



# **Results - Framework Document (RFD**

**for**

**Central Institute of Post-Harvest Engineering and  
Technology**

**(2014 –2015)**

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

### **Vision**

Higher profitability of agricultural production systems through efficient post harvest engineering and technological interventions

### **Mission**

Creating prosperity through minimization of post harvest losses and increase in value addition to produce and by-products from crops, horticulture, livestock and fisheries sector.

### **Objectives**

1. To design, develop and evaluate post-harvest processing equipment, tools and gadgets
2. To develop process protocols and value added products
3. To organize human resource development and capacity building programmes

### **Functions**

- To undertake basic, applied and adaptive engineering and technology research in post production sector of produce of plant origin, livestock and aquaculture produce including agricultural and environmental control, quality and safety.
- To act as national institute for research, education/teaching and training in post harvest engineering and technology
- To act as national repository of information on processes, equipment, products and technologies on post harvest engineering and technology
- To transfer technology and provide advisory and consultancy services and promote entrepreneurship
- To develop and strengthen linkages with the private and public sector in the mandated areas

**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.	To design, develop and evaluate post-harvest processing equipment, tools and gadgets	25	Design & development of post harvest processing equipment, tools and gadgets	Equipment designed and developed	Number	15	10	8	6	4	2
			Testing and evaluation of post harvest processing equipment, tools and gadgets	Final validated design of machine	Number	10	9	7	5	3	1
2.	To develop process protocols and value added products	22	Development of process protocol	Process protocols	Number	10	13	11	9	7	5
			Development of value added products	Value added products	Number	12	8	7	6	5	4
3.	To organize human resource development and capacity building programmes	33	Transfer of technology, capacity building	Trainings, FLDs, Exhibitions & Licensing of improved postharvest technologies	Number	23	36	30	24	18	12

			Documentation and IPR management	Patents filed	Number	02	4	3	2	1	0
				Other Pub. (Leaflets, Brochures, success stories, News items, Newsletters, mass media etc.)	Number	08	30	25	20	15	10
*	Publication/Documentation	05	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	3	11	9	7	5	3
			Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	2	June 30, 2014	July 2, 2014	July 4, 2014	July 7, 2014	July 9, 2014
*	Fiscal resource management	02	Utilization of released plan fund	Plan fund utilized	%	2	98	96	94	92	90
*	Efficient functioning of the RFD system	03	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 of RFD 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	03	Rating from Independent Audit of implementation of Citizen's Client's 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	07	Update organizational strategy to align with revised priorities	% of Implementation	%	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
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### 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.	To design, develop and evaluate post-harvest processing equipment, tools and gadgets	Design & development of post harvest processing equipment, tools and gadgets	Equipment designed and developed	Number	4	6	8	8	9
		Testing and evaluation of post harvest processing equipment, tools and gadgets	Final validated design of machine	Number	3	6	7	7	8
2.	To develop process protocols and value added products	Development of process protocol	Process protocols	Number	8	14	11	11	11
		Development of value added products	Value added products	Number	7	10	7	7	8
3.	To organize human resource development and capacity building programmes	Transfer of technology, capacity building	Trainings, FLDs, Exhibitions & Licensing of improved postharvest technologies	Number	35	40	30	30	32

		Documentation and IPR management	Patents filed	Number	4	3	3	3	3
			Other Pub. (Leaflets, Brochures, success stories, News items, Newsletters, mass media etc.)	Number	26	-	25	25	25
*	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	28	--	9	12	12
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	--	--	July 2, 2014	-	-
*	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	--	--	96	85	85
*	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 of RFD 2013-2014	On-time submission	Date	-	-	May 2, 2015	-	-



*	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	% of Implementation	%	--	--	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	--	--
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#### Section 4(a): Acronyms

<b>S. No</b>	<b>Acronym</b>	<b>Description</b>
1.	CIPHET	Central Institute of Post-harvest Engineering and Technology
2.	FLDs	Field Level Demonstrations
3.	R&D	Research and Development
4.	SAUs	State Agricultural Universities
5.	IPR	Intellectual Property Right
6.	MOFPI	Ministry of Food Processing Industries
7.	CSIR	Council of Scientific and Industrial Research
8.	GDP	Gross Domestic Product
9.	KVK	Krishi Vigyan Kendra
10.	FLD	Front Line Demonstration
11.	TSP	Tribal Sub Plan

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

<b>S. No.</b>	<b>Success indicator</b>	<b>Description</b>	<b>Definition</b>	<b>Measurement</b>	<b>General Comments</b>
1.	Equipment designed and developed	Success indicators cover number of equipment, tools and gadgets developed.	Development of post-harvest engineering and technology related equipment, tools and gadgets.	Number of equipment, Tools and gadgets developed	Nil
2.	Final validated design of machine	Post-harvest processing equipment, will be evaluated including refinement of developed/ existing equipment, tools and gadgets.	Evaluation and refinement of developed/existing post-harvest processing equipment, tools and gadgets.	Performance, efficiency and accuracy along with low cost and energy efficiency.	Nil
3.	Process protocols	Development of protocols for value added products.	Process protocol for value added products	Number of protocols developed	Nil
4.	Value added products	Development of value added products using developed protocols.	Manufacture of products from commodities and co-products	Number of value added products	Nil
5.	Trainings, FLDs, Exhibitions & Licensing of improved postharvest technologies	Training conducted for farmers and upcoming entrepreneurs, private and government officials, R&D and extension personnel. Licensing and training on CIPHET developed technologies.	Trainings, FLDs, exhibitions for transfer of technology and commercialization along with human resource development.	Number of training, FLDs, & exhibitions conducted/ participated. Numbers of technologies licensed.	Nil
6.	Patents filed	Patenting innovative technology and process/ products.	A license to use exclusive rights to a process/design	Number of patents filed.	Nil
7.	Other Pub. (Leaflets, Brochures, success stories, News items, Newsletters, mass media etc.)	Publishing Leaflets, Brochures, success stories, News items, Newsletters, mass media etc.	Preparation of printed /electronic material and issuing for public distribution or sale to bring to the public attention	Number of Publications/ mass media items	Nil

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

<b>Location Type</b>	<b>State</b>	<b>Organization Type</b>	<b>Organization Name</b>	<b>Relevant Success Indicator</b>	<b>What is your requirement from this organization</b>	<b>Justification for this requirement</b>	<b>Please quantify your requirement from this Organization</b>	<b>What happens if your requirement is not met</b>
State Govt.	All states	Other	Other	Trainings, FLDs, Exhibitions & Licensing of improved postharvest technologies	Sponsorship for conducting trainings and sponsored candidates	For dissemination of developed technologies to the end users.	Number of trainings and candidates	Dissemination of developed technologies to the end users will be affected.

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

<b>S. No.</b>	<b>Out Come</b>	<b>Jointly responsible for influencing this outcome / impact with the following organization(s)/ department (s) / ministry(ies)</b>	<b>Success Indicator (s)</b>	<b>Unit</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>	<b>2016-2017</b>
1	Reduction in post-harvest losses and increase in value addition of agricultural produce	SAUs, CSIR, MOFPI, Entrepreneurs, Food Processing Industry	Increase in number of food processing units over previous year	%	1.1	1.1	1.2	1.3	1.4
			Contribution of food processing to GDP of Agriculture	%	12	12	12.5	13	13.5
2	Human resource development	SAUs, KVKs, Manufacturers, Entrepreneurs	Skilled manpower developed	Number	350	412	430	500	560

## Target Setting

S.No.	Success Indicators	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
		V 2009-10	IV 2010-11	III 2011-12	II 2012-13	I 2013-14		
1.	Equipment designed and developed	NA	13	11	4	6	8.5	5
2.	Final validated design of machine	NA	12	16	3	6	9.25	6
3.	Process protocols	NA	7	15	8	14	11	14
4.	Value added products	NA	6	14	7	10	9.25	12
5.	Trainings, FLDs, Exhibitions & Licensing of improved postharvest technologies	NA	29	26	35	40	32.5	28
6.	Research/ articles published	NA	NA	NA	28	NA	28	_*
7.	Patents filed	NA	0	3	4	3	2.5	5
8.	Other Pub. (Leaflets, Reports, Brochures, success stories, News items, Newsletters, AV aids etc.)	NA	NA	NA	26	NA	26	_*

\* The SI was not part of the RFD 2013-14

**Classification of the success indicator according to its category**

<b>S.No.</b>	<b>Success Indicator</b>	<b>Input</b>	<b>Activity</b>	<b>Internal Output</b>	<b>External Output</b>	<b>Outcome</b>	<b>Measures Qualitative Aspects</b>
1.	Equipment designed and developed	False	False	True	False	False	False
2.	Final validated design of machine	False	False	True	False	False	False
3.	Process protocols	False	False	True	False	False	False
4.	Value added products	False	False	True	False	False	False
5.	Trainings, FLDs, Exhibitions & Licensing of improved postharvest technologies	False	False	True	False	False	False
6.	Patents filed	False	False	True	False	False	False
7.	Other Pub. (Leaflets, Brochures, success stories, News items, Newsletters, mass media etc.)	False	False	True	False	False	False