



Results-Framework Document (RFD)
for
Crop Science Division
(2013- 2014)

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Section 1: Vision, Mission, Objectives and Functions

VISION

Productivity enhancement in field crops.

MISSION

Develop high yielding and nutritive crop cultivars (varieties/hybrids) with high tolerance to various biotic and abiotic stresses.

OBJECTIVES

- Development of improved cultivars for enhancing productivity of field crops.
- Identification of appropriate crop production & protection technologies.
- Technology dissemination and capacity building.

FUNCTIONS

- Research for developing improved cultivars in field crops (food, fodder, oilseeds, pulses, fibre and sugar crops) with better nutritional quality and tolerance to biotic and abiotic stresses.
- Management of plant, microbes and insect genetic resources.
- Production of breeder seed as per indent of DAC.
- Strengthening frontier research in identified areas/ programmes.
- Adaptive research, technology assessment, and technology transfer to end users to bridge the yield gaps.
- Human resource development/capacity building in the frontier areas of research in crop science.

Section 2: Inter se Priorities among key Objectives, Success Indicators and Targets

Sl. No.	Objectives	Weight	Actions	Success Indicators	Unit	Weight	Target / Criteria Value				
							Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
1	Development of improved cultivars for enhancing productivity of field crops	60	Evaluation and conservation of genetic material	Germplasm and breeding lines evaluated	Number	10	37000	35000	33000	30000	27500
				Germplasm conserved in Long Term Storage	Number	5	6000	5000	4000	3500	3000
				Lines identified and registered for unique traits	Number	7	100	80	70	60	55
			Development of improved cultivars	Entries tested in AICRP multi-location trials	Number	8	2600	2400	2300	2200	2100
				Varieties identified by AICRP Varietal Identification Committees	Number	15	58	50	43	37	32
			Quality seed production	Breeder seed produced	Quintals	15	95000	85000	80000	75000	70000
2	Identification of appropriate crop production & protection technologies	10	Development and testing of new technologies	New technologies developed and tested	Number	10	150	135	125	120	115
3	Technology dissemination and capacity building	19	Demonstrations of new varieties and technologies	Front line demonstrations conducted	Number	10	12000	11000	10000	9000	8500
			Training programmes organization	Trainings/fairs organized	Number	9	300	250	225	200	180

4	Efficient Functioning of the RFD System	3	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	2	May 15, 2013	May 16, 2013	May 17, 2013	May 20, 2013	May 21, 2013
			Timely submission of Results for RFD (2012-13)	On-time submission	Date	1	May 1, 2013	May 2, 2013	May 5, 2013	May 6, 2013	May 7, 2013
5	Administrative reforms	4	Implement ISO 9001 as per approved action plan	% implementation	%	2	100	95	90	85	80
			Prepare an action plan for innovation	On-time submission	Date	2	July 30, 2013	August 10, 2013	August 20, 2013	August 30, 2013	September 10, 2013
6	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	Actions	Success Indicators	Unit	Actual Value for FY 11-12	Actual Value for FY 12-13	Target Value for FY 13-14	Projected Value for FY 14-15	Projected Value for FY 15-16
Development of improved cultivars for enhancing productivity of field crops	Evaluation and conservation of genetic material	Germplasm and breeding lines evaluated	Number			35000	35500	36000
		Germplasm conserved in Long Term Storage	Number			5000	5500	5600
		Lines identified and registered for unique traits	Number			80	85	90
	Development of improved cultivars	Entries tested in AICRP multi-location trials	Number			2400	2450	2500
		Varieties identified by AICRP Varietal Identification Committees	Number			50	55	59
	Quality seed production	Breeder seed produced	Quintals			85000	87000	88000
Identification of appropriate crop production & protection technologies	Development and testing of new technologies	New technologies developed and tested	Number			135	140	145
Technology dissemination and capacity building	Demonstrations of new varieties and technologies	Front line demonstrations conducted	Number			11000	11500	11700
	Training programmes organization	Trainings/fairs organized	Number			250	260	270

Efficient Functioning of the RFD System	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date			16/05/2013		
	Timely submission of Results for RFD (2012-13)	On-time submission	Date			02/05/2013		
Administrative reforms	Implement ISO 9001 as per approved action plan	% implementation	%			95		
	Prepare an action plan for innovation	On-time submission	Date			10/08/2013		
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: Acronyms

S.No.	Acronym	Description
1	AICRP	All India Coordinated Research Project
2	DAC	Department of Agriculture and Cooperation
3	FLD	Front Line Demonstration
4	NBPGR	National Bureau of Plant Genetic Resources

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

SI. No.	Success Indicator	Description	Definition	Measurement	General Comments
1	Germplasm and breeding lines evaluated	Source material for the improved varieties to be evaluated	Material generated from the basic germplasm	Number of breeding lines evaluated	May not increase with every passing year.
2	Germplasm conserved in Long Term Storage	Diverse germplasm is the basic requirement to bred new improved varieties	Basic genetic resource for crop improvement	Number of Germplasm/lines conserved	May not increase with every passing year
3	Lines identified and registered for unique traits	Germplasm/breeding lines are evaluated to select the useful germplasm/breeding lines to be utilized in crop improvement programme. Such trait specific germplasm /lines are registered with NBPGR, New Delhi	Germplasm/breeding lines identified for specific traits such as resistant to a particular biotic stress or tolerant to abiotic stress or quality parameters	Number of such lines registered with NBPGR	May not increase with every passing year
4	Entries tested in AICRP multi-location trials	AICRP centres, after testing their breeding lines/entries in common varietal trials, contribute entries to AICRP trials for multilocation testing.	Promising breeding lines being tested in AICRP multilocation trials	Number of such breeding lines/entries tested	May not increase with every passing year.
5	Varieties identified by AICRP Varietal	Breeding lines tested along with checks in multilocation trials through All India	Best performing entries identified as a new variety	Number of such varieties identified	Targets for varieties identified

	Identification Committees	Coordinated Research Projects and the best performing entries compared to checks are identified as new improved varieties for release.	for release		given in section 2 and their respective trend values in Section 3 may vary as the identification of varieties Targets for varieties identified given in Section 2 and their respective depend upon the availability of superior material with respect to yield, resistance/tolerance to biotic and abiotic stresses over the existing varieties.
6	Breeder seed produced	Produced from nucleus seed, breeder seed is the starting point in seed chain of producing quality seeds for farmers	Genetically pure seed produced under direct control of plant breeder and which provides the source for the initial and recurring production of foundation seed.	Quantity produced (quintals)	Quantity may vary as per indent from DAC
7	New technologies developed and tested	The Crop Science Division through its institutes is continuously developing new production and protection technologies for improving productivity and production of field crops. Once developed, these technologies need to be	New technique/method/tool/agent/molecule etc which can be used to improve crop productivity and production.	The number of technologies developed and tested is indicator of the success.	

		tested and validated before dissemination.			
8	Front line demonstrations conducted	Dissemination of scientific knowledge /technologies is an important activity of the Crop Science Division. The institutes under Crop Science Division conducts FLDs. Through front line demonstrations (FLD), the new varieties/hybrids, new products and technological innovations are demonstrated to farmers..	Demonstration of new variety/technology/package of practices etc. on farmers field under close supervision of scientist.	The number of FLDs conducted are indicators to measure the progress of this success indicator	
9	Trainings/fairs organized	Capacity building of stakeholders regarding advancements in farm technologies are important activities of the Crop Science Division. The institutes under Crop Science Division conducts farmers training programmes/organize farmers' fairs etc. .	Training is an organized activity to impart latest information/knowledge to the participants about the crop production and protection technologies (in case of Crop Science Division). Farmers' fair is also an organized activity where farmers are exposed to the latest available technologies at one place.	The number of training programmes /farmers' fairs organized are indicators to measure the progress of this success indicator.	

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

Location Type	State	Organization Type	Organization Name	Relevant Success Indicator	What is your requirement from this organization	Justification for this requirement	Please quantify your requirement from this Organization	What happens if your requirement is not met
Central Government		Department	DAC	Breeder seed produced	Indent for quantity of breeder seed	Variety wise indent for breeder seed	Quantity of breeder seed is produced as per indent	Less or more quantity of breeder seed will be produced
Central Government		Department	DAC	Front line demonstrations conducted	Allotment of FLD	FLD allotment to centres	Number of FLD allotted	Number of FLD conducted may vary as per allotment

Section 6: Outcome/Impact of Department/Ministry

S. No.	Outcome / Impact of Ministry / Department	Jointly responsible for influencing this outcome / impact with the following departments/ministry(ies)	Success Indicator(s)	Unit	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1	Enhanced productivity of field crops	DAC	Enhanced productivity (genetic potential)	Per cent	7.0	7.5	8.0	8.0	8.0