



**Results-Framework Document
(RFD)
for
Indian Agricultural Research Institute
(2013-2014)**

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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	35	Evaluation of genetic material	Breeding lines and germplasm evaluated	Number	6	18700	16850	15000	13000	11200
				Lines identified for unique traits	Number	4	155	140	120	110	90
			Development of improved cultivars	Entries contributed to AICRP multi-location trial	Number	8	122	110	100	85	70
				Varieties identified for release	Number	7	16	15	13	11	10
			Seed production programme	Breeder seed produced	Weight MT	5	830	750	670	580	500
				Truthfully labeled seed produced	Weight MT	3	1440	1300	1160	1010	870
Quality planting material produced	Number	2		33300	30,000	26600	23300	20000			
2	Development and identification of appropriate crop production, protection and value addition technologies	25	Development of technologies for enhancing resource use efficiency	Technologies developed and validated	Number	8	7	6	5	4	3
			Development of strategies for biotic/abiotic stress management	Novel molecules, genes and biological formulations developed and or tested	Number	8	22	20	18	16	13
			Development of technologies for value addition	Novel processes/ technologies/ products developed	Number	5	5	4	3	2	1
			Recommendation of technologies	Technologies recommended	Number	4	6	5	4	3	2
3	Technology dissemination, capacity building and policy research	19	Field demonstrations and agro-advisories	Field demonstrations conducted and agro-advisories issued	Number	8	6100	5500	4900	4300	3700
			Training of farmers/ Extension officials	Trainings organized	Number	8	90	80	70	60	55
			Policy analysis	Policy briefs/papers prepared	Number	3	3	2	1	0	0
4	Excellence in human resources development	10	Post Graduate Teaching and AHRD Trainings	Application: Admission ratio (Ph.D.)	Ratio	2	14:1	12.5:1	11.1:1	9.7:1	8.3:1
				Degrees awarded	Number	4	220	200	180	155	130
				No. of trainings conducted	Number	4	28	25	22	19	17

* Efficient Functioning of the RFD System	3	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	2	15/05/2013	16/05/2013	17/05/2013	20/05/2013	21/05/2013
		Timely submission of Results for RFD (2012-13)	On-time submission	Date	1	01/05/2013	02/05/2013	05/05/2013	06/05/2013	07/05/2013
* Administrative reforms	4	Implement ISO 9001 as per the approved action plan	% Implementation	%	2	100	95	90	85	80
		Prepare an action plan for Innovation	On-time submission	Date	2	30/07/2013	10/08/2013	20/08/2013	30/08/2013	10/09/2013
* Improving internal efficiency /responsiveness service delivery of Ministry /Department	4	Implementation of Sevottam	Independent Audit of Implementation of citizen's charter	%	2	100	95	90	85	80
			Independent Audit of Implementation of public grievances redressal system	%	2	100	95	90	85	80

Section 3:

Trend Values of the Success Indicators

S.No	Objectives	Actions	Success Indicators	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Targeted Value for FY 13/14	Projected Value for FY14/15	Projected Value for FY 15/16
1	Germplasm enhancement and development of improved cultivars	Evaluation of genetic material	Breeding lines and germplasm evaluated	Number	16215	15000	16850	18800	20700
			Lines identified for unique traits	Number	100	120	140	200	220
		Development of improved cultivars	Entries contributed to AICRP multi-location trial	Number	112	180	110	112	115
			Varieties identified for release	Number	18	20	15	16	17
		Seed production programme	Breeder seed produced	Weight MT	320	450	750	860	990
			Truthfully labeled seed produced	Weight MT	960	1013	1300	1500	1700
Quality planting material produced	Number		45,000	65000	30,000	50,000	75,000		
2	Development and identification of appropriate crop production, protection and value addition technologies	Development of technologies for enhancing resource use efficiency	Technologies developed and validated	Number	5	6	6	7	8
			Development of strategies for biotic/abiotic stress management	Novel molecules, genes and biological formulations developed and or tested	Number	16	16	20	22
		Development of technologies for value addition	Novel processes/ technologies/ products developed	Number	2	4	4	5	6
		Recommendation of technologies	Technologies recommended	Number	5	5	5	6	6
3	Technology dissemination, capacity building and policy research	Field demonstrations and agro-advisories	Field demonstrations conducted and agro-advisories issued	Number	3742	5000	5500	6000	6500
		Training of farmers/ Extension officials	Trainings organized	Number	70	70	80	100	120
		Policy analysis	Policy briefs/papers prepared	Number	2	2	2	2	2
4	Excellence in human resources development	Post Graduate Teaching and AHRD Trainings	Applications: Admission ratio (Ph.D.)	Ratio	20:1	17:1	12.5:1	13:1	13.5:1
			Degrees awarded	Number	202	208	200	200	200
			No. of trainings conducted	Number	17	22	25	27	30

* Efficient Functioning of the RFD System	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	-	-	16/05/2013	-	-
	Timely submission of Results for RFD 2012-13	On-time submission	Date	-	-	02/05/13	-	-
* Administrative reforms	Implement ISO 9001 as per the approved action plan	% Implementation	%	-	-	95	-	-
	Prepare an action plan for Innovation	On-time submission	Date	-	-	10/08/2013	-	-
* Improving internal efficiency /responsiveness service delivery of Ministry /Department	Implementation of Sevottam	Independent Audit of Implementation of citizen's charter	%	-		95	-	-
		Independent Audit of Implementation of public grievances redressal system	%	-		95	-	-

Section 4:

Acronyms

S. No.	Acronym	Description
1.	AICRP	All India Coordinated Research Project
2.	AHRD	Agricultural Human Resource Development
3.	GAP	Good Agricultural Practices
4.	SMS	Short Messages Service
5.	DD	Door Darshan
6.	MT	Metric Tonne
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:

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	Lines identified for unique traits	Identification of breeding lines for special characteristics	Unique traits are the extra-ordinary traits in the plants that can be exploited for development of improved crop varieties	Number of such lines identified	
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	Technologies	Development of technologies that	Natural resources are chemical fertilizers,	Number	

	developed and validated	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/ technologies/ products developed	Technologies that add value to agricultural produce	Process by which low cost produce can be converted in high value product	Number	
11	Technologies recommended	Recommendation of technologies/GAPs to the farmers for increasing crop yield	Transfer of knowledge by subject matter specialists to the farming community for good farming practices	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 briefs/papers prepared	Policy briefs and policy papers prepared on various economic aspects	The purpose of policy briefs 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	Application: Admission ratio (Ph.D.)	Ratio of number of students applied for and selected for admission in Ph.D. course at IARI		Ratio	The ratio may vary depending upon number of applicants in a particular year
16	Degrees awarded	M.Sc. and Ph.D. degrees awarded to the students	Master and Doctorate degrees	Number	Number may vary based on dedication and withdrawal of students
17	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

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 organization

S. No.	Out Come/Impact of organization	Jointly responsible for influencing this outcome / impact with the following department (s)/ministry(ies)	Success Indicators	Unit	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
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 exporting companies	a) Wheat*	%	22.5	27.5	23	22	22
			b) Rice (Basmati belt)	%	70	75	76	77	78
			c) Share of IARI Basmati rice varieties in export	%	74	75	75	75	75
			d) Mustard*	%	30	31	35	30	30
			e) Pulses*	%	8	9	9	9	9
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	%	15	20	22	23	25
			Improved rural livelihood and buildup of social capital	Number (Lakhs)	1.0	1.1	1.2	1.3	1.4
			Conservation of resources and environmental quality	%	5	6	8	9	10
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	65	86	60	60	60

* Percent area estimated based on breeders seed indent