



Results-Framework Document (RFD)

for

**Directorate of Soybean Research
(2014-2015)**

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Section 1: Vision, Mission, Objectives and Functions

Vision

To contribute to edible oil pool and energy-protein malnutrition eradication programme of the country

Mission

To enhance and sustain soybean production and productivity through research and development of new technologies and providing strong technological support

Objectives

- Genetic enhancement and development of improved cultivars
- Development and identification of appropriate crop production & protection technologies
- Technology dissemination and capacity building

Functions

To act as national centre for basic and applied research on soybean; to plan, coordinate and monitor research on soybean in the country; to impart training to scientists and extension workers engaged in soybean research and development; to foster national and international collaborations for exchange of knowledge and material; to disseminate information on latest soybean production technology; to serve as an information bank on different aspects of soybean for strategic planning; to extend consultancy services and expertise.

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	Genetic enhancement and development of improved cultivars	45	Evaluation of genetic material	Breeding and germplasm lines evaluated	No.	04	840	700	560	420	280
				Germplasm lines tested under multi-location testing	No.	04	144	120	96	72	48
				Lines identified for unique traits	No.	04	17	14	11	8	5
			Development of improved cultivars	Entries contributed for multi-location trial	No.	13	48	40	32	24	16
				Varieties identified for release	No.	10	3	2	1	0	0
			Seed production programme	Breeder seed produced	MT	10	2400	2000	1600	1200	800
2	Development & identification of appropriate crop production & protection technologies	21	Development of new technologies	New technologies tested	No.	11	7	6	5	4	3
				Technologies recommended	No.	10	3	2	1	0	0
3	Technology dissemination and capacity building	14	Demonstrations conducted	Front line demonstrations conducted	No.	8	840	700	560	420	280
			Farmers/ Extension officials training programmes organized	Trainings organized	No.	6	73	61	49	37	25
*	Publication/Documentation	5	Publication of the research articles in the journals having the NAAS	Research articles published	No.	3	16	13	10	7	4

			rating of 6.0 and above								
			Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	2	30.06.2014	02.07.2014	04.07.2014	07.07.2014	09.07.2014
*	Fiscal resource management	2	Utilization of released plan fund	Plan fund utilized	%	2	98	96	94	92	90
*	Efficient Functioning of the RFD System	3	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 for 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	3	Rating from Independent Audit of implementation of Citizens' / Clients' Charter (CCC)	Degree of implementation of commitments in CCC	%	2.00	100	95	90	85	80
			Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	1.00	100	95	90	85	80
*	Administrative Reforms	7	Update organizational strategy to align with revised priorities	Date	Date	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

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.	Genetic enhancement & development of improved cultivars	Evaluation of genetic material	Breeding and germplasm lines evaluated	No.	450	1200	700 ^b	725	750
			Germplasm lines tested under multi-location testing	No.	100	115	120	125	130
			Lines identified for unique traits	No.	7	27	10	11	12
		Development of improved cultivars	Entries contributed for multi-location trial	No.	37	40	40	40	42
			Varieties identified for release	No.	2	8	2	2	3
		Seed production programme	Breeder seed produced	MT	2200	1350 ^a	2000 ^c	2050	2100
2.	Development & identification of appropriate crop production & protection technologies	Development of new technologies	New technologies tested	No.	4	5	6	6	7
			Technologies recommended	No.	1	2	2	2	3
3.	Technology dissemination and capacity building	Demonstrations conducted	Front line demonstrations conducted	No.	755	669	700 ^d	700	700
		Farmers/ Extension officials training programmes organized	Trainings organized	No.	94	61	61	65	70
*	Publication/ Documentation	Publication of the research articles in the	Research articles published	No.	10	13	13	13	14

		journals having the NAAS rating of 6.0 and above							
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	-	-	02.07.2014	-	-
*	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	99.98	99.83	96	97	98
*	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 for 2013-2014	On-time submission	Date	-	-	May 2, 2014	-	-
*	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	Date	Date	-	-	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	-	-

- a. Due to heavy rainfall target could not be achieved. The contingency plan for production of breeder seed in Rabi Season is taken up, figures are likely to revise
- b. The germplasm scattered across different centres of AICRP were consolidated and evaluated at DSR, Indore and this was an exceptional achievement in year 2013-14. Looking at the past experience the targets were fixed at 700.
- c. As per allocation from DAC.
- d. Depends on allocation of funds from DAC.

Section 4(a) : Acronyms

S.No.	Acronym	Description
1.	DSR	Directorate of Soybean Research
2.	AICRPS	All India Coordinated Research Project on Soybean
3.	CVRC	Central Varietal Release Committee
4.	FLD	Frontline Demonstrations
5.	SAUs	State Agricultural Universities
6.	DAC	Department of Agriculture & Cooperation
7.	PGP	Plant Growth Promoting
8.	MT	Metric Tonnes

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

S. No.	Success Indicator	Description	Definition	Measurement	General comments
1.	Breeding and germplasm lines evaluated	DSR and AICRPS evaluates newly developed breeding/germplasm lines through multi-year, multi-locational trials.	Breeding lines and germplasm are the building blocks for development of varieties.	Number of lines evaluated	
2.	Germplasm lines tested under multi-location testing	New germplasm lines are to be identified to integrate in ongoing breeding programmes.	Germplasm lines would be identified on the basis of multilocational evaluation.	Number of lines evaluated	
3.	Lines identified for unique traits	DSR serves as National Repository of soybean germplasm.	Donor lines identified for unique traits would be exploited in breeding programmes.	Number of lines evaluated	
4.	Entries contributed for multi-location trial	Efficiency of breeding programmes could be judge by number of breeding lines developed.	The breeding lines developed at centres need to be evaluated under AICRPS testing for their further consideration.	Number of entries tested	
5.	Varieties identified for release	AICRPS Annual Group Meeting identifies promising breeding lines that have performed consistently well over locations and seasons.	Consistent superior lines are identified for further consideration of CVRC to be released as varieties.	Number identified	
6.	Breeder seed produced	Quality seed is an essential component of any improved crop production regime.	The amount of quality seed produced reflects on the seed replacement rate in a crop.	Amount of seed produced.	
7.	New technologies tested	In view of new challenges, new production and protection technologies are required to mitigate them.	A number of new production and protection technologies are evaluated every year so as to test their efficacy.	Number of new technologies evaluated.	
8.	Technologies recommended	Successful production and protection technologies are identified on the basis of their consistent superior performance.	Identified new production and protection technologies over years and locations are recommended to farmers.	Number of technologies recommended	
9.	Front line demonstrations conducted	Frontline demonstrations are the launch vehicle of any new crop husbandry technology.	Number of trials are conducted at farmers field to demonstrate new technologies.	Number of FLDs conducted	
10.	Trainings organized	Farmers and extension workers need to be trained about new development in soybean varieties, production and protection technologies.	A number of in house and out station programmes are conducted to create awareness among farmers and extension machinery.	Number of trainings organized.	

Section 5. Specific performance requirement 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
Agro-ecological zones	Different states	SAUs	SAUs	Varieties identified for release	Development and identification of superior genotypes	It is a joint assignment	New varieties	More or less number of varieties would be identified
Agro-ecological zones	Different states	SAUs	SAUs	New technologies tested	Number of new technologies developed	It is a joint assignment	New technologies	More or less number of technologies would be identified
Agro-ecological zones	Different states	DAC & SAUs	DAC & SAUs	Breeder seed produced	Seed indent to be provided by DAC and breeder seed produced by SAUs	The amount of breeder seed produced depends on indent by DAC and performance of individual SAUs centres	Quantity of breeder seed	More or less quantity of breeder seed would be produced

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

S. No.	Outcome/ Impact	Jointly responsible for influencing this outcome with the following Organization(s)/ Department(s)/ Ministry(ies)	Success indicator(s)	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1.	Enhanced availability of quality seeds	SAUs, DAC	Increase in breeder seed production	%	3	-15*	5	5	5
2.	Diversification of soybean varieties	SAUs	Identification of new varieties	No.	2	8	2	2	3
			Breeding lines evaluated	No.	40	45	50	50	55
			New cross combinations effected	No.	65	75	80	80	85
3.	Zone specific efficient production technologies	SAUs, State Deptts. of Agriculture	New interventions assessed	No.	3	4	4	4	4
			Identification of high efficacy PGP microbes	No.	03	05	02**	03**	03**

* Due to heavy rainfall target could not be achieved. The contingency plan for production of breeder seed in Rabi Season is taken up, figures are likely to revise

** Targets for Identification of high efficacy PGP Microbes reduced due to reduction in number of scientist in the subject.

Classification of Success Indicators

S.No.	Success Indicator(s)	Input	Activity	Internal Output	External Output	Outcome	Measures Qualitative Aspects
1.	Breeding and germplasm lines evaluated	False	True	False	False	False	False
2.	Germplasm lines tested under multi-location testing	False	True	False	False	False	False
3.	Lines identified for unique traits	False	False	True	False	False	True
4.	Entries contributed for multi-location trial	False	True	False	False	False	False
5.	Varieties identified for release	False	False	True	False	False	True
6.	Breeder seed produced	False	False	False	True	False	False
7.	New technologies tested	False	False	True	False	False	False
8.	Technologies recommended	False	False	False	False	True	False
9.	Front line demonstrations conducted	False	True	False	False	False	False
10.	Trainings organized	False	True	False	False	False	False

Table for setting the Agreed Performance Targets

S.No.	Success Indicator(s)	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
		2009-10 V	2010-11 IV	2011-12 III	2012-13 II	2013-14 I		
1.	Breeding and germplasm lines evaluated	161	41	400	450	1200	450.4 (425)	550
2.	Germplasm lines tested under multi-location testing	116	17	22	100	115	74 (110.3)	100
3.	Lines identified for unique traits	11	11	9	7	27	13 (7.0)	7
4.	Entries contributed for multi-location trial			38	37	40	38.3	35
5.	Varieties identified for release	0	1	1	2	8	3 (1.33)	1
6.	Breeder seed produced	1486.7	1972.7	2100	2200	1350	1822 (2090.6)	1800
7.	New technologies tested	-	-	4	4	5	4.3	6
8.	Technologies recommended	-	-	1	1	2	1.3	2
9.	Front line demonstrations conducted	-	-	700	755	669	708	750
10.	Trainings organized	35	38	38	94	61	53.2 (37.0)	50

Figures in parenthesis are averages excluding outliers.