



Results-Framework Document (RFD)

for

Project Directorate for Farming Systems Research (2014-2015)

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Section-I. Vision, Mission, Objectives and Functions

Vision

Sustainable management of farm resources for achieving household food, nutritional and livelihood security.

Mission

Improve food, nutritional and livelihood security of small and marginal farmers through integrated farming systems approach.

Objectives

- Develop on-station and on-farm (farmers' participatory) integrated farming system models for small and marginal farmers under different farming situations.
- Identify, evaluate and refine alternative cropping systems and system-based production technologies.
- Standardize organic farming practices for crops and cropping systems.
- HRD and technology transfer.

Functions

- To plan, coordinate, implement and monitor R & D programmes for sustainable farming systems development in different AERs of the country.
- To serve as knowledge repository in the field of farming systems research and development.
- To validate and refine new farm production technologies in farmers' participatory mode.
- Human resource development and capacity building in the field of integrated farming system.

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.	Develop on-station and on-farm (farmers' participatory) integrated farming system models for small and marginal farmers under different farming situations	38	Characterization of location-specific farming systems	Farming systems characterized	Number of Zones	5	5	4	3	2	1
			Development of IFS models and modules for different farming situations	Integrated farming system models/modules developed and validated	Number	25	18	15	12	9	6
			Fine tuning and improvement of prevailing farming systems in farmers' (including tribal farmers) participatory mode	Farm households covered	Number	8	720	600	480	360	240
2.	Identify, evaluate and refine alternative cropping systems and system-based production technologies	28	Identification and evaluation of alternative cropping systems	Alternative cropping systems identified	Number	8	13	11	9	7	5
			Development of system-based farm production technologies	System-based farm production technologies developed	Number	15	14	12	10	8	6
			Study of on-farm response to plant nutrients	On-farm trials conducted	Number	5	600	500	400	300	200
3.	Standardize organic farming practices for crops and cropping systems	8	Standardization of organic farming practices for crops/ cropping systems	Package of practices of organic farming for crops/ cropping systems developed	Number	8	10	8	6	4	2
4.	HRD and technology transfer	6	Capacity and knowledge building	Trainings, seminars etc. organized	Number	4	26	22	18	14	10
				Front line demonstrations conducted	Number	2	60	50	40	30	20

Publication/Documentation	5	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	Number	3	18	15	12	9	6
		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 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 2012-13	Actual Value for FY 2013-14	Target Values for FY 2014-15	Projected Values for FY 2015-16	Projected Values for FY 2016-17
1	Develop on-station and on-farm (farmers' participatory) integrated farming system models for small and marginal farmers under different farming situations	Characterization of location-specific farming systems	Farming systems characterized	Number of Zones	8	4	4	5	5
		Development of IFS models and modules for different farming situations	Integrated farming system models/ modules developed and validated	Number	10	13	15	16	16
		Fine tuning and improvement of prevailing farming systems in farmers' (including tribal farmers) participatory mode	Farm households covered	Number	-	550	600	600	600
2	Identify, evaluate and refine alternative cropping systems and system-based production technologies	Identification and evaluation of alternative cropping systems	Alternative cropping systems identified	Number	11	10	11	12	12
		Development of system-based farm production technologies	System-based farm production technologies developed	Number	12	12	12	13	13
		Study of on-farm response to plant nutrients	On-farm trials conducted	Number	426	450	500	550	550
3	Standardize organic farming practices for crops and cropping systems	Standardization of organic farming practices for crops/ cropping systems	Package of practices of organic farming for crops/ cropping systems developed	Number	7	8	8	9	9
4	HRD and technology transfer	Capacity and knowledge building	Trainings, seminars etc. organized	Number	10	20	22	24	24
			Front line demonstrations conducted	Number	46	50	50	60	60
	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	Number	8	12	15	18	20
		Timely publication of the	Annual Report published	Date	-	-	02.07.20	-	-

		Institute Annual Report (2013-2014)					14		
	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	99.54	83.56	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.	AERs	Agro-Ecological Regions
2.	AICRP-IFS	All India Coordinated Research Project on Integrated Farming Systems
3.	HRD	Human Resource Development
4.	IFS	Integrated Farming System
5.	PDFSR	Project Directorate for Farming Systems Research
6.	NPK	Nitrogen, Phosphorus and Potassium
7.	NPOP	National Programme of Organic Production
8.	R & D	Research & Development
9.	NPOF	Network Project on Organic Farming
10.	NABARD	National Bank for Agriculture and Rural Development

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

S. No.	Success Indicator	Description	Definition	Measurement	General comments
1	Farming systems characterized	Farming systems of different agro-climatic zones are being characterized through extensive diagnostic surveys for understanding their spread/ intensity, viability and constraints.	Farming system is a mix of different enterprises adopted by a farm family including available resources at its disposal, income from different components and constraints limiting the productivity.	Number of agro-climatic zones covered through characterization survey.	The characterization of existing farming system is a pre-requisite for design and development of region-specific efficient IFS models.
2	Integrated farming system models/ modules developed and validated	On-station integrated farming system research units are developing IFS models specific to a particular region and appropriate for small and marginal farmers.	IFS model is an optimum mix of different components (modules) designed by integrating them by using all the principles of science and in such a manner that overall productivity and income of farm household is enhanced. For this, the available farm resources, prevailing constraints and available agricultural infrastructure is taken into account.	Number of functional IFS models developed.	These IFS research models will be further subjected to evaluation of their efficiencies and refinement in subsequent years.
3	Farm households covered	Farmers' participatory (on-farm) approach of R & D, with major emphasis on small, marginal and tribal farmers, has been adopted to improve upon existing farming systems, by component-wise constraint analysis and suitable technological interventions.	On-farm approach of IFS research involves the active participation of farmers in research. After constraint analysis in different components, optimum technological interventions are identified and evaluated in farmers' participatory mode.	Farm households adopted for on-farm IFS research and improvement in household income through farming activities.	On-farm approach of farming systems improvement at grass root level is essentially required as each farmer has its own farming system and limitations.
4	Alternative cropping systems identified	Alternative cropping systems are being identified and evaluated under different	Alternative cropping systems are improved sequential/ inter cropping systems assessed in terms of higher	Region-specific cropping systems, which have potential	Cropping is a major sub-system of farming systems in majority of

		farming situations for increasing productivity and profitability of farmers.	productivity/ profitability/ resource conservation, as compared to existing major cropping systems.	to give a significantly higher productivity/ profitability than the popular cropping systems in the region.	farm households in India, as it provides, among other things, the food security. Hence it requires concerted efforts for improvement.
5	System-based farm production technologies developed	System-based farm production technologies are being developed, tested and refined under different farming situations for increasing productivity and profitability of farmers.	System-based farm management technologies are those technologies which take into account the interactions taking place when two crops are grown on the same field in succession or simultaneously or two different farming system components co-exist and compete with each other for same resources.	New farm management technologies, identified for higher productivity/ profitability or conservation of natural resources.	--
6	On-farm trials conducted	On-farm (farmers' participatory) research is being conducted to evaluate the nutrient response of different crops and cropping systems	The quantification of response of crops - grown in a certain cropping system - to the application of major plant nutrients (NPK) alone or in combination on farmers' fields.	The number of trials conducted for assessing the response.	These trials give true reflection of nutrient response level in real farm situations.
7	Package of practices of organic farming for crops/ cropping systems developed	Organic farming practices are being developed/ standardized through experimentation under NPOF for different crops and cropping systems.	A standardized organic farming practice is a practice in respect of a crop or cropping system grown under organic environment and is in compliance with NPOP standards.	The number of organic farming practices standardized through experimentation.	Standardization of organic farming practices through experimentation is required to develop a transferable package of practices to be used by common organic grower.
8	Trainings, seminars etc. organized	Trainings, summer/ winter schools, field days, farmers' meetings, traveling seminars etc. are being organized on different aspects of farming systems for stakeholders	--	Number of trainings, summer/ winter schools, field days, farmers' meetings, traveling seminars organized by	These are very important for HRD/ capacity building among different stakeholders/ beneficiaries of IFS/ organic farming research.

		(farmers/ researchers/ officials of state departments of agriculture/ service providers)		PDFSR or Centres of AICRP-IFS/ NPOF.	
9	Front line demonstrations conducted	Front line demonstrations are being conducted at farmers' fields to disseminate proven / improved technologies in systems perspective.	Frontline demonstrations are conducted by scientists themselves in frontier areas of technologies generated.	Number of frontline demonstrations conducted by PDFSR or Centres of AICRP-IFS/ NPOF.	Frontline demonstrations are strong tools of technology transfer.

Section 5: Specific performance requirement 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
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

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

S. No.	Outcome/ Impact of Organization	Jointly responsible for influencing this outcome/ impact with the following organization(s)/ Department(s)/ Ministry(ies)	Success Indicator(s)	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1	Enhanced farming system productivity/ profitability of farm households	State Agricultural Universities, State Deptt. of Agriculture/ Animal Husbandry/ Irrigation, NABARD and other agriculture finance institutes	Small and marginal farm households covered.	Number	50	60	70	80	90
			Increase in farming system (crops + animals + fish + poultry + value addition etc.) profitability	Rs. in lakhs/ annum	14	16	18	20	22
			Rural employment generated due to adoption of integrated farming systems and new technologies	Man days	14000	16000	18000	20000	22000