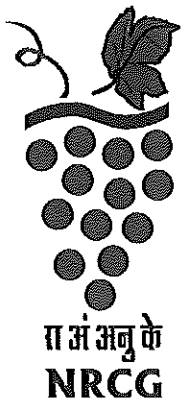

R F D

Results- Framework Document

(2011 – 2012)

for

National Research Centre for Grapes

P.B. No.3, Manjri Farm, Solapur Road, Pune -412 307,

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

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 stake holders for increasing production and productivity of grapes.

Section-2

Inter se priorities among key objectives, success indicators and targets and Performance Results Achievements

Objectives	Weight	Action	Success Indicators	Unit	Weight	Target/Criteria Value				
						Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
1. 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	75	68	60	52	45
		Research on conventional breeding for desirable traits	Number of varieties /clones identified/developed/in process of development	Number	6	5	4	3	2	1
		Research on molecular breeding for desirable traits	Generation of segregants for mapping	Number	6	60	50	40	30	20
		Analysis of molecular markers	Identification of molecular markers	Number	5	30	25	20	15	12
2. Production management and value addition	54	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,	Number of canopy management components standardized / or in process of testing	Number	3	3	2	1	0	0
			Number of growth regulators tested/recommended	Number	3	3	2	2	1	1
			Number of ongoing trials to develop water and nutrient schedules	Number	3	2	1	1	1	1
			Development of techniques like use of rootstocks, water conservation techniques	Number	3	2	1	1	1	1
			Number of quality planting materials produces	Thousands	5	150	125	100	80	60

		transfer of technology	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	2800	2600	2400	2200	2000
			Number of experiments on value additions techniques	Number	3	5	4	3	2	1
			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
3. Efficient Functioning of the RFD System	11	Timely submission of RFD for 2011-12	On-time submission	Date	2%	10.06.2011	14.06.2011	16.06.2011	20.06. 2011	22.06. 2011
		Timely submission of Results for 2011-12	On-time submission	Date	1%	01.05.2012	03.05.2012	04.05.2012	05.05.2012	06.05.2012
		Finalize a Strategic Plan for RC	Finalize the Strategic Plan for next 5 years	Date	2%	10.12.2011	15.12.2011	20.12.2011	24.12.2011	31.12.2011
		Identify potential areas of corruption related to organisation activities and develop an action	Finalize an action plan to mitigate potential areas of corruption	Date	2%	10.12.2011	15.12.2011	20.12.2011	24.12.2011	31.12.2011

		plan to mitigate them								
		Implementation of Sevottam	Create a Sevottam compliant system to implement, monitor and review Citizen's Charter	Date	2%	10.12.2011	15.12.2011	20.12.2011	24.12.2011	31.12.2011
			Create a Sevottam Compliant system to redress and monitor public Grievances	Date	2%	10.12.2011	15.12.2011	20.12.2011	24.12.2011	31.12.2011

Section 3
Trend values of the success indicators

Objectives	Action	Success Indicators	Unit	Actual value for FY 09/10	Actual value for FY 10/11	Targeted Value for FY 11/12	Projected Value for FY 12/13	Projected Value for FY 13/14
1. Conservation of genetic resources/germplasm for sustainable use.	Collection, characterization and conservation of genetic resources.	Number of germplasm collected.	Number	20	25	25	35	35
	Molecular characterization of accessions	Number of accessions	Number	60	68	68	70	75
	Research on conventional breeding for desirable traits	Number of varieties /clones identified/developed/in process of development	Number	3	4	4	6	6
	Research on molecular breeding for desirable traits	Generation of sergeants for mapping	Number	45	50	50	55	60
	Analysis of molecular markers	Analysis of molecular markers	Number	22	25	25	35	35
2. Production management and value addition	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	1	1	1	2	3
		Number of growth regulators tested/recommended	Number	1	1	1	3	3
		Number of ongoing trials to develop water and nutrient schedules	Number	1	1	1	2	3
		Development of techniques like use of rootstocks, water conservation techniques	Number	1	1	1	3	3
		Number of quality planting materials produces	Thousands	110	125	125	150	200
		Number of control measures, IPM packages developed for managing abiotic stresses	Number	3	4	4	5	6
		Number of pesticides tested/recommended	Number	7	9	9	10	12

		Number of studies on pesticide degradation	Number	3	4	4	6	6
		Number of bio pesticides, bio fertilizers tested/recommended	Number	3	4	4	5	6
		Number of samples analyzed for pesticide residues	Number	2400	2600	2600	4500	5000
		Number of experiments on value additions techniques	Number	3	4	4	6	6
		Participation in field visits, seminars, discussions etc	Number	20	22	22	30	35
		Publication of bulletins, videos, films, database, TV program, radio talks etc	Number	6	8	8	10	12
3.Efficient Functioning of the RFD System	Timely submission of RFD for 2012-13	On-time submission	Date	--	--	14.06. 2011	--	--
	Timely submission of Results for 2012-13	On-time submission	Date	--	--	03.05.2012	--	--
	Finalize a Strategic Plan for RC	Finalize the Strategic Plan for next 5 years	Date	--	--	15.12.2011	--	--
	Identify potential areas of corruption related to organisation activities and develop an action plan to mitigate them	Finalize an action plan to mitigate potential areas of corruption.	Date	--	--	15.12.2011	--	--
	Implementation of Sevottam	Create a Sevottam compliant system to implement, monitor and review Citizen's Charter	Date	--	--	15.12.2011	--	--
		Create a Sevottam Compliant system to redress and monitor public Grievances	Date	--	--	15 .12.2011	--	--

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

To meet the requirement of grape growers and grape industry and to improve the grape production and quality and to sustain the productivity of grapes under adverse situations, the research activities in the National Research Centre for Grapes, Pune has been consolidated and prioritized into two major objectives as stated below:

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 are 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.
- The quality of research output depends on availability of required number of scientific personnel, sufficient number of technical assistants, and also on the trainings attended by them.

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

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	2009-10	2010-11	2011-12	2012-13	2013-14
1.	Production of quality seed and planting materials of grapes, development of improved varieties and technologies including value added products	Grape growers association/ state departments of horticulture/national horticulture mission/grape processing board etc	Increase in production of grapes	%	1	1.5	1.75	2.0	2.1
			Development of improved varieties/clones of grape in process of development	Number	2	3	4	5	5.5
			Development of production technology	Number	10	12	16	17	18
			Production of quality and disease-free planting materials	Number in thousands	140	145	150	155	160
			Development of /in the process of development of value added products and enhancing shelf-life.	Number	5	6	7	8	9
			Awareness of stakeholders & capacity building of the scientist through training/ demonstrations	Number	20	22	25	26	28

(RFD nodal officer)