Results- Framework Document (RFD)

for

National Research Centre for Grapes
(1st April, 2012 –31st March, 2013)

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Section 1:
Vision, Mission, Objectives and Functions

Vision

Harnessing viticulture and enology science to ensure comprehensive and sustained grape production through crop improvement, assessment, refinement and adoption of most appropriate and precisive technologies in grape production and value addition thereby increasing net returns to grape growers and all the stakeholders involved in the industry.

Mission

To undertake the programmes involving basic and strategic research for resolving the major biotic and abiotic constraints affecting the grape production, productivity and its quality and to have sustained productivity and promote diversification to wine production and other value added products

Objectives

1. Conservation of genetic resources/Germplasm for sustainable use
2. Production management and value addition of grapes

Functions

To attend to issues relating to all aspects of viticulture and enology research, education and extension at national and international level through collaborations in research involving improvement, production, protection and post-harvest technology, training and dissemination of developed technologies to stakeholders for increasing production and productivity of grapes.

Section-2
Inter se priorities among key objectives, success indicators and targets

Objectives	Weight (%)	Action	Success Indicators	Unit	Weight (%)	Target/Criteria Value				
						Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
Conservation of genetic resources/ germplasm for sustainable use.	35	Collection, characterization and conservation of genetic resources.	Number of germplasm collected.	Number	10	30	25	20	15	10
		Molecular characterization of accessions	Number of accessions	Number	8	70	60	50	40	30
		Research on conventional breeding for desirable traits	Number of varieties /clones identified/developed/in process of development	Number	6	6	5	4	3	2
		Research on molecular breeding for desirable traits	Generation of sergeants for mapping	Number	6	55	50	45	40	35
		Research on development of molecular markers	Analysis of molecular markers	Number	5	30	25	20	15	10
Production management and value addition of grapes	53	Development of canopy management practices, bio-regulator schedule, nutrient and water management techniques, use of rootstocks, developing quality planting material, disease forecasting models, bio-efficacy of pesticides, use of biofertilizers/pesticid	Number of canopy management components standardized / or in process of testing	Number	3	2	1	0	0	0
			Number of growth regulators tested/recommended	Number	3	2	1	0	0	0
			Number of ongoing trials to develop water and nutrient schedules	Number	3	2	1	0	0	0
			Development of techniques like use of rootstocks, water conservation techniques	Number	3	2	1	0	0	0

		es; value addition, transfer of technology	Number of quality planting materials produced	Number (Thousands)	4	150	125	100	75	50
			Number of control measures, IPM packages developed for managing abiotic stresses	Number	3	5	4	3	2	1
			Number of pesticides tested/recommended	Number	6	10	9	8	7	6
			Number of studies on pesticide degradation	Number	3	5	4	3	2	1
			Number of bio pesticides, bio fertilizers tested/recommended	Number	3	5	4	3	2	1
			Number of samples analyzed for pesticide residues	Number	5	4000	3500	3000	2500	2000
			Number experiments on of value additions techniques	Number	3	6	5	4	3	2
			Participation in field visits, seminars, discussions etc	Number	8	25	22	20	18	15
			Publication of bulletins, videos, films, database, TV program, radio talks etc	Number	6	10	8	6	4	2
Efficient functioning of RFD system	3%	Timely submission of RFD for 2012-13	On-time submission	Date	2%	Mar. 23 2012	Mar. 26 2012	Mar. 27 2012	Mar. 28 2012	Mar. 29 2012
		Timely submission of Results for 2012-13	On-time submission	Date	1%	May 1 2013	May 2 2013	May 3 2013	May 6 2013	May 7 2013

Administrative Reforms	5%	Implement ISO 9001	Prepare ISO 9001 action plan	Date	1%	June 4 2012	June 5 2012	June 6 2012	June 7 2012	June 8 2012
			Implementation of ISO 9001 action plan	Date	2%	March 25 2013	March 26 2013	March 27 2013	March 28 2013	March 29 2013
		Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	2%	100	95	90	85	80
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

Objectives	Action	Success Indicators	Unit	Target value for FY 10/11	Projected Value for FY 11/12	Projected Value for FY 12/13	Projected Value for FY 13/14	Projected Value for FY 14/15
Conservation of genetic resources/germplasm for sustainable use.	Collection, characterization and conservation of genetic resources.	Number of germplasm collected.	Number		25	30	35	35
	Molecular characterization of accessions	Number of accessions	Number		68	70	70	75
	Research on conventional breeding for desirable traits	Number of varieties /clones identified/developed/in process of development	Number		4	6	6	6
	Research on molecular breeding for desirable traits	Generation of sergeants for mapping	Number		50	55	55	60
	Analysis of molecular markers	Analysis of molecular markers	Number		25	30	35	35
Production management and value addition of grapes	Development of canopy management practices, bioregultor schedule, nutrient and water management techniques, use of rootstocks, developing quality planting material, disease forecasting models, bioefficacy of pesticides, use of biofertilizers/pesticides; value addition, transfer of technology	Number of canopy management components standardized / or in process of testing	Number		2	2	2	3
		Number of growth regulators tested/recommended	Number		2	2	3	3
		Number of ongoing trials to develop water and nutrient schedules	Number		1	2	2	3
		Development of techniques like use of rootstocks, water conservation techniques	Number		1	2	3	3
		Number of quality planting materials produces	Thousands		125	150	150	200
		Number of control measures, IPM packages developed for managing abiotic stresses	Number		4	5	5	6
		Number of pesticides tested/recommended	Number		9	10	10	12

		Number of studies on pesticide degradation	Number		4	5	6	6
		Number of bio pesticides, bio fertilizers tested/recommended	Number		4	5	5	6
		Number of samples analyzed for pesticide residues	Number		2600	4000	4500	5000
		Number experiments on of value additions techniques	Number		4	6	6	6
		Participation in field visits, seminars, discussions etc	Number		22	25	30	35
		Publication of bulletins, videos, films, database, TV program, radio talks etc	Number		9	10	10	12
Efficient Functioning of the RFD System	Timely submission of RFD for 2012-13	On-time submission	Date			Mar. 26 2012		
	Timely submission of results for 2012-13	On-time submission	Date			May 2 2013		
Administrative reforms	Implement ISO 9001	Prepare ISO 9001 action plan	Date			May 2 2013		
		Implementation of ISO 9001 action plan	Date			March 26 2013		
	Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%			95		
Improving Internal Efficiency / responsiveness / service delivery of Ministry / Department	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%			95		
		Independent Audit of implementation of public grievance redressal system	%			95		

Section 4: Description and definition of success indicators and proposed measurement methodology.

1. Objective 1

To support developing strains, varieties/ clones, breeds for different purposes. Molecular markers can also be linked to economic traits. A core germplasm maintained as field gene bank helps in utilization of gentic resources in future to develop desirable varieties for various purposes as per the need of the grape industry. Number of explorations made, number of accession added to germplasm and molecular markers developed will be the success indicators.

2. Objective 2

Grape cultivation is highly intensive with very high initial expenditure for establishing vineyards and increased recurring costs in terms of costlier fertilizers, bioregulators, pesticides etc. Experiments to identify technically feasible and cost effective materials for training system, development of most appropriate and precisive schedules to improve nutrient and water use efficiency including petiole nutrient standards/standards for table and wine varieties, use of bio-pesticides, development of integrated pest and disease management techniques that will minimize the cost of cultivation and thus increase net returns to the growers. Production of elite planting materials which is genetically pure and free from insect pests and diseases especially drought, salt and nematode tolerant rootstocks and making available to grape growers to increase the area under grape cultivation especially in adverse soil and climatic conditions. Environmental and food safety is the major concern in grape cultivation as lot of chemicals being used. Developing use of bio pesticides and bio control agents helps in minimizing the use of chemicals. Establishment of PHI and MRL of pesticides and monitoring pesticide residues in grapes help in minimizing the pesticide residue in both domestic and exportable grapes. Strengthening extension and education systems helps to disseminate the knowledge / technology developed at the center to grape growers and other stakeholders of grape industry.

Section 5: Specific performance requirements from other Departments.

- The quantity of planting materials produced is based on the quantity indented/demand by the grape growers from different grape growing regions of the country.
- Technology adoption would depend upon the proactive role of development departments namely State Departments of Horticulture in grape growing states, grape growers associations of different grape growing states, Grape Processing Board, etc.
- Financial support as per the EFC allocation for the institute.

Section 6. Outcome/Impact of activities of Organisation/ Ministry

1	2	3	4	5	6	7	8	9	10
S. No.	**Outcome/Impact of organisation /RCs**	**Jointly responsible for influencing this outcome/impact with the following organisation(s)/ departments/ministry(s)**	**Success Indicators**	**Unit**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**
1.	Production of quality seed and planting materials of grapes, development of improved varieties and technologies including value added products	Grape growers association/ state department of horticultures/national horticulture mission/grape processing board etc	Increase in production of grapes*	%	-	1.0%	1.25%	1.5%	2.0%
			Development of improved varieties/clones of grapes in process of development	Number	-	3	4	5	6
			Development of production technology	Number	-	14	16	18	20
			Production of quality and disease-free planting materials	Number in thousands	-	125	150	170	200
			Development of /in the process of development of value added products and enhancing shelf-life.	Number	-	4	5	6	7
			Awareness of stakeholders & capacity building of the scientist through training/ demonstrations	Number	-	22	25	30	35

*: Subject to congenial climatic conditions during cropping season as unseasonal rains during past 2 years resulted in heavy incidence of downy mildew resulting in reduced production

Sahbia
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