



## **Results-Framework Document (RFD)**

**for**

## **Directorate of Wheat Research, Karnal (2014-2015)**

**Address : P.B. No. 158, Agarsain Marg, Karnal-132001 (Haryana)**

**Website ID : [www.dwr.res.in](http://www.dwr.res.in)**

## **Section 1: Vision, Mission, Objectives and Functions**

### **Vision**

Ensuring food security of India by enhancing the productivity and profitability of wheat and barley on an ecologically and economically sustainable basis.

### **Mission**

Sustainable growth of wheat and barley production through research and extension initiatives supported by infrastructural and policy measures.

### **Objectives**

1. Genetic enhancement and development of improved cultivars
2. Development and identification of appropriate crop production & protection technologies
3. Technology dissemination and capacity building

### **Functions**

Coordination of multidisciplinary research in wheat and barley breeding, agronomy, crop protection, quality and technology dissemination; germplasm conservation and exchange; linkage with national and international institutions for providing impetus to research activities; human resource development.

**Section 2: *Inter se* priorities among Key Objectives, Success Indicators and Targets**

S. No.	Objective(s)	Weight	Action(s)	Success Indicator(s)	Unit	Weight	Target/Criteria value				
							Excellent	Very Good	Good	Fair	Poor
							100%	90%	80%	70%	60%
1	*Genetic enhancement and development of improved cultivars of wheat and barley	45	Evaluation of genetic material for yield & quality components and biotic & abiotic stress tolerance	Breeding and germplasm lines evaluated	Number	12	3720	3100	2480	1860	1240
				New entries tested under AICRPW&B trials for multi-location testing	Number	10	720	600	480	360	240
				Genotypes identified for unique traits/genes	Number	5	31	26	21	16	11
			Development of improved cultivars	Varieties identified for release	Number	10	13	11	9	7	5
			Seed production programme	Breeder seed produced	Weight Metric Tonnes	7	2880	2400 <sup>s</sup>	1920	1440	960
				# Truthfully labeled seed produced	Weight Metric Tonnes	1	12	10	8	6	4
2	*Development and identification of appropriate crop production & protection technologies	20	Development and testing of new technologies	New technologies developed & tested	Number	20	18	15	12	9	6
3	Technology dissemination	15	Demonstrations conducted	# Front line demonstrations conducted	Number	10	660	550	440	330	220

	and capacity building		Farmers/ Extension officials training programmes organized	Trainings organized	Number	5	6	5	4	3	2
	Publication/Documentation	5	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	3	22	18	14	10	6
			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	100	95	90	85	80
			Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	1	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

\* Cover the Flagship programmes (Pre-breeding, Biotic stress & Climate change) and the CRPs.

# Low criteria values selected ( as compared to the projected value in RFD 2013-14) as the production of Truthfully Labeled seed depends on the availability of newly identified variety and the number of FLDs depends upon the approval (allotment) from the Ministry of Agriculture every year.

\$ Target for breeder seed has been changed because of the indent of breeder seed has been revised by DAC, Government of India to rationalize breeder seed requirements in the country. This was done to discourage very old varieties which have now become susceptible to diseases particularly rusts.

### Section 3: Trend Values of the Success Indicators

S. No.	Objectives	Actions	Success Indicator(s)	Unit	Actual value for FY 2012-2013	Actual value for FY 2013-2014	Target value for FY 2014-2015	Project ed value for FY 2015-2016	Project ed value for FY 2016-2017
1	*Genetic enhancement and development of improved cultivars of wheat and barley	Evaluation of genetic material for yield & quality components and biotic & abiotic stress tolerance	Breeding and germplasm lines evaluated	Number	3200	3100	3100	3200	3300
			New entries tested under AICRPW&B trials for multi-location testing	Number	590	650	600	610	620
			Genotypes identified for unique traits/genes	Number	27	32	26	28	30
		Development of improved cultivars	Varieties identified for release	Number	12	16	11	12	14
		Seed production programme	Breeder seed produced	Weight Metric Tonnes	3744	2750	2400 <sup>s</sup>	2450	2500
			# Truthfully labeled seed produced	Weight Metric Tonnes	11	16	10	11	12
2	*Development and identification of appropriate crop production & protection technologies	Development and testing of new technologies	New technologies developed & tested	Number	15	18	15	16	18
3	Technology dissemination and capacity building	Demonstrations conducted	Front line demonstrations conducted ^	Number	730	740	550	600	650
		Farmers/ Extension officials training programmes organized	Trainings organized	Number	6	6	5	6	7
	Publication/Documentation	Publication of the research articles in the journals having the	Research articles published	No.	16	17	18	20	22

		NAAS rating of 6.0 and above							
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	-	-	July 2, 2014	-	-
	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	100	100	96	96.5	97.5
	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	-	-

\* Cover the Flagship programmes (Pre-breeding, Biotic stress & Climate change) and the CRPs.

# Production of Truthfully Labeled seed depends on the availability of newly identified variety.

^ Number of FLDs depends upon the approval (allotment) from the Ministry of Agriculture every year.

\$ Target for breeder seed has been changed because of the indent of breeder seed has been revised by DAC, Government of India to rationalize breeder seed requirements in the country. This was done to discourage very old varieties which have now become susceptible to diseases particularly rusts.

**Section 4 (a): Acronyms**

S. No.	Acronym	Description
1	AICRP W&B	All India Coordinated Research Project on Wheat & Barley
2	DAC	Department of Agriculture and Cooperation
3	SAUs	State Agricultural Universities
4	FLD	Front Line Demonstration

**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	Source material for the improved varieties to be evaluated	Material generated from the basic germplasm	Number of lines evaluated	--
2	New Entries tested under AICRPW&B trials for multi-location testing	Multilocation testing of advanced lines generated during breeding for yield and other traits	Superior lines identified as new variety for release	Number	--
3	Genotypes identified for unique traits/genes	Diverse germplasm lines have unique traits for yield components, disease resistance and quality traits	Germplasm lines with unique traits identified for use in breeding	Number	--
4	Varieties identified for release	Breeding lines tested along with checks in multi-location trials through All India Coordinated Research Projects and the best performing entries compared to checks are identified as new improved varieties for release	Best performing entries identified as a new variety for release	Number of such varieties identified	Targets for varieties identified given in Section 2 and their respective trend values in Section 3 may vary as the identification of varieties depend upon the availability of superior material with respect to yield, biotic and abiotic resistance/tolerance over



					the existing varieties
5	Breeder seed produced	Produce from nucleus and breeder seed is the starting point in seed chain of producing quality seeds for farmers	Breeder seed is the starting point in seed chain which is multiplied /converted into foundation /certified seed	Quantity produced (Quintals)	Quantity may vary as per indent from DAC
6	Truthfully labeled seed produced	To propagate new variety in short period of time in farmers field, truthfully labeled seed is produced	Faster propagation of newly developed variety in farmer's field	Quintals	Production of truthfully labeled seed depends on the newly identified variety
7	New technologies developed & tested	New technologies developed for resource management and disease control are tested for their suitability	Better technologies identified for improving efficiency in resource utilization and higher production	Number	--
8	Front line demonstrations conducted	Trials and demonstrations conducted for technology testing and proving the technology potential for production	On-farm trials aims at testing new technologies under farmer's condition and management, by using farmers own practice as control. Frontline demonstration is the field demonstration conducted on farmers field under the close supervision of scientists	Number	The number of FLDs depend on indent by DAC
9	Trainings organized	Capacity building activities related to knowledge and skill improvement/development programmes conducted for farmers, rural youth and extension personnel	Training is a process of acquisition of new skills, attitude and knowledge in the context of preparing for entry into a vocation or improving productivity in an organization or enterprise	Number	--

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

<b>Location Type</b>	<b>State</b>	<b>Organization Type</b>	<b>Organization Name</b>	<b>Relevant Success Indicator</b>	<b>What is your requirement from this organization</b>	<b>Justification for this requirement</b>	<b>Please quantify your requirement from this Organization</b>	<b>What happens if your requirement is not met.</b>
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 the indent	Less or more quantity of breeder seed will be produced
State/Central Government		Agricultural Universities	SAUs	New Entries tested under AICRPW&B trials for multi-location testing	To conduct trials	Trials are conducted across the country	Number of trials are decided in wheat workshop annually	Development of new varieties and technologies will hamper

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

<b>S. No.</b>	<b>Outcome / Impact</b>	<b>Jointly responsible for influencing this outcome / impact with the following organization(s)/ department(s)/ministry(ies)</b>	<b>Success Indicator(s)</b>	<b>Unit</b>	<b>2012-2013 #</b>	<b>2013-2014 *</b>	<b>2014-2015</b>	<b>2015-2016</b>	<b>2016-2017</b>
1	Enhancement in wheat productivity	SAUs and State agriculture departments	Wheat productivity	% increase	-2	0.0	2	2	2
2	Enhancement in barley productivity	SAUs and State agriculture departments	Barley productivity	% increase	0	2.4	2	2	2

There are year to year variations in wheat and barley productivity because of fluctuations in weather conditions during the crop season. However, there is continuous enhancement in wheat and barley productivity in India on long term basis. Therefore, target is 2% enhancement in wheat and barley productivity per annum.

# During 2012-13, due to heavy rains & flooding, there was crop lodging in some areas which resulted in the decline in crop productivity.

\* It is based on 3<sup>rd</sup> estimate and the Final estimate for the wheat and barley production in the year 2013-14 is still awaited.

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