



Results-Framework Document (RFD)

for

NATIONAL RESEARCH CENTRE FOR BANANA

(2013- 2014)

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Section 1: Vision, Mission, Objectives and Functions

Vision: To increase the production and productivity through technological innovations for the livelihood and nutritional security of the banana growers and consumers.

Mission:

1. Enhancing productivity and quality of banana through varietal improvement.
2. Production of quality planting material of banana.
3. Resource based planning and crop management.
4. Effective and eco-friendly crop protection.
5. Improving storage methods and nutritional quality of banana based foods.

Objectives

1. Enhancing the productivity and quality of bananas and plantains.
2. Value addition and dissemination of technologies.

Functions

- To plan, co-ordinate and monitor research for development at national level.
- To serve as knowledge repository of *Musa* germplasm and establish national and international co-operation and visualize research needs as per changing scenario.
- To overview the implementation of programmes in relation to targets and needs.
- To do mid-term corrections in the frame work of needs and objectives.
- To collaborate with relevant national and international agencies in achieving the targets.

Section-2:

Inter se priorities among key objectives, success indicators and targets

S. No.	Objectives	Weight	Action	Success Indicators	Unit	Weight	Target/Criteria Value				
							Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
1	Enhancing productivity and quality of bananas and plantains	75	Genetic resources management and elite cultivars identification	Germplasm collected/characterized/evaluated	No.	10	30	26	20	18	15
				Molecular markers, databases, EST libraries, expression profiles developed	No.	10	10	8	6	5	4
				Elite cultivars, breeding lines, progenies, developed/evaluated	No.	5	15	12	10	8	6
			Development of improved production/ post harvest technologies	Improved production/ post harvest technologies developed	No.	15	5	4	3	2	1
				Quality planting materials/other inputs produced/supplied/certified	No./kg.	10	8000	7000	5000	3000	2000
			Development of improved protection technologies	IPM components/technologies/ bio-control agents identified/ developed	No.	25	8	6	4	3	2
2	Value addition and dissemination of technologies	14	Development of value added products	Value added products developed/ refined	No.	8	6	4	3	2	1
			Organizing of training/ demonstrations	Trainings/demonstrations/ exhibitions conducted/attended	No.	6	8	5	4	3	2
	Efficient Functioning of the RFD System	3	Timely submission of Draft RFD 2013-14 for approval	On-time submission	Date	2	May15 2013	May 16 2013	May 17 2013	May 20 2013	May 21 2013
			Timely submission of results for 2012-13	On-time submission	Date	1	May 1 2013	May 2 2013	May 5 2013	May 6 2013	May 7 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	30.7.13	10.8.13	20.8.13	30.8.13	10.9.13
	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 grievance redressal system	%	2	100	95	90	85	80

Section 3:

Trend values of the Success Indicators

S. No.	Objectives	Action	Success Indicators	Unit	*Actual values		**Target values	*Projected values	
					2011-2012	2012-2013	2013- 2014	2014-2015	2015-2016
1	Enhancing productivity and quality of bananas and plantains	Genetic resources management and elite cultivars identification	Germplasm collected/characterized/evaluated	No.	23	26	26	28	30
			Molecular markers, databases, EST libraries, expression profiles developed	No.	6	8	8	10	11
			Elite cultivars, breeding lines, progenies, developed/evaluated	No.	6	8	12	14	15
		Development of improved production/post harvest technologies	Improved production/ post harvest technologies developed	No.	7	8	8	10	12
			Quality planting materials/other inputs produced/supplied/certified	No./kg.	5000	6000	7000	8000	10000
Development of improved protection technologies	IPM components/technologies/ bio-control agents identified/ developed	No.	5	6	6	7	7		
2	Value addition and dissemination of technologies	Development of value added products	Value added products developed/ refined	No.	5	4	4	5	6
		Organizing of training/ demonstrations	Trainings/demonstrations/ exhibitions conducted/attended	No.	6	5	5	7	8
	Efficient Functioning of the RFD System	Timely submission of Draft RFD 2013-14 for approval	On-time submission	Date	May15 2013	May 16 2013			
		Timely submission of results for 2012-13	On-time submission	Date	May 1 2013	May 2 2013			
	Administrative Reforms	Implement ISO 9001 as per the approved action plan	% implementation	%	100	95			
		Prepare an action plan for innovation	On-time submission	Date	30.7.13	10.8.13			
	Improving Internal Efficiency/ responsiveness/service delivery of Ministry/ Department	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	100	95			
			Independent Audit of Implementation of public grievance redressal system	%	100	95			

Section 4:

Acronyms

S. No.	Acronym	Description
1	IPM	Integrated Pest Management
2	SAU's	State Agricultural University
3	DAC	Department of Agriculture and Co-operation
4	KVK	Krishi Vigyan Kendra
5	NHB	National Horticulture Board
6	NHM	National Horticulture Mission
7	NGOs	Non Governmental Organizations
8	B:C ratio	Benefit: Cost ratio

Section 4:

Description and definition of success indicators and proposed measurement methodology

S. No.	Success indicator	Description	Definition	Measurement	General comments
1	Germplasm collected	Germplasm are genetic resources of bananas and plantains which is the major source of genetic variability	Collection includes collection from the natural habitat, farmers and institutes/organizations/Universities. It also includes the exotic introductions made through NBPGR, New Delhi.	Number	Germplasm materials serve as the base for utilization in crop improvement programs of bananas and plantain towards the development of new varieties.
2	Germplasm characterized		Characterization means both morpho-taxonomic and molecular characterization	Number	
3	Germplasm conserved		Conservation includes those in the field gene bank and <i>in vitro</i> gene banks	Number	
4	Elite cultivars identified/ developed	Elite cultivar includes those elite clones collected through surveys and evaluation; those improved through conventional breeding or biotechnological approaches	Elite cultivar is one which is best or improved over the existing cultivars in terms of yield and/or resistance to biotic and abiotic stresses.	Number	Elite cultivars could be released directly as a new variety to the farming community or it could further be used in breeding programmes leading to the evolution of new/improved varieties.
3	Improved production / post harvest technologies developed	Developing improved crop production / post harvest technologies to improve input use efficiency, yield and fruit quality and increasing the B:C ratio of growers	Input use efficiency refers to judicious use of agricultural inputs such as water, nutrients etc., to increase production per unit of input used	Number	Enhancing the water, nutrient and pesticide use efficiency is the most important factor to reduce cost of production.

4	Quality planting materials/ other inputs produced/ supplied/ certified	Quality planting material refers to pest and disease free, healthy planting material through vegetative means namely micro and macro propagation. Other inputs refer to micronutrient mixture 'Banana Shakti'/ bio-control agents developed and commercialized at NRCB, Trichy. Certification means the issue of quality labels to tissue culture plants of various DBT certified labs after virus indexing and genetic fidelity testing.	It is method of vegetative propagation through which new individuals arise without production of seeds or spores	Number / kilograms / No. of quality labels issued	All those inputs mentioned in column 2 generate revenue to the Institute.
5	IPM components/ technologies/ bio-control agents identified/developed	IPM components include those semiochemicals identified for the control of insect pests.	IPM includes management of weeds, insect pests and diseases through a set of control measures.	Number	IPM is essential for an eco - friendly agriculture and this could also be commercialized.
6.	Value added products developed/ refined.	Value added products include all types of value addition in banana inclusive of edible and fibre based products from bananas and plantains. Refinement can be even a small improvement that enhances the quality of the final product.	Value added products mean both new and improved edible food products and non-edible banana fibre based products.	Number	Technology on value addition of bananas and plantains could be commercialized.
7.	Trainings/ demonstration organized	Capacity building activities to improve knowledge and skill of growers, extension officials, entrepreneurs etc.,	Training is a process of imparting of new skills, attitude and knowledge through various means.	Number	

Section 5:

Specific performance requirements from other Department

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
-	-	-	-	-	-	-	-	-

Section 6:

Outcome / Impact of activities of the organization

S. No.	Outcome / Impact of Organization	Jointly responsible for influencing this outcome / impact with the following organization(s) / departments/ ministry(ies)	Success Indicator(s)	Unit	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1.	Increased productivity of quality bananas and plantain	Departments of Agriculture/ Horticulture of various States, SAUs, DAC, KVKs, NGOs, Ministry of Food Processing, Govt. of India, NHB/ NHM and Private entrepreneurs	Increase in productivity of banana	%	2%	2%	3%	3%	4%
			Increase in number of entrepreneurs receiving consultancies	No.	3	4	5	6	7