



**Results-Framework Document
(RFD)
for
Indian Agricultural Research Institute
(2014-2015)**

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Section -1: Vision, Mission, Objectives and Functions

Vision

Generation and extension of innovative technologies to achieve food, nutrition and livelihood security with sustainable agriculture, and economic prosperity along with quality human resource development under dynamic constrained physical and economic environment in the country.

Mission

The primary mission of the Institute is to explore new frontiers of science and knowledge and develop human resource to provide leadership to the country in technology development and policy guidance resulting in a vibrant, responsive and resilient agriculture which must be effectively productive, eco-friendly, sustainable, economically profitable and socially equitable.

Objectives

1. Germplasm enhancement and development of improved cultivars
2. Development and identification of appropriate crop production, protection and value addition technologies
3. Technology dissemination, capacity building and policy research
4. Excellence in human resources development

Functions

To function on the premise that research is the engine of science-led agricultural growth. To follow the path of scientific research, technology development and extension and human resource development leading to the realization of new paradigms for achieving the congruence among enhanced productivity, sustainability, ecological and environmental security and socio-economic equity.

Section 2: *Inter se* priorities among Key Objectives, Success Indicators and Targets

S.No	Objectives	Weight (%)	Actions	Success Indicators	Unit	Weight (%)	Target/Criteria value				
							Excellent	Very Good	Good	Fair	Poor
							100%	90%	80%	70%	60%
1	Germplasm enhancement and development of improved cultivars	30	Evaluation of genetic material	Breeding lines and germplasm evaluated	Number	5	30,000	25,000	20,000	15,000	10,000
				High performance lines registered/published	Number	3	258	215	172	129	86
			Development of improved cultivars	Entries contributed to AICRP multi-location trial	Number	6	246	205	164	123	82
				Varieties identified for release	Number	6	22	18	14	10	6
			Seed production programme	Breeder seed produced	Weight MT	5	600	500	400	300	200
				Truthfully labeled seed produced	Weight MT	3	630	525	420	315	210
Quality planting material produced	Number	2		50,400	42,000	33,600	25,200	16,800			
2	Development and identification of appropriate crop production, protection and value addition technologies	25	Development of technologies for enhancing resource use efficiency	NRM technologies validated/published	Number	8	8	7	6	5	4
			Development of strategies for biotic/abiotic stress management	Novel molecules, genes and biological formulations developed and or tested	Number	8	24	20	16	12	8
			Development of technologies for value addition	Novel processes/ products developed for value addition	Number	5	6	5	4	3	2
			Commercialization of technologies	Technologies commercialized	Number	4	14	12	10	8	6
3	Technology dissemination, capacity building and policy research	15	Field demonstrations and agro-advisories	Field demonstrations conducted and agro-advisories issued	Number	7	5,160	4,300	3,440	2,580	1,720
			Training of farmers/ Extension officials	Trainings organized	Number	6	144	120	96	72	48
			Policy analysis	Policy papers published	Number	2	3	2	1	1	1
4	Excellence in human resources development	10	Post Graduate Teaching and AHRD Trainings	Degrees awarded	Number	5	216	180	144	108	72
				No. of trainings conducted	Number	5	38	32	26	20	14

*	Publication/Documentation	5	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	3	450	375	300	225	150
			Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	2	30.06.2014	02.07.2014	04.07.2014	07.07.2014	09.07.2014
*	Fiscal resource management	2	Utilization of released plan fund	Plan fund utilized	%	2	98	96	94	92	90
*	Efficient Functioning of the RFD System	3	Timely submission of Draft RFD for 2014-2015 for Approval	On-time submission	Date	2	May 15, 2014	May 16, 2014	May 19, 2014	May 20, 2014	May 21, 2014
			Timely submission of Results for 2013-2014	On-time submission	Date	1	May 1 2014	May 2 2014	May 5 2014	May 6 2014	May 7 2014
*	Enhanced Transparency / Improved Service delivery of Ministry/Department	3	Rating from Independent Audit of implementation of Citizens' / Clients' Charter (CCC)	Degree of implementation of commitments in CCC	%	2	100	95	90	85	80
			Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	1	100	95	90	85	80
*	Administrative Reforms	7	Update organizational strategy to align with revised priorities	Date	Date	2	Nov.1 2014	Nov.2 2014	Nov.3 2014	Nov.4 2014	Nov.5 2014
			Implementation of agreed milestones of approved Mitigating Strategies for Reduction of potential risk of corruption (MSC).	% of implementation	%	1	100	90	80	70	60
			Implementation of agreed milestones for ISO 9001	% of implementation	%	2	100	95	90	85	80
			Implementation of agreed milestones of approved Innovation Action Plans (IAPs).	% of implementation	%	2	100	90	80	70	60

Section 3: Trend Values of the Success Indicators

S.No	Objectives	Actions	Success Indicators	Unit	Actual Value for FY 12/13	Actual Value for FY 13/14	Target Value for FY14/15	Projected Value for FY 15/16	Projected Value for FY 16/17
1	Germplasm enhancement and development of improved cultivars	Evaluation of genetic material	Breeding lines and germplasm evaluated	Number	15000	22495	25,000	26,000	27,000
			High performance lines registered/published	Number	203	207	215	225	235
		Development of improved cultivars	Entries contributed to AICRP multi-location trial	Number	180	200	205	210	215
			Varieties identified for release	Number	20	20	18	19	20
		Seed production programme	Breeder seed produced	Weight MT	450	609	500	505	510
			Truthfully labeled seed produced	Weight MT	1013	582	525	530	535
			Quality planting material produced	Number	65000	46130	42,000	43,000	44,000
2	Development and identification of appropriate crop production, protection and value addition technologies	Development of technologies for enhancing resource use efficiency	NRM technologies validated/published	Number	6	7	7	8	9
		Development of strategies for biotic/abiotic stress management	Novel molecules, genes and biological formulations developed and or tested	Number	16	92	20	22	24
		Development of technologies for value addition	Novel processes/ technologies/ products developed for value addition	Number	4	5	5	6	7
		Commercialization of technologies	Technologies commercialized	Number	15	41	12	13	14
3	Technology dissemination, capacity building and policy research	Field demonstrations and agro-advisories	Field demonstrations conducted and agro-advisories issued	Number	5000	10657	4,300	4,500	4,700
		Training of farmers/ Extension officials	Trainings organized	Number	70	111	120	125	130
		Policy analysis	Policy papers published	Number	2	2	2	2	2
4	Excellence in human resources development	Post Graduate Teaching and AHRD Trainings	Degrees awarded	Number	208	175	180	185	190
			No. of trainings conducted	Number	22	27	32	35	38

*	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	Number	423	545	375	390	405
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	-	-	02.07.2014	-	-
*	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	99.91	98.06	96	96	96
*	Efficient Functioning of the RFD System	Timely submission of Draft RFD for 2014-2015 for Approval	On-time submission	Date	-	-	May 16, 2014	-	-
		Timely submission of Results for 2013-2014	On-time submission	Date	-	-	May 2 2014	-	-
*	Enhanced Transparency / Improved Service delivery of Ministry/Department	Rating from Independent Audit of implementation of Citizens' / Clients' Charter (CCC)	Degree of implementation of commitments in CCC	%	-	-	95	-	-
		Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	-	-	95	-	-
*	Administrative Reforms	Update organizational strategy to align with revised priorities	Date	Date	-	-	Nov.2 2014	-	-
		Implementation of agreed milestones of approved Mitigating Strategies for Reduction of potential risk of corruption (MSC).	% of implementation	%	-	-	90	-	-
		Implementation of agreed milestones for ISO 9001	% of implementation	%	-	-	95	-	-
		Implementation of milestones of approved Innovation Action Plans (IAPs).	% of implementation	%	-	-	90	-	-

Section 4 (a): Acronyms

S. No.	Acronym	Description
1.	AICRP	All India Coordinated Research Project
2.	AHRD	Agricultural Human Resource Development
3.	SMS	Short Messages Service
4.	DD	Door Darshan
5.	MT	Metric Tonne
6.	NRM	Natural Resources Management
7.	M.Sc.	Master of Science
8.	Ph.D.	Doctor of Philosophy
9.	IARI	Indian Agricultural Research Institute
10.	ICAR	Indian Council of Agricultural Research
11.	SAUs	State Agricultural Universities
12.	DAC	Department of Agriculture and Cooperation
13.	CGIAR	Consultative Group on International Agricultural Research
14.	APEDA	Agricultural & Processed Food Products Export Development Authority
15.	UPSC	Union Public Service Commission

Section 4(b): Description and definition of success indicators and proposed measurement methodology

S. No.	Success Indicator	Description	Definition	Measurement	General Comments
1	Breeding lines and germplasm evaluated	Source material for the improved varieties to be evaluated	Material generated from the basic germplasm	Number of breeding lines evaluated	It depends on the leadership of scientists associated and collaboration
2	High performance lines registered/ published	Registration/publishing breeding lines for high performance	Breeding lines having traits for high yield and biotic and abiotic stresses that can be exploited for development of improved crop varieties	Number of such lines registered/ published	
3	Entries contributed to AICRP multi-location trial	Breeding lines of field and horticultural crops tested at AICRP multilocational trials against popular cultivated varieties in that region for identification of new varieties for release	Best performing entries are identified as new variety for release	Number of such varieties identified	Number may vary depending upon the material available from the evaluated lines
4	Varieties identified for release	Breeding lines of field and horticultural crops tested at AICRP multilocational trials and identified as new varieties for release during annual workshop	Breeding lines identified for release for superior traits by AICRP Workshop	Number of varieties identified	Number may vary depending upon timely evaluation and fair assessment
5	Breeder seed produced	Produce from nucleus and breeder seed is the starting point in seed chain of producing quality seeds for farmers	Breeder seed is the starting point in seed chain which is multiplied/converted in to foundation/certified seed	Quantity produced (MT)	Quantity may vary as per indent received, availability of land and other resources/ facilities
6	Truthfully labeled seed produced	Truthfully labeled seed are those seeds that are sold to the farmers by showing quality parameter without certification	The seeds which are sold by farmers or companies by showing quality parameter through their label without certification are known as truthful seeds. These seeds don't need permission from government, but seed law regulates the quality parameters mentioned in the label	Quantity produced (MT)	Quantity may vary as per indent received, availability of land and other resources/ facilities
7	Quality planting material produced	Production of quality planting material of fruit crops	Saplings of fruit plants	Number	
8	NRM technologies	Validation of technologies that	Natural resources are chemical fertilizers,	Number	

	validated/published	enable crops to use resources efficiently for increasing production	water, and pesticides etc. that are essential for crops to grow		
9	Novel molecules, genes and biological formulations developed and/ or tested	Development and testing of novel molecules, biological formulations and isolation & incorporation of genes for biotic/abiotic stress management	Chemical/biochemical compounds that control insect pests and diseases and increase production. Genes are parts of chromosomes that confer resistance for biotic and abiotic stresses in crop plants	Number	
10	Novel processes/ products developed for value addition	Technologies that add value to agricultural produce	Process by which low cost produce can be converted in high value product	Number	
11	Technologies commercialized	Commercialization of technologies for the benefit of the farmers	Transfer of technology to the stakeholders through commercialization process	Number	
12	Field demonstrations conducted and agro-advisories issued	Trials and demonstrations conducted for technology testing and proving the technology potential production and advisories given to the farmers through direct communication/ DD/Radio/ newspapers/SMSs	On-farm trials aims at testing new technologies under farmers condition and management, by using farmers own practice as control. Frontline demonstration is the field demonstration conducted on farmer's field under the close supervision of scientists. Agro-advisories are issued by various means of communication to the farmers for good agricultural practices, advance forewarnings of weather conditions	Number	Number may vary depending upon the contribution of the volunteer organizations
13	Trainings organized	Capacity building activities related to knowledge and skill improvement/ development programmes conducted for farmers,rural youth and extension personnel	Training is a process of acquisition of new skills, attitude and knowledge in the context of preparing for entry into a vocation or improving productivity in an organization or enterprise	Number	
14	Policy papers published	Policy papers published in peer reviewed journals	The purpose of policy papers is to help the stakeholders, policy makers and planners for bringing out overall changes in agricultural system	Number	Number may vary according to the aptitude of scientists and number of externally funded projects received
15	Degrees awarded	M.Sc. and Ph.D. degrees are awarded to the students	Master and Doctorate degrees	Number	Number may vary based on dedication and withdrawal of students
16	No. of trainings conducted	Advanced AHRD trainings provided to the scientist/researcher of ICAR Institutes/SAUs	A process of acquiring new knowledge for improvement in research, teaching and extension	Number	Number of trainings may vary as per the availability of fund

Section 5: Specific performance requirements from other departments that are critical for delivering agreed results

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this organisation	What happens if your requirement is not met
Central Government		Departments	Department of Agriculture & Cooperation	Breeder seed produced	Indent for quantity of breeder seed	Variety-wise indent for breeder seed	Quantity of breeder seed produced as per indent	Production of less or more quantity of breeder seed

Section 6: Outcome/Impact of activities of Department/Ministry

S. No.	Out Come/Impact	Jointly responsible for influencing this outcome / impact with the following organization(s)/department (s)/ministry(ies)	Success Indicator	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1	Impact on adoption of IARI crop varieties at national and international level	DAC, Planning Commission, , Ministry of Environment & Forests, CGIAR Institutes APEDA, Ministry of Commerce, Basmati rice exporting companies	a) Wheat*	%	27.5	23	22	22	23
			b) Rice (Basmati belt)	%	75	76	77	78	79
			c) Share of IARI Basmati rice varieties in export	%	75	75	75	75	77
			d) Mustard*	%	31	35	30	30	32
			e) Pulses*	%	9	9	9	9	10
2	Impact on farmers income/ resources/ employment due to IARI technologies	DAC, Ministry of Panchayati Raj, Ministry of Rural Development and State Governments, SAUs, Volunteer organizations	Increase in farmers income	%	20	22	23	25	27
			Improved rural livelihood and buildup of social capital	Number (Lakhs)	1.1	1.2	1.3	1.4	1.45
			Conservation of resources and environmental quality	%	6	8	9	10	11
3	Achievement of students and faculty at National/International level	SAUs, CGIAR Institutes, Foreign Universities, UPSC	a) Employments to IARI graduates	%	90	90	90	90	90
			b) Awards & recognitions	Number	86	60	60	60	65

* Percent area estimated based on breeders seed indent