



Results - Framework Document (RFD)

for

Indian Institute of Spices Research (2014-2015)

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Section 1: Vision, Mission, Objectives and Functions

Vision

- Enhancing productivity of spices for meeting growing domestic demand and to be the global leader in spices export

Mission

- Utilize the scientific, technological and traditional strengths for sustainable spice production

Objectives

1. Production management, value addition and transfer of technology in spices
2. Conservation of genetic resources for sustainable use

Functions

- To attend to research and development of high yielding and quality varieties and sustainable production, protection and post harvest technologies, training and dissemination of developed technologies to the stakeholders for increasing the production and productivity of spices.

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.	Production management, value addition and transfer of technology in spices	50	Optimization of horticultural/ INM/ IPM technology management and development of value added products of spices	Technologies developed/evaluated on INM/IPM/IDM	Number	10.0	7	6	5	4	3
				Value added products identified / developed	Number	10.0	4	3	2	1	0
			Production of breeder seed/ planting materials	Nucleus planting materials produced	Number ('000s)	10.0	150	125	100	75	50
				Nucleus seed rhizomes produced	('000 kg)	5.0	8	7	6	5	4
			Dissemination/ commercialization of technologies	Demonstrations/ exhibitions conducted	Number	5.0	25	20	15	10	5
				Trainings conducted (farmers/ agrl. officers and others)	Number	5.0	19	16	13	10	7
				Partnership development including licensing of technologies	Number	5.0	7	6	5	4	3
2.	Conservation of genetic resources for sustainable use	30	Collection, conservation and cataloguing of spices germplasm and characterization for useful agronomic traits	Germplasm accessions collected, conserved and catalogued	Number	20.0	192	160	128	96	64
				Accessions evaluated for specific	Number	10.0	138	115	92	69	46

				agronomic traits							
	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	14	12	10	8	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	2.0	15/05/2014	16/05/2014	19/05/2014	20/05/2014	21/05/2014
			Timely submission of results for 2013-2014	On-time submission	Date	1.0	01/05/2014	02/05/2014	05/05/2014	06/05/2014	07/05/2014
	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 12/13	Actual value for FY 13/14	Target value for FY 14/15	Projected value for FY 15/16	Projected value for FY 16/17
1.	Production management, value addition and transfer of technology in spices	Optimization of horticultural/ INM/ IPM technology management and development of value added products of spices	Technologies developed/ evaluated on INM/IPM/IDM	Number	5	7	6	6	7
			Value added products identified/ developed	Number	3	4	3	3	4
		Production of breeder seed/ planting materials	Nucleus planting materials produced	Number ('000s)	80	118	125	135	150
			Nucleus seed rhizomes produced	('000 kg)	5	6	7	8	8
		Dissemination/ commercialization of technologies	Demonstrations/ exhibitions conducted	Number	25	27	20	22	24
			Trainings conducted (farmers/ agrl. officers and others)	Number	18	17	16	20	22
			Partnership development including licensing of technologies	Number	3	6	6	6	7
2.	Conservation of genetic resources for sustainable use	Collection, conservation and cataloguing of spices germplasm and characterization for useful agronomic traits	Germplasm accessions collected, conserved and catalogued	Number	250	157	160	170	150
			Accessions evaluated for specific agronomic traits	Number	100	137	115	120	125
3.	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	Number	6	13	12	13	14
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	-	-	02/07/2014	-	-
4.	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	100	99.7	96	97	98
5.	Efficient functioning of the RFD system	Timely submission of draft RFD for 2014-2015 for approval	On-time submission	Date	-	-	16/05/2014	-	-
		Timely submission of results for 2013-2014	On-time submission	Date	-	-	02/05/2014	-	-
6.	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	-	-

7.	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

Sl. No.	Acronym	Description
1.	INM	Integrated Nutrient Management
2.	IPM	Integrated Pest Management
3.	IDM	Integrated Disease Management
4.	NGOs	Non Governmental Organizations
5.	IISR	Indian Institute of Spices Research

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

S. No.	Success Indicator	Description	Definition	Measurement	General Comments
1.	Technologies developed/ evaluated on INM/IPM/IDM	Integrated nutrient/ pest/ disease management is practiced encompassing conjunctive use of both chemical and organic nutrient/ bioagent/ botanical sources for improving environmental health & sustaining higher productivity	Integrated nutrient/ pest/ disease management refers to the maintenance of soil / plant/ ecosystem health at an optimum level and control the pest/disease incidence for sustaining the desired productivity through optimization of the benefits from all possible sources of organic, inorganic and biological components in an integrated manner	Developing integrated nutrient, pest and disease management technologies for different spice crops and cropping systems	To ensure balance fertilization, control of biotic stresses and sound soil/ plant/ environmental health
2.	Value added products developed/ identified	Value addition involves identification/ development of new products from the raw agro-produce. These would involve pilot testing / validation through various institutes, NGOs, private production houses/ industry	To develop different value products from agro-produce and identifying potential nutraceutical compounds	Number	The value added products will diversify the use there by increasing the profit. Identification of potential nutraceuticals will help to boost the use of spice products in pharmaceutical industries
3.	Nucleus planting materials produced	Production of nucleus planting material of black pepper and nutmeg, vegetatively propagated for producing quality materials for distribution to extension agencies/ farmers	It is a process of vegetative means by which new individuals are produced without production of seeds	Numbers produced (in thousands)	In a wider sense, planting material arise from vegetative propagation include cutting, budding, grafting and tissue culture
4.	Nucleus seed rhizomes produced	Production of nucleus seed rhizome material of ginger and turmeric, vegetatively propagated for producing quality materials for distribution to extension agencies/ farmers	It is a process of vegetative means by which new individuals are produced without production of seeds	Quantity produced (in tonnes)	In a wider sense, planting material arise from vegetative propagation include cutting, budding, grafting and tissue culture
5.	Demonstrations / exhibitions conducted	Trials and demonstrations conducted for technology testing and proving the technology potential and the knowledge and skills of primary and secondary	On-farm trials aims at testing new technologies under farmers condition and management, by using farmers own practice as control. Frontline	Number	Demonstrations enhance the rate of adoption of new technologies by farmers

		stakeholders shall be enhanced by organizing exposure visits to on-farm trials/ demonstrations/ exhibitions	demonstration is the field demonstration conducted on farmers field under the close supervision of scientists		
6.	Trainings conducted (farmers/ agrl. officers and others)	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	Capacity building empowers officials and farmers with new knowledge
7.	Partnership development including licensing of technologies	It is envisaged to bring commercial ethos in agricultural research system. The increasing numbers of partnerships over the years points towards emphasis on transfer of knowledge, patenting skills and technologies, thereby contributing to improved socioeconomic impact	Partnership development, includes patenting, licensing of IISR's technologies and/or services	Number	Partnership development leads to quick and easy dissemination of knowledge/ technology developed
8.	Germplasm accessions collected, conserved and catalogued	Availability of diverse germplasm is the basic requirement to breed new improved varieties	Basic genetic resource for crop improvement	Number of germplasm accessions	Cataloguing is done for morphological and yield attributes
9.	Accessions evaluated for specific agronomic traits	Source material for improved varieties to be evaluated for agronomic traits	Evaluation is done for potential agronomic (yield attributes), quality or stress (biotic/ abiotic) tolerance	Number of promising/ breeding lines evaluated	Evaluation would lead to identification of superior accessions

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
NIL								

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

S. No.	Outcome / Impact	Jointly responsible for influencing this outcome / impact with the following organisation(s) / department(s)/ ministry(ies)	Success Indicator (s)	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1.	Production of quality seed and planting materials of improved varieties and processing technologies of spices crops	Ministry of Agriculture, Ministry of Commerce, Ministry of Environment & Forests, Ministry of Rural Development and State Governments, NGOs and Private partners	Increase in spice crops productivity	%	4.10	4.15	4.20	4.25	4.30
			Enhancing the quality of turmeric (curcumin content)	%	3.25	3.50	4.00	4.25	4.50
2.	Commercialization of technologies	State Departments, NGOs and Private partners/ entrepreneurs	Research converted in to commercialized technologies	Number	3	6	6	6	7

Table 1: Past Achievements of the success indicators

S. No.	Success indicator (s)	Past Achievements of the Success Indicators						Mean of Achievements	Projected value of the success indicator for 2014-15 as per the approved RFD 2013-14
		n th year -	V 2009-2010	IV 2010-2011	III 2011-2012	II 2012-2013	I 2013-2014		
1.	Technologies developed/ evaluated on INM/IPM/IDM	5	6	5	3	6	7	5.8	6
2.	Value added products identified / developed	1	1	2	3	4	4	3.25	4
3.	Nucleus planting materials produced	100	152	125	127	80	118	123.3	120
4.	Nucleus seed rhizomes produced	10	12.5	13	7	5	6	6.0	7
5.	Demonstrations/ exhibitions conducted	6	9	9	19	25	26	23.5	18
6.	Trainings conducted (farmers/ agrl. officers and others)	12	15	20	18	18	17	18.8	15
7.	Partnership development including licensing of technologies	2	-	2	9	3	6	2.3	5
8.	Germplasm accessions collected, conserved and catalogued	50	88	110	236	250	157	243	165
9.	Accessions evaluated for specific agronomic traits	50	80	95	100	100	137	93.7	115
10.	No of research articles in journals with NAAS rating 6.0 and above	10	19	15	15	6	13	14.3	-

Classification of Success Indicators according to its Category

S. No.	Success Indicator(s)	Input	Activity	Internal Output	External Output	Outcome	Measures Qualitative Aspects
1.	Technologies developed/ evaluated on INM/IPM/IDM	False	False	True	False	False	False
2.	Value added products identified/developed	False	False	True	False	False	False
3.	Nucleus planting materials produced	False	False	True	False	False	False
4.	Nucleus seed rhizomes produced	False	False	True	False	False	False
5.	Demonstrations/ exhibitions conducted	False	True	False	False	False	True
6.	Trainings conducted (farmers/ agrl. officers and others)	False	True	False	False	False	False
7.	Partnership development including licensing of technologies	False	False	False	True	False	True
8.	Germplasm accessions collected, conserved and catalogued	False	True	False	False	False	False
9.	Accessions evaluated for specific agronomic traits	False	True	False	False	False	False
10.	Research articles published	False	False	True	False	False	True