



# **Results Frame-work Document (RFD)**

**for**

**Central Avian Research Institute**

**(2014 - 2015)**

**Central Avian Research Institute**

**Izatnagar-243 122, UP**

**Website ID: [www.icar.org.in/cari/](http://www.icar.org.in/cari/)**

## **Section 1: Vision, Mission, Objectives and Functions**

### **Vision**

- Enhancing productivity & profitability of diversified poultry species for sustainable poultry farming for household nutritional security, income and employment generation.

### **Mission**

- Developing and popularizing appropriate poultry production and processing technologies in respect of diversified avian species for enhanced profitability.

### **Objectives**

- Improvement of diversified poultry germplasm
- Value-addition and quality assurance of poultry products
- Transfer of proven technologies

### **Functions**

- To address the matters relating to all aspects of research on different poultry species
- To address the matters related with education/training and human resources development on all aspects of poultry production.

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

S.No	Objective(s)	Weight	Action(s)	Success Indicator(s)	Unit	Weight	Target/Criteria Value				
							Excellent	Very Good	Good	Fair	Poor
							100%	90%	80%	70%	60%
1.	Improvement of diversified poultry germplasm	50	Production of improved stocks of diversified poultry species and analysis of candidate genes	Chicks of quail, duck, turkey, guinea fowl and indigenous chicken hatched	Number	18	22000	21000	20000	19000	18000
				Genes studied	Number	07	23	21	19	17	15
			Quality assessment of poultry feed and evaluation of newer feed resources and additives	Feed samples analyzed	Number	12	250	240	230	220	210
				Feed resources /additives evaluated	Number	8	7	6	5	4	3
			Development of technology/ methods for enhancing reproductive efficiency in diversified poultry species	Development of diluents for ducks semen	Number	5	2	1	0	0	0
2.	Value-addition and quality assurance of poultry products	15	Development of technologies for novel egg/functional poultry meat products	Technology for value-added products standardized	Number	8	2	1	0	0	0
			Evaluation of quality of poultry products	Samples analyzed for chemical/ microbiological contaminants	Number	7	290	280	270	260	230
3.	Transfer of proven technologies	15	Capacity building program and commercialization of technologies	Training program organized	Number	4	7	6	5	4	3
				Field demonstrations performed	Number	4	6	5	4	3	2
				Copies of software sold	Number	3	30	28	26	24	22
			Publications of extension materials	Publications released	Number	4	5	4	3	2	1

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	21	19	17	15	13
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	2	30.06.14	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 RFD system	3	Timely submission of draft RFD 2014-15 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 2013-14	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 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.	Objective(s)	Action(s)	Success Indicator(s)	Unit	Actual value for FY 2012-13	Actual value for 2013-14	Targeted value for FY 2014-15	Projected value for FY 2015-16	Projected value for FY 2016-17
1	Improvement of diversified poultry germplasm	Production of improved stocks of diversified poultry species and analysis of candidate genes	Chicks of quail, duck, turkey, guinea fowl and indigenous chicken hatched	Number	28224	27520	21000	22000	23000
			Genes studied	Number	27	22	21	23	25
		Quality assessment of poultry feed and evaluation of newer feed resources and additives	Feed samples analysed	Number	279	329	240	250	260
			Feed resources /additives evaluated	Number	3	6	6	6	6
		Development of technology/ methods for enhancing reproductive efficiency in diversified poultry species	Development of diluents for ducks semen	Number	-	-	1	1	1
2	Value-addition and quality assurance of poultry products	Development of technologies for novel egg/functional poultry meat products	Technology for value-added poultry products standardized	Number	1	2	1	1	1
		Evaluation of quality of poultry products	Samples analyzed for chemical/ microbiological contaminants	Number	315	338	280	290	300
3	Transfer of proven technologies	Capacity building program and commercialization of technologies	Training program organized	Number.	3	7	6	7	8
			Field demonstrations performed	Number	9	-	5	6	7
			Copies of software sold	Number	32	25	28	32	34
		Publications of extension materials	Publications released	Number	3	7	4	4	4

	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	17	17	19	21	23
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	30.6.13	30.6.14	02.07.2014	-	-
	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	98.55	99.24	96	97	97
	Efficient functioning of RFD	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 Redressal 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 Mitigation Strategies for Reduction of potential risk of corruption (MSC).	% of Implementation	%	-	-	90	-	-
		Implementation of agreed milestones for	% of implementation	%	-	-	95	-	-

		ISO 9001							
		Implementation of milestones of approved Innovation Action Plans (IAPs).	% of implementation	%	-	-	90	-	-

#### Section 4(a): Acronyms

S.No.	Acronym	Description
1.	A.H.	Animal Husbandry
2.	NGOs	Non-Governmental Organizations
3.	SAUs	State Agricultural Universities
4.	KVKs	Krishi Vigyan Kendras
5.	A.I.	Artificial Insemination
6.	CPDO	Central Poultry Development Organization
7.	SVUs	State Veterinary Universities

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

Sl. No.	Success Indicator	Description	Definition	Measurement	General Comments
1	Chicks of quail, duck, turkey, guinea fowl and indigenous chicken hatched	Improvement of diversified poultry species viz. quail, duck, turkey, guinea fowl and indigenous chicken is one of the important research activities of the institute. The well designed genetic selection programs are ongoing for each of these species under which the targeted number of chicks are being hatched for executing the selection.	To augment the poultry production/ productivity the thrust is being given for improving the diversified poultry species.	Number	The production potentials of diversified poultry species have not yet been fully explored for optimal exploitation; besides each of these species has its own unique attributes in terms of quality of products.
2	Genes studied	Number of genes studied will help in understanding the molecular mechanisms involved in various biological processes and thereby integrating molecular intervention for bringing desired improvement in the traits.	Understanding the pathways using molecular tools will help in augmenting productivity, immunity, tropical adaptability and quality.	Number	Molecular tools may help in developing finer tools for further improvement besides helping in breaking the yield barriers.
3	Feed samples analyzed	Analysis of feed samples will help in quality control of poultry feed for bringing the improvement in the production traits as well as welfare.	Mycotoxins and proximate analyses of feed sample are essential for quality assurance of feed.	Number	Good quality poultry feed is an essential component of poultry production. However, fungal growth contaminates feed affecting production. Analysis of feed samples from each batch is therefore routinely done.
4	Feed resources /additives evaluated	Identification of newer feed resources and additives will help in economizing feed cost and reduce the competition between human and poultry for feed ingredients.	Evaluation of feed resources/additives is essential for precision feeding.	Number	Feed cost accounts about 70% of total poultry production. Cost escalation and scarcity of feed ingredients necessitate identification of cheaper and alternate feed resources for least-cost feeding.
5	Development of diluents for ducks semen	Development of semen dilutor that may maintain good fertility is an important step for optimizing AI in duck so that faster improvement may be achieved through pedigreed breeding in genetic selection program in lesser space requirement	Developing good semen dilutor for AI technology is essentially required for augmenting duck production.	Number	Duck is next to chicken in number and production. For improving the duck populations, AI technology will play a vital role.
6	Technology for value-added products	Development of value added delicious and nutritious poultry egg and meat products will help in fetching more profits as well as providing	Production of value added shelf stable consumer acceptable poultry	Number	Poultry products are consumed by all the sections of the society as one of the choicest food. These products earn



	standardized	nutritional security.	products.		good dividend.
7	Samples analyzed for chemical/ microbiological contaminants	For production of quality poultry products; assessing the potent microbiological and chical contaminants is essential.	Product qualities assessment for producing safe poultry products.	Number	Various pathogens and contaminants may be encountered in poultry products which necessitates quality evaluation of products.
8	Training program organized	For dissemination of technical know-how of poultry production the training program for farmers and entrepreneurs is one the effective extension method.	Organizing the training programs is one of the proven methods.	Number	Trainings program are organized not only for farmers but also for field veterinarians and army personnel. State govt. and NGOs sponsored programs are also being organized.
9	Field demonstration performed	Field demonstration is performed to evaluate the performance of the poultry stocks developed in institute under field conditions	Field demonstration is one of the extension methods for evaluating and popularizing a product/technology as well as motivating the farmers for adoption.	Number	Various poultry stocks for commercial exploitation are being developed at the institute and evaluated at farmers' door so as to adjudge their performance under field conditions as well as to motivate the farmers for adopting the technology.
10	Copies of software sold	The MAKEFEED software developed at this institute is being commercialized for the benefit of entrepreneurs and poultry industry.	For easy computation of least cost ration for poultry the software has been developed.	Number	The computation of least cost ration using software is becoming popular in poultry industry. The development of MAKEFEED software is step forward in this direction.
11	Publications released	Extension materials like pamphlets, folders, booklets etc. on various aspects of poultry production are being published and released.	Printing and release of extension materials for benefits of farmers and entrepreneurs.	Number	Publication of extension materials in commoners' language and releasing it for benefit of farmers and popularization of poultry, is an established extension method.

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

Location Type	State	Organization Type	Organization Name	Relevant Success Indicator	What is your requirement from this organization	Justification for this requirement	Please quantify your requirement from this organization	What happens if your requirement is not met
State	All states of India	SAUs/research Institute/ State AH departments, KVKs and NGOs	SAUs/research Institute/ State AH department, KVKs and NGO	Chicks of quail, duck, turkey, guinea fowl and indigenous chicken hatched	Collaboration for dissemination of improved poultry germplasm	Various agencies located in different states of the country require improved poultry germplasm	Cannot be quantified at this stage and will depend on demand	The target value for supply of germplasm may not be achieved

**Section 6 : outcome /impact of activity of organization of Department/ ministry**

S. No.	Outcome /impact	Jointly responsible for influencing this outcome/ impact with the following organization(s) departments/ ministry(ies)	Success indicator (s)	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016 - 2017
1	Diversified poultry germplasm supply	State AH Deptt/ CPDO and SAUs / SVU / NGOs Entrepreneur/private sector	Germplasm supplied	Number (lakhs)	1.50	1.55	1.60	1.65	1.68
2	Saving in feed quantity- poultry for meat	Institute's responsibility	Feed quantity saved over 1981*	%	30.60	32.58	34.62	36.72	38.50
3	Gain in productivity – poultry for eggs	Institute's responsibility	Gain in egg productivity over 1981*	%	25.24	29.17	29.67	31.42	32.5

**\*Benchmarked at 1981 on account of institute inception in 1979**

**Past Achievements of the Success Indicators:**

S.No.	Success indicator (s)	Past Achievements of the Success Indicators							Mean of the Achievements	Projected value of the success indicator for 2014-15 as per the approved RFD 2013-14
		n <sup>th</sup> year	-	V 2009-2010	IV 2010-2011	III 2011-2012	II 2012-2013	I 2013-2014		
1.	Chicks of quail, duck, turkey, guinea fowl and indigenous chicken hatched			18070	18637	17906	28224	27520	22071	19500
2.	Genes studied					11	27	22	20	22
3.	Feed samples analyzed			195	240	156	279	329	239.8	240
4.	Feed resources /additives evaluated			4	4	6	3	6	4.6	6
5.	Development of diluents for ducks semen					-	-	-		-
6.	Technology for value-added products standardized			1	1	1	1	2	1.2	1
7.	Samples analyzed for chemical/ microbiological contaminants			230	250	272	315	338	281	265
8.	Training program organized			8	9	8	3	7	7	5
9.	Field demonstration performed			-	5	4	9	-	6	-
10.	Copies of software sold			27	18	30		25	25	32
11.	Publications released			3	3	4	3	7	4	4

### Classification of Success Indicators according its category

S.No.	Success Indicator(s)	Input	Activity	Internal Output	External Output	Outcome	Measures Qualitative Aspects
1.	Chicks of quail, duck, turkey, guinea fowl and indigenous chicken hatched	FALSE	FALSE	TRUE	FALSE	FALSE	TRUE
2.	Genes studied	FALSE	FALSE	TRUE	FALSE	FALSE	TRUE
3.	Feed samples analyzed	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
4.	Feed resources /additives evaluated	FALSE	FALSE	TRUE	FALSE	FALSE	TRUE
5.	Development of diluents for ducks semen	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
6.	Technology for value-added products standardized	FALSE	FALSE	FALSE	TRUE	FALSE	TRUE
7.	Samples analyzed for chemical/ microbiological contaminants	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
8.	Training program organized	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
9.	Field demonstration performed	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
10.	Copies of software sold	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
11.	Publications released	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE