abiotic Stress Management, Malegaon, (d) CCRI –Central Citrus Research Institute-Nagpur (e) ICAR-CIFE: Central Institute of Fisheries Education, Mumbai, Maharashtra (f) NBSSLUP: National Bureau of Soil Survey and Land Use Planning (Nagpur) (g) NRCG: National Research Centre for Grapes (Pune) (h) NRCP: National Research Centre for Pomegranate (Solapur) (i) DFR: Directorate of Floriculture Research (Pune) (j) DOGR: Directorate of Onion and Garlic Research (Pune) (k) DBSKKV: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (l)DPDKV: Dr Panjabrao Deshmukh Krishi Vidyapeeth, Krishi Nagar, Akola (m) MAS&FU:Maharashtra Animal Science and Fishery University, Nagpur (n) MPKV:Mahatma Phule Krishi Vidyapeeth, Rahuri (o) VNMAU: Vasantrao Naik Marathwada Agricultural University, Parbhani (p) CIFE: Central Institute of Fisheries Education, Mumbai,: AICRP; - (1) on Floriculture; Network project –on (1) onion and garlic-Pune

State	e Goa												
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	CCARI	•	•			•	•			2	0	0	0

CCARI: Central Coastal Agricultural Research Institute, Ela, Old Goa

Stat	e Karnata	ıka											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA C	CAU	ZPD	KVK	AICRP	NP	STICARI
No.	_												
1.	IIHR	NBAIR		DCR	UHS				1	31	6	1	19
2.	IIANP				UAS (Raichur)								
3.	NIVEDI				UAS(Dharwad)								
4.					UAS(Bangalore)								
5.					KVA&FSU								
6.			_		UA&HS								

(a) IIHR: Indian Institute of Horticultural Research, Bengaluru (b) IIANP: National Institute of Animal Nutrition and Physiology, Bengaluru (c) NIVEDI: National Institute of Veterinary Epidemiology and Disease Informatics, Hebbal, Bengaluru (d) NBAIR: National Bureau of Agricultural Insect Resources (Bengaluru) (e) DCR: Directorate of Cashew Research, Puttur (f) UHS: University of Horticultural Sciences, Navanagar, Bagalkot (g) UAS: University of Agricultural Sciences, Raichur (h) UAS: University of Agricultural Sciences, Dharwad, (i) UAS: University of Agricultural Sciences, Bangalore, (j) KVA&FSU: Karnataka Veterinary Animal and Fisheries Science University, Bidar; (k)UA&HS: University of Agricultural and Horticultural Sciences; Shimoga (l) ZPD (VIII): Bangalore: AICRP-on (1) Animal disease monitoring and surveillance-Bengaluru (2) small millets- Bangalore (3) Biological control of crop pests-Hebbal, Bangalore (4) fruits-Bangalore (5) Nutritional and physiological interventions for enhancing reproductive performance in animals-Bengaluru (6) cashew-Puttur: Network project—on (1) agricultural acarology-Bangalore

State	e Kerala												
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.								-					
1.	CIFT				KAU					14	3	0	10
2.	CMFRI				KUFOS								
3.	CTCRI				KVASU								
4.	IISR												
5.	CPCRI												

(a) CIFT: Central Institute of Fisheries Technology, Cochin (b) CMFRI: Central Marine Fisheries Research Institute, Kochi (c) CTCRI: Central Tuber Crops Research Institute, Trivandrum (d) IISR: Indian Institute of Spices Research, Calicut (e) CPCRI: Central Plantation Crops Research Institute, Kasargod (f) KAU: Kerala Agricultural University, Thrissur (g) KUFOS-Kerala University of Fisheries and Ocean Studies-Kochi: (h) KVASU-Kerala Veterinary and Animal Sciences University-Wayanad; AICRP-on (1) tuber crops-Thiruvananthapuram (2) palms-Kasaragod (3) spices-Calicut

State	e Tamil Na	ıdu											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	CIBWA		NRCB		TNAU					30	1	0	13
2.	SBI				TNV&ASU								
3.					TNFU								

(a) CIBWA: Central Institute of Brackish Water Aquaculture, Chennai (b) SBI: Sugarcane Breeding Institute, Coimbatore (c) NRCB: National Research Centre for Banana, Trichi (d) TNAU: Tamil Nadu Agricultural University, Coimbatore (e) TNV&ASU: Tamil Nadu Veterinary and Animal Sciences University, Madhavaram, Chennai: (f) TNFU-Tamil Nadu Fisheries University-Nagapattinam; AICRP- (1) on cotton-Coimbatore

State	Andhra	Prade	sh										
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.				_									
1.	CTRI			•	ANGRAU	-			•	23	0	1	13
2.	IIOPR				SVVU								
3.					YSRHU								

(a) CTRI: Central Tobacco Research Institute, Rajahmundry (b) IIOPR: Indian Institute of Oil Palm Research, Pedavegi, West Godawari (c) ANGRAU:-Acharya NG Ranga Agricultural University-Rajendranagar (d) SVVU: Sri Venkateswara Veterinary University, Tirupati, Chittoor, (e) Y.S.R. Horticultural University, Venkataramnagudem, Tadepalli, West Godavari,: Network project-on (1) tobacco –Rajahmundry

Stat	te Telengana	a											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA C	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	NAARM		NRCM	DPR	PJTSAU				1	14	6	0	1
2.	IIRR				SKLTSHU								
3.	IIOR				PVNRTSUVAFS								
4.	IIMR												
5.	CRIDA												

(a) NAARM: National Academy of Agricultural Research Management, Hyderabad (b) IIRR: Indian Institute of Rice Research, Hyderabad (c) IIOR: Indian Institute of Oilseeds Research, Hyderabad (d) IIMR: Indian Institute of Millets Research, Hyderabad; (e) CRIDA-Central Research Institute for Dryland Agriculture, Hyderabad (f) NRCM: National Research Centre on Meat (Hyderabad): (g) DPR: Directorate of Poultry Research (Hyderabad) (h) PJTSAU: Professor Jayashankar Telangana State Agricultural University-Hyderabad; (i) SKLTSHU- Sri Konda Laxman Telangana State Horticultural University- Hyderabad. (j) PVNRTSUVAFS-Sri PV Narsimha Rao Telangana State University for Veterinary, Animal and Fisheries Sciences-Rajendranagar; ZPD (V): Hyderabad; AICRP;- (1) Sunfalower, safflower and castor – Hyderabad (2) rice-Hyderabad (3) Sorghum improvement-Hyderabad (4) Agrometeorology-Hyderabad (5) Dryland agriculture-Hyderabad (6) on poultry breeding-Hyderabad

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State	Orissa												
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
110.					-		,	,					
1.	CIFA				OUAT					33	2	0	7
2.	NRRI												
3.	CIWA												
4.	IIWM												

(a) CIFA: Central Institute of Freshwater Aquaculture, Bhubneshwar (b) NRRI: National Rice Research Institute (formerly CRRI), Cuttack (c) CIWA: Central Institute for Women in Agriculture, Bhubaneshwar; (d) IIWA-Indian Institute of Water Management-Bhubaneswar (e) OUAT: Orissa Univ. of Agriculture and Technology, Siripur, Bhubaneswar; AICRP: on (1) Irrigation water management - Bhubaneswar (2) home science-Bhubaneswar

State	e West Beng	gal											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	CIFRI				BCKV		VB		1	18	0	1	14
2.	CRIJAF				UBKV								
3.	NIRJAFT				WBUA&FS								

CIFRI: Central Inland Fisheries Research Institute, Barrackpore (b) CRIJAF: Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata (c) NIRJAFT: National Institute of Research on Jute and Allied Fibre Technology, Kolkata (d) BCKV: Bidhan Chandra Krishi Viswavidyalaya-Nadia (e) UBKV: Uttar Banga Krishi Viswavidyalaya-Pundibari (f) WBUA&FS: West Bengal University of Animal and Fishery Sciences, Kolkata (g) VB: Vishwa Bharti University, Shantiniketan (h) ZPD(II):Salt Lake, Kolkata: Network project-on (1) jute and allied fibres-Barrackpore

State	Sikkim												
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	NOFRI		NRCO	-					-	4	0	0	1

(a) NOFRI -National Organic Farming Research Institute-Gangtok; (b) NRCO: National Research Centre on Orchids (Pakyong)

State	Bihar												
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	ICAR-RCER		NRCIF		BAU			RAU		38	0	0	5
2.			NRCL										

(a) ICAR-RCER: ICAR Research Complex for Eastern Region, Patna;(b) NRCIF-National Research Centre on Integrated Farming-Motihari (c) NRCL: National Research Centre for Litchi (Muzaffarpur) (d): BAU: Bihar Agricultural University, Bhagalpur (e) RAU: Rajendra Agricultural University, Pusa, Samastipur

State	Jharkhan	d											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	IIAB				BAU					24	0	2	3
2.	IINRG												
3.	IARI												

(a) IIAB: Indian Institute of Agricultural Biotechnology, Ranchi (b) IINRG: Indian Institute of Natural Resins and Gums, Ranchi ;(c) ICAR- IARI-Indian Agricultural Research Institute- Hazaribag (d) BAU: Birsa Agricultural University-Ranchi: Network project-on (1) conservation of lac insect genetic resources-Ranchi (2) harvesting, processing and value addition to natural resins and gums- Ranchi

Stat	e Uttar l	Pradesh											
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	CARI	NBAIMO			CSAUA&T	IVRI	BHU	RLB CAU	1	68	12	7	6
2.	CISTH	NBFGR			NDUA&T	SHIAT&S	AMU						
3.	IGFRI				SVBPUA&T								
4.	IIPR				UPPDDUPCVVV								
5.	IISR				BUA&T								
6.	IIVR												
7.	CIRC												
8.	CIRG												
9.	IIFSR												
10.	IVRI												
11.	CARI												
	IISS	7 . 1 A .	,		T die T	(1) CICTU					TT .: :		

(a) CARI: Central Avian Research Institute, Izatnagar (b) CISTH: Central Institute of Sub Tropical Horticulture, Lucknow (c) IGFRI: Indian Grassland and Fodder Research Institute, Jhansi (d) IIPR: Indian Institute of Pulses Research, Kanpur (e) IISR: Indian Institute of Sugarcane Research, Lucknow (f) IIVR: Indian Institute of Vegetable Research, Varanasi (g) CIRC: Central Institute for Research on Cattle, Meerut (h) CIRG: Central Institute for Research on Goats, Makhdum (i) IIFSR: Indian Institute of Farming Systems Research, Modipuram (j) ICAR- IVRI: Indian Veterinary Research Institute, Izatnagar; (k) CARI-Central Agro-forestry Research Institute-Jhansi, (l) IISS-Indian Institute of Seed Science-Mau (m)NBAIMO: National Bureau of Agriculturally Important Micro Organisms (Mau Nath Bhanjan); (n) NBFGR: National Bureau of Fish Genetic Resources (Lucknow) (o) CSAUA&T:-Chandra Shekar Azad University of Agriculture &Technology—Kanpur (p) NDUA&T: Narendra Deva University of Agriculture and Technology-Kumarganj, Faizabad (q) SVBPUA&T: Sardar Vallabh Bhai Patel Univ of Agriculture and Technology, Modipuram, Meerut (r) UPPDDUPCVVV: UP Pandit Deen Dayal Upadhaya Pashu Chikitsa Vigyan Vishwa Vidhyalaya Evam Go Anusandhan Sansthan, Mathura (s)BUA&T-Banda University of Agriculture and Technology-Banda (t) IVRI: Indian Veterinary Research Institute, Izatnagar; (u) SHIAT&S-Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad; (v) BHU: Banaras Hindu University, Varanasi,(w) AMU:Aligarh Muslim University, Aligarh (x) RLBCAU: Rani Lakshmi Bai Central Agricultural University, Jhansi (y) ZPD (IV): Kanpur; AICRP: on (1)chickpea-Kanpur (2) mullarp-Kanpur (3) pigeonpea-Kanpur (4) Vegetable crops-Varanasi (5) linseed-Kanpur (6) NSP (crops)-Varanasi (7) sugar -Lucknow (8) forage crops-Jhansi (9) agroforestry-Jhansi (10) Integrated farming systems -Modipuram (11) goat improvement-Makhdoom (12) on cattle-Meerut: Network project-on (1) arid legumes-Kanpur (2)Organic farming-Modipuram, Meerut (3) gastro intestinal parasitism-Izatnagar (4) Haemorragic septicaemia- Izatnagar (5) blue tongue disease- Izatnagar (6) Neonatal mortality in farm animals-Izatnagar (7) Diagnostic imaging and management of surgical conditions in animals- Izatnagar

State U	ttarakhand												
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	ICAR-IISWC			DCWFR	GBPUA&T					13	1	0	4
2.	VPKAS			PDFMD	VCSGUUH&F								

(a) ICAR-IISWC: ICAR-Indian Institute of Soil and Water Conservation, Dehradun (b)VPKAS: Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora (c) DCWFR: Directorate of Cold Water Fisheries Research (Bhimtal, Nainital), Uttarakhand (d) PDFMD: Project Directorate on Foot and Mouth Disease, Mukteshwar; (e) GBPUA&T:- Govind Ballabh Pant University of Agriculture and Technology-Pantnagar; (f) VCSGUUH&F –VCSG-Uttarakhand University of Horticulture and Forestry-Bharsar.; AICRP-on (1) foot and mouth disease-Mukteshwar

HIRALAL JANA

State H	imachal l	Pradesh											
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	CPRI	,		DMR	CSK HPKV					12	2	0	6
2.					DYSPUH&F								

(a) CPRI: Central Potato Research Institute, Shimla (b) DMR: Directorate of Mushroom Research -Solan (c) CSK HPKV: Chaudhary Sarwan Kumar Himachal Pradesh Krishi Viswavidyalaya-Palampur (d) DYSPUH&F: Dr Yashwant Singh Parmar Univ. of Horticulture and Forestry, Solan, AICRP: on (1) mushroom-Solan (2) potato –Shimla

State	Madhya Pi	radesh											
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	CIAE	•		DWSR	RVRSKVV		-		1	47	10	1	5
2.	IISS				JNKV								
3.	IISR				NDPVSU								
4.	NIHSAD		_										

(a) CIAE: Central Institute of Agricultural Engineering, Bhopal (b) IISS: Indian Institute of Soil Sciences, Bhopal; (c) IISR-Indian Institute of Soybean Research-Indore; (d) NIHSAD-National Institute of High Security Animal Diseases, Bhopal (e) DWSR: Directorate of Weed Science Research (Jabalpur) (e)RVRSKVV: Rajmata VRS Krishi Vishwavidyalaya, Gwalior (f) JNKV: Jawaharlal Nehru Krishi Vishwavidyalaya, Krishi Nagar, Jabalpur (g) NDPVSU -Nanaji Deshmukh Pashu Veterinary Science University-Jabalpur. (h) ZPD (VII): Jabalpur; AICRP: on (1) sesame and niger –Jabalpur (2)Ergonomics and safety in agriculture-Bhopal (3) farm implements and machinery –Bhopal (4) energy in agriculture and agro-based-industries –Bhopal (5) Increased utilization of animal energy with enhanced system efficiency-Bhopal (6) long-term fertilizer experiments –Bhopal (7) soil test with crop response-Bhopal (8) micro and secondary nutrients and pollutant elements in soils and plants-Bhopal (9) soybean-Indore (10) weed management-Jabalpur: Network project-on (1) Soil biodiversity-biofertilizers-Bhopal;

State	Chattisga	rh											
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	NIBSM		,		IGKV			,		20	0	0	0
2.					CKU								

(a) NBSMI: National Institute of Biotic Stress Management, Raipur (b)IGKV: Indira Gandhi Krishi Vishwavidyalaya, Krishak Nagar, Raipur (c) CKU-Chhatisgarh Kamdhenu University-Durg

State	Assam												
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.			NRCP		AAU					25	2	0	4

(a) NRCP: National Research Centre on Pig (Guwahati) (b) AAU: Assam Agricultural University-Jorhat: AICRP-(1) on pig-Guwahati (2) mega seed project of pig-Guwahati

State	Arunacl	hal Pra	desh										
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.			NRCY							14	0	0	1

NRCY: National Research Centre on Yak (Dirang)

State	e Nagalan	d											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.			NRCM				NU			9	0	0	2

(a) NRCM: National Research Centre on Mithun (Medziphema) (b) NU: Nagaland University, Mediziphema

State	e Manipu	r											
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.			*	•		•	•	CAU		9	0	0	1

CAU: Central Agricultural University-Imphal

State	Mizorai	n											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.	•	•	•	·		•			-				
I.										Ü	U	U	1

State	Tripur	a											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICR	NP	STICARI
No.											P		
1.	•	•	•	•	•		•	•	•	4	0	0	1

State	e Meghalaya												
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	ICAR-RCNEHR	<u> </u>							1	5	0	0	2

(a) ICAR-RCNEHR: ICAR Research Complex for NEH Region, Barapani (b) ZPD (III): Umian

Cha	ndigarh (U	T)											
Sr.	ICARI	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	•	•	•	-	,					3	0	0	1

Delhi	i (UT)												
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.													
1.	IASRI	NBPGR	NCIPM	DKMA		IARI				1	4	1	1
2.	IARI		NRCPB										
3.	NIAEPR												

(a)IASRI: Indian Agricultural Statistics Research Institute, New Delhi (b) ICAR-IARI: Indian Agricultural Research Institute, Pusa (c) NIAEPR: National Institute for Agril. Economics and Policy Research (New Delhi) (d) NBPGR: National Bureau of Plant Genetic Resources (New Delhi) (e)NCIPM: National Centre for Integrated Pest Management (New Delhi) (f) NRCPB: National Research Centre on Plant Biotechnology (New Delhi) (g) DKMA: Directorate of Knowledge Management in Agriculture (New Delhi) (h) IARI: Indian Agricultural Research Institute, Pusa, New Delhi: AICRP-on (1) Honey bees and pollinators-Pusa, New Delhi (2) nematodes in cropping system- New Delhi (3) maize- New Delhi (4) potential crops- New Delhi; Network project (NP)-on (1) pesticides residues-New Delhi

Dam	an and D	iu (UT	")										
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.										,	0	0	0

Dadı	ra and N	lagar l	Haveli (UT)									
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.	•							•			0	0	0

Pond	icherry (U	T)											
Sr.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
No.	6	,											
1.										3	U	U	U

Laksl	hadeep (U'	Γ)											
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI
1.										1	0	0	1

And	Andaman and Nicobar (UT)													
Sr. No.	Instt.	NB	NRC	PDs	SAU	DU	CUFA	CAU	ZPD	KVK	AICRP	NP	STICARI	
1.	CIARI									3	0	0	0	

CIARI: Central Island Agricultural Research Institute, Bathua Basthi, Port Blair

organization for conducting and coordinating agricultural research, has been at the forefront to lead these agricultural revolutions in the country, making India not only selfsufficient in food but also with surplus. As a forward looking organization, fully realizing the emerging complex challenges, ICAR has set a vision to attain "Rainbow Revolution" covering the entire spectrum of activities in agriculture which will make India a developed nation free of poverty, hunger, malnutrition, and environmental safety. Towards this goal, it is operating two prestigious and mega projects viz. (1) National Agricultural Technology Project (NATP) with emphasis on production system research, organization and management reforms and innovations in technology dissemination and (2) Agricultural Human Resource Development Project (AHRDP) with emphasis on improving the quality of agricultural education. Therefore, role of ICAR in Indian agricultural development is noteworthy, praiseworthy, remarkable and unquestionable. Though, now-a-days agriculture is losing its' quite luster due to industrial sector and service sector's speedy development. Everybody (mainly youth) is aspiring and chasing towards these two speedy development sectors forgetting the importance of agriculture in their life, their families life, their country's life as well as whole world's life. But, it is true that even one day's food shortage may bring disaster in country as well as whole world. Thus to push the new generation into realization of importance of agriculture in their life, few of motivational measures are to be taken. Here are the few motivational measures those needs ICAR's consideration and implementation, so the role of ICAR will be more meaningful in nation building. (1) Shifting of emphasis is needed from production orientation to marketing

orientation: From first agricultural development programme, Intensive agricultural District Programme (IADP) in 1960 to nearly latest agricultural development programme, National Agricultural Innovation Programme (NAIP) in 2005 mainly emphasis was given on production enhancement. It is true that crop's production level has reached its' 80 per cent or above level by the contribution of scientists derivation of HYV and highbred varieties and farmers' hard efforts of cultivation. Above this level, if we try to enhance production that will not be so profitable compare to catching recent day's marketing opportunities. In respect of marketing still we are in 15-20 per cent level, therefore, we have ample opportunities to gain profit if we provide much emphasis on marketing. West Bengal has huge production of rice, potato, vegetables and inland fishes; U.P., Punjab and Haryana have huge production of wheat, Himachal Pradesh has huge production of apple, Punjab, Gujarat and Maharashtra have huge production of cotton; Kerala, Tamil Nadu and A & N have huge production of coconut etc. Our mechanism will be to find out the world places where the demand of these products are prevailing and arrange a suitable and durable export system. In this respect, ICAR will introduce IAMRI (Indian Agricultural Marketing Research Institute) which is really need of the hour. Due to privatization, liberalization and globalization we have ample opportunity to connect village market to global market and exploit the marketing opportunities worldwide through quality products and in this respect market information and market intelligence are two strong pillars. (2) Emphasis should be given on products diversification and value addition. (3) ICAR institutes should be established in well-distributed manner to all states and union territories, it should be done on

logical basis so, the people of every corner of our country get a touch of agricultural development equally. Another thing is that ICAR not only indicates agriculture development but also agricultural administration. Therefore, well distribution of ICAR institutions and other agricultural entities on logical basis should bring sound agricultural administration. (4) Efforts of ICAR are needed to dignify agriculture: Recent days' youth are not interested in agriculture and they consider it is as a neglected and disrespected occupation. To change their outlook and attitude, there is need to glorify agriculture using mass media and other awareness programmes. How much mother is important in a family it is realized by progenies when mother does not cook food, similarly how much agriculture is important it is realized when there is no breakfast, no lunch or no dinner in a house due to scarcity of food items or non-availability of food items? Whatever the role played by mother in a house, the same role is played by farmers in our country. Farmers are the mothers of our country, especially in our country where agriculture is base of our economy, life, livelihood and culture. (5) In a house-four walls and a ceiling (roof) are there. The base holds the people, carrier of people. Four walls and ceiling protect the people inside house from outer disturbances i.e. sunlight, storm, rainfall etc. Hence four walls and ceiling are the soldiers of our country and base or platform is the farmers who carry the responsibility to provide food them to sustain their life. In actual sense, farmers are the real saver of life. In protection line, Paramveer Chakra is provided to soldier (s) who laid down (sacrifice) their life for protection of countrymen, but in field of agriculture, there is no such type of prestigious award though the farmers are the real saver of life of countrymen. Therefore, it is my personal request to ICAR to introduce a prestigious award such as "Param Kisan Chakra" in agriculture for the farmers who are laid downing (sacrificing) their life's 70 years in active agriculture. Criteria will be -(1) Age will be 88+ years (2) Farmers will have 70 years of service experience in active agriculture after the age of universal franchise (18 years). (3) Age of 88⁺ years, he/ she will have minimum 1 acre of cultivable land in his/ her own name. (4) He/she will be a working farmer and physically fit at the time of receiving the prize (5) He/ she will be respectable person in his/her locality. (6) Prestige, dignity and respect and no doubt economic coverage are the inspiration of any person or personnel. To attract the intellectuals in field of agriculture for agricultural development of our country, ICAR should introduce a award on excellence performance in agriculture as "Indian Nobel on Agriculture (INA). It will really boost the morale of agricultural personnel and will act as inspiration which is the driving force behind any noteworthy activity. According to Mother Teresa, "Man is not hungry only for bread and butter but for love and recognition". (7) Soldiers are fighting with invaders, intruders and enemies to protect our country and maintain peace in society, similarly farmers are working in field and producing food for everybody of our country so, the people are living peacefully in society. Hence, farmers are also soldiers. To enhance the farmers respect level, it is my proposal to ICAR to announce farmers of our country as "Krisi Sainik" or "Krishisena" (Agricultural Soldiers). Both the entities of our country are very important, therefore thethen Prime Minister Lal Bahadur Shastri strongly uttered "Jay Jawan, Jay Kisan". (8) The Nobel prize is widely regarded as the most prestigious award available in the fields of literature, medicine, physics, chemistry, peace and economics. Alfred Bernhard Nobel (1833A.D.-1896A.D.) was the founder of the Nobel Prize for the greatest benefit to mankind. During his lifetime -in field of agriculture there was a balance between demand and supply of agricultural products due to less world population. But, in time respect, now-a-days, world food crisis has occupied the prime position due to pressure of population (more than 700 crores) among all existing problems in the world. If Alfred Nobel would born in recent time, he obviously included this field, field of agriculture in his prize list. Now-a-days, providing better agricultural services to the people is really the greatest benefit to mankind. Hence, it is my heartfelt suggestion to ICAR (as one of the largest national agricultural systems in the world) to place a paper in favour of agriculture for Nobel Prize to Swedish Academy. Change is the rule of nature. As an entity (human being) of nature why we can not change the rule? It must be convinced to Swedish Academy.

"The future of our food security system will depend upon the scientific and policy support we extend to our farming community who constitute one-fourth of the global farming community"-Prof. M.S. Swaminathan.