



**R F D**  
**(Results-Framework Document)**

**for**

**Directorate of Wheat Research, Karnal**  
**(2013-2014)**

## **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. Germplasm 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.	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	50	Evaluation of genetic material	Breeding and germplasm lines evaluated	Number	10	3200	3000	2800	2600	2400
				Entries tested in AIC W&BIP trials for multi-location testing	Number	10	620	600	580	560	540
				Lines identified for unique traits	Number	8	30	25	20	16	12
			Development of improved cultivars	Entries contributed for AIC W&BIP multilocation trial	Number	8	50	45	40	30	20
				Varieties identified for release	Number	6	12	10	8	6	4
			Seed production programme	Breeder seed produced	Weight Quintals	7	25000	24000*	22000	20000	18000
				Truthfully labeled# seed produced	Weight Quintals	1	110	100	80	60	40
2	Development and identification of appropriate crop production & protection technologies	24	Development and testing of new technologies	New technologies tested	Number	12	16	15	14	12	10
				Technologies recommended	Number	12	8	7	5	4	3
3	Technology dissemination and capacity building	15	Demonstrations conducted	Front line demonstrations conducted	Number	10	850	800	700	650	600
			Farmers/ Extension officials training	Trainings organized	Number	5	5	4	3	2	1

			programmes organized								
Efficient Functioning of the RFD System	3	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	2	15/05/2013	16/05/2013	17/05/2013	20/05/2013	21/05/2013	
		Timely submission of Results for RFD (2012-13)	On-time submission	Date	1	01/05/2013	02/05/2013	05/05/2013	06/05/2013	07/05/2013	
Administrative Reforms	4	Implement ISO 9001 as per the approved action plan	% Implementation	%	2	100	95	90	85	80	
		Prepare an action plan for Innovation	On-time submission	Date	2	30/07/2013	10/08/2013	20/08/2013	30/08/2013	10/09/2013	
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	

\* With regard to indent and production of breeder seed, there was higher indent and production during 2011-12. However, indent of breeder seed has been reduced to 22000 quintals of wheat and barley during 2012-13 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.

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

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

S. No.	Objectives	Actions	Success indicator(s)	Unit	Actual values for FY 2011-2012	Actual values for FY 2012-2013	Target values for FY 2013-2014	Project ed values for FY 2014-2015	Project ed values for FY 2015-2016
1	Genetic enhancement and development of improved cultivars	Evaluation of genetic material	Breeding and germplasm lines evaluated	Number	3200	3100	3000	3100	3200
			Entries tested in AIC W&BIP trials for multi-location testing	Number	610	590	600	610	620
			Lines identified for unique traits	Number	26	27	25	28	29
		Development of improved cultivars	Entries contributed for AIC W&BIP multilocation trial	Number	48	48	45	47	49
			Varieties identified for release	Number	12	12	10	11	12
		Seed production programme	Breeder seed produced	Weight Quintals	41600	37440	24000*	25000	26000
			Truthfully labeled seed produced*	Weight Quintals	110	110	100	110	110
2	Development and identification of appropriate crop production & protection technologies	Development of new technologies	New technologies tested	Number	16	15	15	15	16
			Technologies recommended	Number	8	7	7	6	7
3	Technology dissemination and capacity building	Demonstrations conducted	Front line demonstrations conducted	Number	1000	730	800	820	850
		Farmers/ Extension officials training programmes organized	Trainings organized	Number	5	6	4	5	6
	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 the 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	--	--

\* With regard to indent and production of breeder seed, there was higher indent and production during 2011-12. However, indent of breeder seed has been reduced to 22000 quintals of wheat and barley during 2012-13 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.

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

#### Section 4: Acronyms

<b>S. No.</b>	<b>Acronym</b>	<b>Description</b>
1	AIC W&BIP	All India Coordinated Wheat & Barley Improvement Programme
2	DAC	Department of Agriculture and Cooperation
3	DARE	Department of Agricultural Research & Education
4	DWR	Directorate of Wheat Research
5	FLD	Front Line Demonstration
6	ICAR	Indian Council of Agricultural Research
7	SAUs	State Agricultural Universities

#### Section 4: 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	Entries tested in AIC W&BIP 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	Lines identified for unique traits	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	Entries contributed for AIC W&BIP multilocation trials	Multilocation testing of advanced lines generated by DWR	Superior lines identified for release for cultivation	Number	--
5	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
6	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 in to foundation /certified seed	Quantity produced (Quintals)	Quantity may vary as per indent from DAC
7	Truthfully labelled seed produced	To propagate new variety in short period of time in farmers field, truthfully labelled seed is produced	Faster propagation of newly developed variety in farmer's field	Quintals	Production of truthfully labelled seed depends on the



					newly identified variety
8	New technologies tested	New technologies developed for resource management and disease control are tested for their suitability	Better technologies identified for wheat and barley improvement	Number	--
9	Technologies recommended	Identified technologies are recommended for large scale application in farmer's field	Better technologies identified for improving efficiency in resource utilization and higher production	Number	--
10	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
11	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

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	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 the indent	Less or more quantity of breeder seed will be produced
State/Central Government		Agricultural Universities	SAUs	Entries tested in AIC W&BIP 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 the organization

S. No.	Out Come/Impact of the organization	Jointly responsible for influencing this outcome / impact with the following department (s) / ministry(ies)	Success Indicators	Unit	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1	Enhancement in wheat productivity	DARE, SAUs and State agriculture departments	Wheat productivity	% increase	5.2*	-2#	2	2	2
2	Enhancement in barley productivity	DARE, SAUs and State agriculture departments	Barley productivity	% increase	5.0*	0#	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.

\* It was exceptionally favourable weather conditions during 2011-12 and hence higher growth in productivity.

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

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