

# **ANNUAL REPROT**

# MERA GAON MERA GAURAV 2016-17





National Research Centre on Plant Biotechnology L.B. S. building, Pusa Campus New Delhi-110012 (www.nrcpb.res.in) Published by

Prof. N. K. Singh Project Director

ICAR-National Research Centre on Plant Biotechnology

Pusa Campus, New Delhi - 110012

Tel.: 25848783, 25841787, 25842789

Fax: 25843984

Website: <a href="http://www.nrcpb.res.in">http://www.nrcpb.res.in</a>

Compiled and Edited by

Dr. Sanjay Singh

Dr. Jagdeep C. Padaria

Dr. Subodh K. Sinha

Dr. Mahesh Rao

Dr. Deepak S. Bisht

Dr. Ansul Watts

Dr. Pankaj Kumar

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Annual Report 2016-17
ICAR-National Research Centre on Plant Biotechnology
Pusa Campus, New Delhi - 110012

Table 1: Details of MGMG Team and status of benchmark survey of selected villages

Team	Name of scientists	Name of village	Name of	Name of	Benchmark
1	with discipline	3	block 4	district 5	survey Status 6
Team 1	Dr. P. K. Jain Dr. Sarvjeet Kaur Dr. S. Barthakur Dr. N. C. Gupta Sh. Ramawatar Nagar Dr. Nimmy M. S. Mrs. Sandhya rawat	Narmohamadpur	Khurja	Bulandshahar	completed
Team 2	Dr. J. C. Padaria Dr. Kanika Dr. P. K. Dash Dr. Vandna Rai Dr. Monika Dalal Dr. D. S. Bisht	Sahpur Kalan	Khurja	Bulandshahar	completed
Team 3	Dr. P. K. Mandal Dr. T. K. Mandal Dr. B. L. Patil Dr. Ritu Rai Dr. Rohini Sreevathsa Dr. Amol K. Solanki Mr. R. K. Narula	Java	Khurja	Bulandshahar	completed
Team 4	Dr. R. C. Bhattacharya Dr. Anita Grover Dr. Rekha Kansal Dr. Kishor Gaikwad Dr. K. P. Singh Mr. R. N. Gupta	Shiryal	Khurja	Bulandshahar	completed
Team 5	Dr. D. Pattanayak Dr. S V Amitha Charu Dr. A. Dinabandhu Dr. Anshul Watts Dr. R Chamola Dr. R. S. Niranjan	Nagla Kuchesar	Khurja	Bulandshahar	completed
Team 6	Dr. N. K. Singh Dr. Sanjay Singh Dr. Subodh kr. Sinha Dr. Ranjeet S. Jat Dr. Mahesh Rao Dr. Sandhya Dr. Seema Dargan Dr. Pankaj Kumar	Nekpur	Khurja	Bulandshahar	completed

Table 2: Activities carried out up to 31<sup>st</sup> March, 2017 in the selected villages

Team	Visit to	o village	Goshthis/ Interface meetings conducted		Demonstrations conducted		I
	No. of	No. of	No. of	No. of	Title of demonstration	No. of	No. of
	visits	farmers	goshthis/	farmers		demons	farmers
			interface				
			meetings				
1	2	3	4	5	6	7	8
Team	5	20	06	53	Mustard variety Pusa	18	18
12,3,4,					Jai Kishan		
5,6,							
Team	5	35	03	37	Paddy Varieties Pusa	09	09
1,2,3,4,					1460 & Pusa 1612		
5,6,							

# **Demonstrations Mustard variety Pusa Jai Kishan at Farmer Field:**





Initial Stage

Flowering stage



Maturity Stage

### **Demonstrations of Rice varieties Pusa 1460 & Pusa 1612:**





Pusa 1460 Pusa 1612

## NRCPB Contacted Seed Production Programme of Pusa Jai Kishan at Farmer Field:



Table 2 continue......

Team	Trair condi	•		e-based isory	Literature support provided			
	No. of	No. of	No. of	No. of	No. of	No. of	Area	No. of
	training	farmers	farmers	advisories	literature	farmers	(ha)	farmers
9	10	11	12	13	14	15	16	17
Team 1	01	20	33	16	more	more than	2.0	05
					than 1000	1000		
Team 2	01	25	42	10	more than	more than	1.0	02
					1000	1000		
Team 3	-	-	20	09	more	more than	1.5	03
					than 1000	1000		
Team 4	02	57	28	15	more than	more than	1.0	04
					1000	1000		
Team 5	01	18	22	12	more	more than	2.0	05
					than 1000	1000		
Team 6	03	78	27	18	more than	more than	3.0	06
					1000	1000		

## Goshthis / interface meetings at different Villages:







Java Nakepur Shriyal

## NRCPB Scientist Field visits at farmers field under MGMG Programme:





Wheat Mustard



## Farmers Field visits at NRCPB Research field Under MGMG Programme:





# TV Talk:









## Trainings conducted:



Table 2 continue......

Team	Linkages created with	Proble	m diagnosed	Awareness cr	eated
	Other departments/	General	Agriculture	Subject matter	No. of
	agencies (furnish name)	problem	problem		farmers
18	19	20	21	22	23
Team 1	Indian Agricultural Research Institute, New Delhi, State agriculture department, district block level.	Market for famers sale agriculture product, drainage problem during rainy season, in and out side roads in the village, Childern equication	Damage by Neel gaoy or other animals, unavailability of quality seed, No knowledge of about newly weedicides, pesticides and insecticides, whole season no inteaction with any District Agricultural Officer, nonfunctional of soil testing laboratories at distict level.	Awareness created of GM crop related information, soil heath card, Crop insurance policy, Availability of good quality seeds for different crop like rice, wheat pulse and oilseeds. Awareness created for e- marking of food grains. Awaraness created of Agrculture related Scheme at district level	13
Team 2	Indian Agricultural Research Institute, New Delhi, State	Market for famers sale agriculture product,	Damage by Neel gaoy or other animals, unavailability of	Awareness created of GM crop related information,	19

	agriculture department, district block level.	drainage problem during rainy season, in and out side roads in the village, Childern equcation	quality seed, No knowledge of about newly weedicides, pesticides and insecticides, whole season no inteaction with any District Agricultural Officer, nonfunctional of soil testing laboratories at distict level.	soil heath card, Crop insurance policy, Availability of good quality seeds for different crop like rice, wheat pulse and oilseeds. Awareness created for e- marking of food grains. Awaraness created of Agrculture related Scheme at district level	
Team3	Indian Agricultural Research Institute, New Delhi, State agriculture department, district block level.	Market for famers sale agriculture product, drainage problem during rainy season, in and out side roads in the village, Childern equcation	Damage by Neel gaoy or other animals, unavailability of quality seed, No knowledge of about newly weedicides, pesticides and insecticides, whole season no inteaction with any District Agricultural Officer, nonfunctional of soil testing laboratories at distict level.	Awareness created of GM crop related information, soil heath card, Crop insurance policy, Availability of good quality seeds for different crop like rice, wheat pulse and oilseeds. Awareness created for e- marking of food grains. Awaraness created of Agrculture related Scheme at district level	16
Team4	Indian Agricultural Research Institute, New Delhi, State agriculture department, district block level.	Market for famers sale agriculture product, drainage problem during rainy season, in	Damage by Neel gaoy or other animals, unavailability of quality seed, No knowledge of about newly weedicides,	Awareness created of GM crop related information, soil heath card, Crop insurance policy, Availability of good quality	22

		and out side roads in the village, Childern equcation	pesticides and insecticides, whole season no inteaction with any District Agricultural Officer, nonfunctional of soil testing laboratories at distict level.	seeds for different crop like rice, wheat pulse and oilseeds. Awareness created for e- marking of food grains. Awaraness created of Agrculture related Scheme at district level	
Team5	Indian Agricultural Research Institute, New Delhi, State agriculture department, district block level.	Market for famers sale agriculture product, drainage problem during rainy season, in and out side roads in the village, Childern equcation	Damage by Neel gaoy or other animals, unavailability of quality seed, No knowledge of about newly weedicides, pesticides and insecticides, whole season no inteaction with any District Agricultural Officer, nonfunctional of soil testing laboratories at distict level.	Awareness created of GM crop related information, soil heath card, Crop insurance policy, Availability of good quality seeds for different crop like rice, wheat pulse and oilseeds. Awareness created for e- marking of food grains. Awaraness created of Agrculture related Scheme at district level	20
Team6	Indian Agricultural Research Institute, New Delhi, State agriculture department, district block level.	Market for famers sale agriculture product, drainage problem during rainy season, in and out side roads in the village, Childern equeation	Damage by Neel gaoy or other animals, unavailability of quality seed, No knowledge of about newly weedicides, pesticides and insecticides, whole season no inteaction with any District	Awareness created of GM crop related information, soil heath card, Crop insurance policy, Availability of good quality seeds for different crop like rice, wheat pulse and oilseeds.	27

	Agricultural Officer, non- functional of soil testing laboratories at distict level.	Awareness created for e- marking of food grains. Awaraness created of Agrculture related Scheme at district level	
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Table 3: Any other activity carried out up to 31st March, 2016

Team	Name of activity	No. of farmers
1	2	3
Team	The Centre Organized 2 <sup>st</sup> NRCPB Farmers	66
1,2,3,4,5,6	Day for interaction between farmers and	
	scientists held at Nekepur village of	
	Bulandshahar U.P on 23 <sup>rd</sup> October 2016. The	
	Project Director NRCPB distributed 1/2 kg	
	seed of Pusa Jai kisan variety of mustard to	
	the farmers	
Team	The Centre participated in Krishi Unnati	More than 3000 farmers visited
1,2,3,4,5,6	Mela 2016 held at IARI New Delhi 19-21	at NRCPB stall during mela
	March 2015	period
Team	Farmers and Scientists interaction meeting held	40
1,2,3,4,5,6	at ICAR-National Research Centre on Plant	
	Biotechnology (NRCPB) on 07.03.2017 &	
	17.03.2017. Problem raised by farmers and	
	probable Solution suggested and Discussion	
	by project Director and Scientist of the	
	NRCPB	
	THE	

Dr.N.K. Singh (Project Director)

Project Director
NRC on Plant Biotechnology
L.B.S. Building, Pusa Campus,
New Delhi-110012

Dr Sanjay Singh Principal Scientist & Nodal Officer, MGMG Note: Kindly attach good quality action photographs as well as News Paper cuttings pertaining to different activities carried out by different teams of scientists

 $2^{nd}\,$  NRCPB Farmers Day at Nakepur Village on 18 October, 2016













# Swachhata Abhiyan campaign in the Nakepur village on 18 October, 2016





Krishi Unnati Mela held at IARI, New Delhi on 15 to 17 March, 2017









# <u>Farmers and Scientists interaction meeting held at ICAR-National Research Centre on Plant</u> Biotechnology (NRCPB) on 07.03.2017

Fourteen (14) farmers accompanied by Program co-ordinator and Project managers of ISAP (Indian Society of Agribusiness Professionals) from three district of Dadari and Bulandsahara, Uttar Pradesh visited our institute on March 07, 2017. The visit was coordinated by ISAP. With a brief introduction of farmers and NRCPB Staff members, Dr. Sanjay Singh informed the house about the purpose of the meeting. Subsequently, Dr. N. K Singh, Project Director, NRCPB addressed the gathering wherein he briefed about the research areas on which our centre is currently working. He interacted with farmers and made them aware about the various policies of Government of India namely, Pradhan Mantri Fasal Bima Yojana, Soil Health Card Scheme, e-NAM (National Agriculture Market) and Pradhan Mantri Krishi Sinchayee Yojana. He also encouraged farmers to adopt practise of custom hiring of machines and value addition of the farm produce for increasing their overall agriculture driven income. He also talked about the specific problems related to crops like Rice, wheat, mustard, pulses, coriander, fennel and garlic. The NRCPB scientific staff tried to answer the farm related queries of farmers. PD, NRCPB advised the farmers to avoid excess use of fertilizers, proper irrigation practices and to take initiatives for forming of Small Help Groups. The discussion ended in a healthy note and farmers were satisfied with the suggestions and inputs by the NRCPB staff.

The meeting was attended by Dr. Sanjay Singh, Dr. R.C. Bhattacharya, Dr. Jasdeep Padaria, Dr. Konika, Dr Mahesh Rao, Dr. Prashant Dash, Dr. Deepak Singh Bisht, Dr. Anshul Watts, Dr. Pankaj Singh, and Dr. Rohit Chamola. Following are some photographs of interaction with farmers:



# Farmers and Scientists interaction meeting held at National Research Centre on Plant Biotechnology (NRCPB) on 07.03.2017

Twenty-Two farmers accompanied by Program co-ordinator and Project managers of ISAP (Indian Society of Agribusiness Professionals) from three district of Rajasthan viz., Bundi, Baran and Sawai Madhopur visited our institute on March 17, 2017. The visit was coordinated by ISAP. With a brief introduction of farmers and NRCPB Staff members, Dr. Sanjay Singh informed the house about the purpose of the meeting. Subsequently, Dr. N. K Singh, Project Director, NRCPB addressed the gathering wherein he briefed about the research areas on which our centre is currently working. He interacted with farmers and made them aware about the various policies of Government of India namely, Pradhan Mantri Fasal Bima Yojana, Soil Health Card Scheme, e-NAM (National Agriculture Market) and Pradhan Mantri Krishi Sinchayee Yojana. He also encouraged farmers to adopt practise of custom hiring of machines and value addition of the farm produce for increasing their overall agriculture driven income. He also talked about the specific problems related to crops like Rice, wheat, mustard, pulses, coriander, fennel and garlic. The NRCPB scientific staff tried to answer the farm related queries of farmers. PD, NRCPB advised the farmers to avoid excess use of fertilizers, proper irrigation practices and to take initiatives for forming of Small Help Groups. The discussion ended in a healthy note and farmers were satisfied with the suggestions and inputs by the NRCPB staff.

The meeting was attended by Dr. Sanjay Singh, Dr. Jasdeep Padaria, Dr Navin C Gupta, Dr. Konika, Dr R. S. Jat, Dr. Mahesh Rao, Dr. Deepak Singh Bisht, Dr. Anshul Watts, Dr. Pankaj Singh, and Dr. Rohit Chamola. Following are some photographs of interaction with farmers:





#### Detailed report on Farmers and Scientists interaction meeting on 07, 2017

### Problem raised by farmers and probable Solution suggested and Discussion

Place: ICAR-NRCPB, Committee room

**Time:** 11:00 AM to 01:00 PM

**NRCPB Staff:** Dr. N. K. Singh (PD NRCPB), Dr. Sanjay Singh, Dr. J. C. Padaria, Dr. Konika, Dr. Mahesh Rao, Dr. N C Gupta, Dr. Deepak Singh Bist, Dr. Anshul Watts, Mr. R. S. Jat, Dr. Rohit Chamola, Dr. Pankaj Kumar

**Farmers:** Farmers including some agriculture officers of ISAP from Dadari and Bulandshara district of Uttar Pradesh

#### Wheat:

**Problem 1:** Yellowing of wheat plants from base towards tip.

**Solution:** This does not seem to be a disease but mostly nutrient deficiency problem and suggestions were made for soil testing for micro nutrients.

Mustard: (Brassica sp)

**Problem 1:** Problem of *Orobanchae* was raised persistently by the farmers for the mustard crop and need to be addressed on priority basis.

**Solution:** The Project Director, NRCPB, Dr. N. K. Singh also showed his concern for this root parasite problem which is devastating the mustard crop and farmers are suffering.

**Problem2:** The problems of aphid infestation and (*Sclerotinia*) were raised by farmers in mustard production.

**Solution:** The management practices for these disease and pests were suggested to the farmers by the different scientist of ICAR-NRCPB, Delhi.

### <u>Detailed report on Farmers and Scientists interaction meeting on 17, 2017</u> <u>Problem raised by farmers and probable Solution suggested and Discussion</u>

Place: ICAR-NRCPB, Committee room

**Time:** 11:00 AM to 01:00 PM

**NRCPB Staff:** Dr. N. K. Singh (PD NRCPB), Dr. Sanjay Singh, Dr. J. C. Padaria, Dr. Konika, Dr. Mahesh Rao, Dr. N C Gupta, Dr. Deepak Singh Bist, Dr. Anshul Watts, Mr. R.

S. Jat, Dr. Rohit Chamola, Dr. Pankaj Kumar

**Farmers:** Twenty two farmers including BDO and officials of ISAP from Bundi, Bara and Sawai Madho Pur district of Rajsthan

#### Wheat:

**Problem 1:** Farmers were asking for Short duration varieties and less water requiring varieties with bold and shiny grains. They informed that the following varieties have been / are been grown by them: LOK-1, Raj 3765, Raj 4037, Raj 4079, Raj 4120, HD2932, HD2967

**Solution:** NRCPB scientists suggested a few new varieties like HD3086, HW1105, HW1531, for high yielding, and HD3043, DBW58, HD 3059 and HD 3118 for short duration and less irrigation having good quality (bold and shiny grains) traits. Seeds of these varieties can be taken up for sowing in their region.

**Problem 2:** Yellowing of wheat plants from base towards tip.

**Solution:** This does not seem to be a disease but mostly nutrient deficiency problem and suggestions were made for soil testing for micro nutrients.

#### Mustard:

**Problem 1:** Problem of *Orobanchae* was continuously raised by the farmers for the mustard crop and need to be addressed as soon as possible.

**Solution:** The Project Director, NRCPB, Dr. N. K. Singh also showed his concern for this root parasite problem which is devastating the mustard crop and farmers are suffering.

**Problem2:** The problems of aphid infestation and pathogen *Sclerotinia* faced by farmers in mustard production were also raised.

**Solution:** The management practices for these disease and pests were suggested to the farmers by the different scientist of ICAR-NRCPB, Delhi.

Coriander: (Coriandrum sativum)

**Problem1:** "Longia" disease in which inflorescence becomes clove like structure was reported by the farmers group; this is a major problem in coriander cultivation.

**Solution:** The PD, NRCPB, New Delhi assured the farmers that NRCPB staff will discuss with the concern scientist and will get back to the farmers with the probable solution.

Fennel: (Cuminum cyminum)

**Problem1:** Yellowing of grains and shattering before harvesting is noticeable problem in fennel.

**Solution:** The PD, NRCPB Delhi assures the farmers that NRCPB staff will discuss with the concern scientist and will get back to the farmers with the solution.

### Lentil and chickpea:

**Problem1:** Chickpea variety GN21-44 t is not easily available to farmers for cultivation.

**Solution:** The PD, NRCPB Delhi assured the farmers that he will contact the concerned scientist in the ICAR for the necessary steps.

**Problem2:** "Uktha rog" is prevalent in the pulses especially lentil and chickpea and the farmers raise this during the meeting.

**Solution:** The PD, NRCPB Delhi assures the farmers that NRCPB staff will discuss with the concern scientist and will get back to the farmers with the solution.

### **News and Paper cutting:**



# किसानों ने किया भ्रमण, मिली कई जानकारियां

हिण्डोली. क्षेत्र के किसानों ने अखिल भारतीय अनुसंधान परिषद पूसा दिल्ली का तीन दिवसीय भ्रमण किया। इंडियन सोसायटी एग्री बिजनेस के संयोजक बच्चू सिंह चौधरी ने बताया कि शुक्रवार से रिववार तक आयोजित मेले में किसानों को कई प्रकार की जानकारियां दी गई। भौतिक संभाग की प्रधान वैज्ञानिक अनंता विशष्ट ने मौसम शाला के बारे में जानकारी दी। किसानों को मौसम शाला का भ्रमण करवाया। राष्ट्रीय पादप जैव प्रौद्योगिक विभाग परियोजना निदेशक नागेन्द्र सिंह ने पूसा द्वारा विकसित की गई नवीन किस्म गेहूं के बारे में किसानों को बताया।