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## Impact Analysis of Front-Line Demonstrations (FLDs) on Indian Mustard (*Brassica Juncea* L. Czern & Coss) in Eastern Uttar Pradesh Region

Mahak Singh<sup>1</sup> and Amit Tomar<sup>2</sup>

<sup>1</sup>Professor & Head, Country Head (AICRP on R & M),

Department of Genetics & Plant Breeding,

Chandra Shekhar Azad University of Agriculture & Technology, Kanpur

<sup>2</sup>Subject Matter Specialist (Plant Breeding),

ICAR-Krishi Vigyan Kendra, Gajraula, Amroha,

Sardar Vallabhbhai Patel University of Agriculture & Technology,

Meerut-250110, U.P., India

### ABSTRACT:

Front Line Demonstrations (FLDs) on Indian Mustard (*Brassica juncea* L. Czern & Coss) was conducted in Twenty Eight villages namely; Gangoly, Bhawanideen Khera, Setubahi Bangarmau, Pandrikala, Dawatpur, Kursum, Amora, Sainipur, Gadaikhere, Naogaon, Prempur, sujaour, Parokh, Lalpur, Kashipur, Bilaspur, Kathogar, Hathigaon, Raipur, Shah, Shahpur, Bhadhawan, Asaiwa, Naveen Nagar, New Nagla Mahewa, Tikra khurd, Kundain of seven Districts namely; Unnao, Fatehpur, Kanpur Dehat, Kanpur Nagar, Auraiya, Etawah, Pratapgarh. Total 70 farmers were selected on the basis of their socio-economic conditions. The main objective of the FLDs to improve the socio-economic condition of the marginal farmers, increasing the Indian Mustard (*Brassica juncea* L. Czern & Coss) cultivated area during Rabi season in Eastern Uttar Pradesh region and also utilization of the Rabi fellow land for cultivation of maize crop. The results revealed that farmers were benefitted from the FLDs practice in comparison to their own traditional practices. The average yield production of Indian mustard from farmers practices and from FLDs practices was 17.50 quintals per hectare and 21.25 quintals per hectare, respectively. The cost: benefit ratios from farmers & FLDs practices was 2.7 & 2.9, respectively.

**Key words:** *Brassica juncea*, Front Line Demonstrations (FLDs), Indian Mustard & Rabi.

**INTRODUCTION:**

Rapeseed and mustard oil is used primarily for edible purposes and is the principle cooking oil in the mustard growing area of the country. Known for its great taste and subtle flavor, this vegetable oil is the world's second leading source of protein meal. Besides seeds, it is used as condiments. The meal cake left after oil extraction forms important cattle feed and may also be used as organic manure. Brassicas are rich source of vitamins, minerals and contains many medicinal properties. They provide high amounts of vitamin C, soluble fiber and contain multiple nutrients with potent anti-cancer properties. Oil is used in Northern India for cooking and frying purposes. It is also used in preparation of hair oil and medicines. It has industrial importance in soap making and in mixtures with mineral oils for lubrication and grease for various machines. Tender leaves of young plants are used as green vegetable and are good source of sulphur and other minerals in diet. Botanically, the genus Brassica comprises six species (*B. nigra*, *B. oleracea*, *B. campestris*, *B. carinata*, *B. juncea*, and *B. napus*). Among them first three species are elementary and diploid with  $2n=16$ , 18 and 20 chromosomes and other three are tetraploids with chromosomes numbers  $2n=34$ , 36 and 38. All these crops are grown under wide range of agro-climatic conditions. Indian mustard [*Brassica juncea* (L.) Czern & Coss], which is cultivated under the genus Brassica is cultivated all over India and it is throughout the world belongs to family Cruciferae (Brassicaceae). It has 38 to 42 % oil and 24% protein.

**METHODOLOGY:**

1. About FLDs on Indian Mustard (*Brassica juncea* L. Czern & Coss): Front Line Demonstrations (FLDs) on Indian Mustard conducted in Twenty Eight villages namely; Gangoly, Bhawanideen Khera, Setubahi Bangarmau, Pandrikala, Dawatpur, Kursum, Amora, Sainipur, Gadaikhere, Naogaon, Prempur, sujaour, Parokh, Lalpur, Kashipur, Bilaspur, Kathogar, Hathigaon, Raipur, Shah, Shahpur, Bhadhawan, Asaiwa, Naveen Nagar, New Nagla Mahewa, Tikra khurd Kundain of seven Districts namely; Unnao, Fatehpur, Kanpur Dehat, Kanpur Nagar, Auraiya, Etawah, Pratapgarh of Uttar Pradesh in eastern region during Rabi-2021-22 funded by Indian Institute of Rapeseed & Mustard Research (DRMR), Bharatpur, Rajasthan. Total 70 FLDs were conducted in 70-acre areas. The FLDs techniques was used as "Improved varieties vs. Commercial cultivars (local check)".

The complete details are given as below in table-1.

S.No.	Details	Quantity to be used
1.	Total number of FLDs conducted	70 FLDs
2.	Total area covered (1 acre for 1 FLDs)	70 acre
3.	Hybrids/varieties used to conduct FLDs on Indian mustard	RH-725, Giriraj (IJ-31), Azad Mahak, Pitambari

## 2. Selection of the farmers:

Total 70 marginal farmers were selected on the basis of their socio-economic conditions and also on the basis of their own choice for conducted Front Line Demonstrations (FLDs) on Indian Mustard (*Brassica juncea* L. Czern & Coss) during Rabi-2021-22 in Eastern Uttar Pradesh region for maximize the production and double your income as per the suggestions of our Hon'ble Prime Minister Shri Narendra Modi Ji.

## 3. Features of hybrids & seed distribution programme:

Four high yielding varieties/hybrids namely; RH-725, Giriraj (IJ-31), Azad Mahak & Pitambari were used for distribution of seed under FLDs on Indian Mustard (*Brassica juncea* L. Czern Coss) during Rabi-2021-22 in Eastern Uttar Pradesh region.

All the varieties/hybrids are suitable for growing in this region, because these varieties/hybrids were released for zone-III. The average yield of these varieties/hybrids are 22 q/ha. and mature in medium duration. Farmers were used a local commercial cultivars for grain production of Mustard.

The details are given as below in table-2.

1.	Name of the centre/ institute	:	C.S.A University of Agril. & Tech., Kanpur
2.	Total no. of the FLDs sanctioned in the workshop	:	70
3.	Total no. of the FLDs actually conducted	:	70
4.	Name of Crop	:	Indian Mustard
5.	Types of FLDs with numbers	:	Full packaged: 70
6.	Name of demonstrated varieties	:	<b>RH-725, Giriraj (IJ-31), Azad Mahak, Pitambari.</b>
7.	Situation : Rainfed/ irrigated and Normal sown/ late sown	:	<b>Irrigated Normal sown</b>
8.	Total no. and name of the villages covered	:	<b>(28)</b> Gangoly, Bhawanideen Khera, Setubahi Bangarmau, Pandrikala, Dawatpur, Kursum, Amora, Sainipur, Gadaikhere, Naogaon, Prempur, sujaour, Parokh, Lalpur, Kashipur, Bilaspur, Kathogar, Hathigaon, Raipur, Shah, Shahpur, Bhadhawan, Asaiwa, Naveen Nagar, New Nagla Mahewa, Tikra khurd Kunda
9.	Total no. and name of the district(s) covered	:	<b>(7)</b> Unnao, Fatehpur, Kanpur Dehat, Kanpur Nagar, Auraiya, Etawah, Pratapgarh.
10.	Cropping systems prevailing in the demonstration area	:	i) Paddy, Mustard, Urd ii) Maize, Mustard, Moong
11.	Date of sowing(range)	:	03-10-2021 to 02-11-2021
12.	Date of harvesting (range)	:	24-01-2022 to 06-04-2022
13.	Specify pests and disease situations	:	Low Aphid
14.	Farmer's opinion about the improved technology (Feedbacks)	:	Satisfied with variety and technology

15.	Visitors/ Monitoring team (No. date and place with remarks)	:	Monitoring team monitored FLDs on 12.01.2022 to 27.01.2022 and was satisfied with FLDs.
16.	Remarks of the Scientists involved in the demonstration	:	Very Good and Team was satisfied with all the FLDs.
17.	Details of the Field Days/Kisan Mela/ training related to the demonstration	:	A two days training programme of 20 Extension personals was held on 11-12, March 2022 at Directorate of Extension, C.S.A. Uni. Of Agri. & Tech. Kanpur.
18.	Scientist working in AICRP Rapeseed- Mustard project monitored the frontline demonstrations in different dated 12.01.2022 to 27.01.2022 in different villages of the different 7 District in the University jurisdiction area.		
19.	Constraints being faced in conducting demonstration	:	Nil
20.	<b>Details of the demonstrated improved technology and farmers practice/ indigenous Technical:</b>		
	<b>Components of demonstrated technology:</b>	:	<b>Prevailing farmers practices against demonstrated technology-</b>
	<b>Full package</b>		Farmers are being adopted conventional method to grow the crop like seed of old variety, broadcasting method of seed sowing and fertilizer application no thinning and not plant
21.	Any other observation	:	Farmers were happy with new variety seed and fully satisfied with new technologies for cultivation of frontline demonstrations

**RESULTS & DISCUSSION:**

- 1. Crop stand:** The results were revealed that the performance of crop stand was good with healthy crops. The number of primary branches per plant, number of secondary branches per plant, number of siliquae per plant was recorded in significant amount.
- 2. Details of the yield from FP & FLDs practices:** The average yield production of *Rabi* Indian Mustard (*Brassica juncea* Czern & Coss) were recorded 17.50 quintals per hectare and 21.25 quintals per hectare, respectively from farmers and FLDs practices. The average net returns (Rs/ha) of *Rabi* Indian Mustard (*Brassica juncea* L. Czern & Coss) were recorded 88,913 Rs/ha and 10,8113 Rs/ha, respectively from farmers & FLDs practices. The average cost of production of *Rabi* Indian Mustard (*Brassica juncea* L. Czern & Coss) were recorded 33,551 Rs/ha and 37721 Rs/ha, respectively for both farmers & FLDs practices. The average yield gains & net return gains were recorded 21.5-22 % & 19,200 Rs/ha., respectively.
- 3. Cost : benefit ratios from FP & FLDs practices:** The significant average cost : benefit ratio of *Rabi* Indian Mustard (*Brassica juncea* L. Czern & Coss) production were recorded 2.7 & 2.9 from both farmers & FLDs practices, respectively.
- 4. Differences between FP & FLDs practices:** The significant differences were recorded from farmers practices and FLDs practices in several points such as variety, seed rate, seed treatment, time of sowing, method of sowing, fertilizers management, water management, plant protection, threshing, harvesting & marketing, etc.
- 5. Farmers Training under Front Line Demonstrations (FLDs) on Rabi Indian Mustard (*Brassica juncea* L. Czern & Coss) in Eastern region of Uttar Pradesh:** Total 10 farmers trainings has been conducted in 10 selected villages of Eastern Uttar Pradesh region. 50 farmers were benefitted from each villages & total 500 farmers were benefitted from the training programme during Rabi, 2021-22.

The details are given below in table-3

S. No.	Particulars	Technology Interventions	Farmer's practices
1	Variety	RH-725, Giriraj (IJ-31), Azad Mahak, Pitambari	Local variety
2	Seed rate	4 kg/ha.	4-5 kg/ha.
3	Seed treatment	√	X
4	Time of sowing	03/10/2021	05/11/2021
5	Method of sowing	Line sowing	Broad caste
6	Fertilizer management	√	√
7	Water management	√	√
8	Plant protection	X	√
9	Threshing	√	√
10	Harvesting	√	√
11	Storage	X	√
12	Marketing	Local market	Local market

### SUMMARY & CONCLUSION:

The Farmers with or without resources keep their land fallow in Rabi and cultivate wheat, gram, linseed and lentil in Rabi. Here we found Indian Mustard a promise crop to increase Cropping intensity in Eastern region of Uttar Pradesh. With majority of Scheduled Castes population / marginal farmers living in villages under studied area were economically isolated. Those were below poverty line and their livelihood dependent solely on agriculture and livestock rearing the SCSP Plan seems to be boon for uplifting their status.

### ACKNOWLEDGEMENT:

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Name of the Centre: C.S.A Univ. of Agri.&amp; Tech., Kanpur-208002

Name of Project: AICRP Rapeseed-Mustard Frontline Demonstrations

Year-2021-22

No. of FLDs conducted- 70.

S. No.	Farmer's name	Address	Mobile No.	Varieties Used in IP	Situation Irrigated/Rainfed	Varieties used in FP	Mean yield (kg/ha)		YOFP (%)	District (in which FLD conducted)	State (in which FLD conducted)	COC (Rs/ha)		GMR (Rs/ha)		ANMR (Rs/ha)	B: C Ratio	
							IP	FP				IP	FP	IP	FP		IP	FP
1	Smt. Madhuri Singh	Village & Post - Kathogar, Block - Vidhunu, District- Kanpur Nagar	9794 3219 88	Giriraj	Irrigated	Local	2115	1750	21.4	8.23	8.11	37721	33551	1081	88913	19200	2.9	2.7
2	Shri. Janmajay	Village & Post - Kathogar, Block - Vidhunu, District- Kanpur Nagar	8858 1100 95, 7785 8709	Giriraj	Irrigated	Local	2200	1800	22.2	8.23	8.11	37721	33551	1108	91600	19508	2.9	2.7



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3	Shri. Ajay Pratap	Hathi Gaon, Block - Sarsaul, District- Kanpur Nagar	8808 2137 47	Pitambari	Irigated	Local	1 4 0 0	1200	16 .7	8.23	8.11	343359	3 0 3 3 9	71 10 0	60950	10 15 0	2 . . 1 0	2 . . 0
4	Shri. Sushil Kumar Singh	Village - Raipur (Narwal), District- Kanpur Nagar	9450 1414 82	Aazad Mahak	Irigated	Local	2 1 0 0	1700	23 .5	8.23	8.11	37721	3 3 5 5 1	10 68 50	86475	20 37 5	2 . . 8 6	2 . . 6
5	Shri. Ram Mohan	Village - Shah, Ghatampur, District - Kanpur Nagar	9793 0871 08	Giriraj	Irigated	Local	2 3 0 0	1900	21 .1	8.23	8.11	37721	3 3 5 5 1	11 70 50	96750	20 30 0	3 . . 1 9	2 . . 9
6	Shri. Parsuram	Village - Shah, Ghatampur, District - Kanpur Nagar	9956 6332 41	Aazad Mahak	Irigated	Local	2 1 5 0	1800	19 .4	8.23	8.11	37721	3 3 5 5 1	10 93 75	91600	17 77 5	2 . . 9 7	2 . . 7
7	Shri. Shiv Shankar	Village - Shah, Ghatampur, District- Kanpur Nagar	9956 6332 41	RH – 725	Irigated	Local	2 2 5 0	1050	21 .6	8.23	8.11	37721	3 3 5 5 1	14 47 5	94225	20 25 0	3 . . 0 8	2 . . 8
8	Shri. Hanuman	Village - Shah, Ghatampur, District - Kanpur Nagar	8009 3619	RH – 725	Irigated	Local	2 2	1800	22 .2	8.23	8.11	37721	3 3	11 19	91650	20 25	3 . .	2 . .

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							0						5					
							0						1					
9	Shri. Shraavan Kumar	Village - Shah, Ghatampur, District - Kanpur Nagar	8081 3200 14	Pitambari	Irigated	Local	1 4 5 0	1200	20 .8	8.23	8.11	34359	3 0 3 3 9	73 82 5	61000	12 82 5	2 .1 0	2 .0
10	Shri. Ram	Village - Shah, Ghatampur, District - Kanpur Nagar	8127 2806 77	Pitambari	Irigated	Local	1 3 5 0	1100	22 .7	8.23	8.11	34359	3 0 3 3 9	68 77 5	56000	12 77 5	2 .0 8	1 .8
11	Shri Raj Kumar	Village - Shahpur, District - Kanpur Nagar	9936 4688 10	RH - 725	Irigated	Local	2 2 5 0	1800	25 .0	8.23	8.11	37721	3 3 5 5 1	11 48 75	91650	23 22 5	3 .0 7	2 .7
12	Shri. Kaushal Kishore	Village - Shahpur, District - Kanpur Nagar	9936 4688 10	RH - 725	Irigated	Local	2 1 5 0	1700	26 .5	8.23	8.11	37721	3 3 5 5 1	10 93 75	86450	22 92 5	2 .9 6	2 .6
13	Smt. Budha Devi	Village - Shahpur, District - Kanpur Nagar	9793 1542 77	Giriraj	Irigated	Local	2 3 0 0	1850	24 .3	8.23	8.11	37721	3 3 5 5 1	11 70 50	94175	22 87 5	3 .1 8	2 .8
14	Shri Satrughan Tiwari	Village - Shahpur, District - Kanpur Nagar	6306 5740 38	Aazad Mahak	Irigated	Local	2 1 5	1750	22 .9	8.23	8.11	37721	3 3 5	10 93 75	89075	20 30 0	2 .9 7	2 .7

							0						5					
													1					
<b>15</b>	Shri. Ram Naresh Shukla	Village - Shahpur, District - Kanpur Nagar	9793 1542 77	RH – 725	<b>Irigate d</b>	<b>Lo cal</b>	2 2 0 0	1900	15 .8	<b>8.23</b>	<b>8.11</b>	37721	3 3 5 5 1	11 19 25	96700	15 22 5	3 . . 0 9	2 . . 9
<b>16</b>	Shri. Sanjay	Village - Shahpur, District - Kanpur Nagar	7565 9829 11	RH – 725	<b>Irigate d</b>	<b>Lo cal</b>	2 2 5 0	1800	25 .0	<b>8.23</b>	<b>8.11</b>	37721	3 3 5 5 1	11 44 75	91600	22 87 5	3 . . 0 7	2 . . 7
<b>17</b>	Shri. Harinaam Yadav	Village - Shahpur, District - Kanpur Nagar	7565 9829 11	RH – 725	<b>Irigate d</b>	<b>Lo cal</b>	2 2 0 0	1800	22 .2	<b>8.23</b>	<b>8.11</b>	37721	3 3 5 5 1	11 19 25	91600	20 32 5	3 . . 0 7	2 . . 7
<b>18</b>	Shri Shyam Lal	Village - Hathi Gaon, Sarsaul, District - Kanpur Nagar	8858 1100 95	Pitambari	<b>Irigate d</b>	<b>Lo cal</b>	1 4 0 0	1100	21 .3	<b>8.23</b>	<b>8.11</b>	34359	3 0 3 3 9	71 40 0	55950	15 45 0	1 . . 9 8	1 . . 8
<b>19</b>	Shri. Shivam Bhadauriya	Village - Hathi Gaon, Sarsaul, District - Kanpur Nagar	9235 1139 63	RH – 725	<b>Irigate d</b>	<b>Lo cal</b>	2 2 7 5	1850	22 .9	<b>8.23</b>	<b>8.11</b>	37721	3 3 5 5 1	11 57 38	94125	21 61 3	3 . . 1 8	2 . . 8
<b>20</b>	Shri. Ram Sanjivan	Village - Shahpur, District - Kanpur Nagar	8400 6262 22	Pitambari	<b>Irigate d</b>	<b>Lo cal</b>	1 3 0 0	1100	18 .2	<b>8.23</b>	<b>8.11</b>	34359	3 0 3 3	66 15 0	55950	10 20 0	1 . . 9 8	1 . . 8

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21	Shri. Vishwanath Awasthi	Village - Bhadevna - Patara, District - Kanpur Nagar	9918 1216 81	Giriraj	Irigated	Local	2350	2000	17.5	8.23	8.11	37721	33551	119600	101800	17800	3.2	3.0
22	Shri. Ganesh Shankar Shukla	Village - Gadai Khera, Pukhrayan, District - Kanpur Dehat	9936 3736 48	Giriraj	Irigated	Local	2275	1850	20.2	8.23	8.11	37721	33551	11313	94175	1908	3.0	2.8
23	Shri. Jai Prakash	Village - Gadai Khera, Pukhrayan, District - Kanpur Dehat	9621 0363 99	Giriraj	Irigated	Local	2150	1800	19.4	19.62	8.11	37721	33551	1025	91600	1785	2.9	2.7
24	Shri Gaya Prasad	Village - Gadai Khera, Pukhrayan, District - Kanpur Dehat	7897 6171 76	Pitambari	Irigated	Local	1350	1100	22.7	19.62	8.11	34359	3339	6875	55950	1285	2.0	1.8
25	Shri Subhash	Village - Gadai Khera, Pukhrayan, District - Kanpur Dehat	8564 9270 14	Giriraj	Irigated	Local	2300	1850	24.3	19.62	8.11	37721	33551	117050	94175	2285	3.1	2.8
26	Shri. Ushman	Village - Gadai Khera, Pukhrayan, District - Kanpur Dehat	8564 9270 14	Giriraj	Irigated	Local	2350	2000	17.5	19.62	8.11	37721	33551	11000	101800	17800	3.2	3.0

27	Shri. Munna Lal	Village - Nogaon, Post - Lalpur, Shivrajpur, District- Kanpur Dehat	9956 9100 57	Aazad Mahak	Irigated	Local	2125	1800	18.0	19.62	8.11	37721	3351	10815	91600	165	29	27
28	Smt. Sunita Devi	Village - Prempur, Post - Gaur, District- Kanpur Dehat	9198 6641 58	Pitambari	Irigated	Local	1400	1200	16.7	19.62	8.11	34359	30339	71300	61000	10300	210	20
29	Shri. Ujyare Lal	Village - Sujaur, Post - Gaur, District - Kanpur Dehat	8604 5383 70	Pitambari	Irigated	Local	1350	1100	22.7	19.62	8.11	34359	30339	68775	55950	1285	20	18
30	Shri. Devendra Singh	Village - Paraunkh, District - Kanpur Dehat	6393 2257 94	Giriraj	Irigated	Local	2250	1800	25.0	19.62	8.11	37721	33551	114475	91600	22875	30	27
31	Shri Jitin Rahul	Village - Paraunkh, District - Kanpur Dehat	7549 0086 09	Giriraj	Irigated	Local	2275	1900	19.7	19.62	8.11	37721	33551	115763	96750	19013	31	29
32	Shri Vinod kumar Shukla	Village - Lalpur, Shivrajpur, District - Kanpur Dehat, Block - Maitha	9956 9100 57	RH - 725	Irigated	Local	2300	1850	24.3	19.62	8.11	37721	33551	117075	94225	22850	31	28
33	Shrimati Lakshmi Raj Singh	Village - Kashipur, District - Kanpur Dehat	8081 9914 47	Giriraj	Irigated	Local	2400	2000	20.0	19.62	8.11	37721	33551	122200	101900	20300	32	30
3	Shri	Village - Bilashpur Bangar,	9651	Pitamba	Irig	Lo	1	1100	22	19.6	8.11	34359	303	68	55950	12	2	1

4	Upendra Kumar	District - Kanpur Dehat	4234 19	ri ate d	cal	3 5 0		.7	2			39	77 5		82 5	.	.	
3 5	Shri Ramshankar	Village - New Nagla mahewa, District Etawah	8272 8261 83	Aazad Mahak	Irig ate d	Lo cal	1 9 7 5	1700	16 .2	19.3 5	8.11	37721	335 51	10 05 38	96350	41 88	2 .7 6	2 .6
3 6	Shri Suresh Kumar	Village - New Nagla mahewa, District Etawah	8439 4853 10	Aazad Mahak	Irig ate d	Lo cal	2 1 0 0	1800	16 .7	19.3 5	8.11	37721	335 51	10 68 75	91425	15 45 0	2 .8 7	2 .7
3 7	Shri Prashant Nigam	Village - New Nagla mahewa, District Etawah	8273 2989 21	Giriraj - 31	Irig ate d	Lo cal	2 3 0 0	1950	17 .9	19.3 5	8.11	37721	335 51	11 71 00	99300	17 80 0	3 1 0	3 .0
3 8	Shri Vinod Kumar	Village - New Nagla mahewa, District Etawah	8218 1542 59	Pitamba ri	Irig ate d	Lo cal	1 2 5 0	1050	19 .0	19.3 5	8.11	34359	303 39	63 67 5	53425	10 25 0	1 .9 8	1 .8
3 9	Shri Vinay Kumar	Village - New Nagla mahewa, District Etawah	8218 1542 59	Aazad Mahak	Irig ate d	Lo cal	2 1 0 0	1750	20 .0	19.3 5	8.11	37721	33551	106875	8 8 9 2 5	17 95 0 8 7	2 .8 7	2 .7
4 0	Shri Sunil Pandey	Village & Post - Dawatpur Tehsil - Bindki, District - Fatehpur	9236 9576 37	RH - 725	Irig ate d	Lo cal	2 3 0 0	1875	22 .7	11.8 1	8.11	37721	33551	117100	9 5 5 3 8	21 56 2 1 8	3 .1 8	2 .8
4 1	Shri Umesh	Village & Post - Dawatpur Tehsil - Bindki, District -	6393 6710	Giriraj - 31	Irig ate	Lo cal	2 3	1900	23 .7	11.8 1	8.11	37721	33551	119675	9 6	22 92	3 .92	2 .92

	Chandra	Fatehpur	40		d		50								7529	50		
42	Shri Prem Singh	Village - Korsam, Malwan, District - Fatehpur	9621823063	RH - 725	Irigated	Local	2175	1800	20.8	11.81	8.11	37721	33551	110638	91600	190389	2.7	2
43	Shri Anil Kumar	Village & Post - Korsam, Malwan, District - Fatehpur	9621823063	Pitambari	Irigated	Local	1375	1150	19.6	11.81	8.11	34359	30339	70038	58525	115130	2.9	1
44	Shri Sudheer Singh	Village & Post - Korsam, Malwan, District - Fatehpur	8423005071	Giriraj - 31	Irigated	Local	2300	1800	22.2	11.81	8.11	37721	33551	117050	91700	253501	3.7	2
45	Shri Rajnarayan	Village & Post - Korsam, District - Fatehpur	8887985668	Pitambari	Irigated	Local	1350	1150	18.2	11.81	8.11	34359	30339	68775	58475	103000	2.9	1
46	Shrimati Godhan Devi	Village & Post - Korsam, Malwan, District – Fatehpur	6386591463	RH - 725	Irigated	Local	2200	1800	22.2	11.81	8.11	37721	33551	111950	91650	203000	3.7	2
47	Shri Ram Singh	Village & Post - Korsam, Malwan, District – Fatehpur	7084978214	Aazad Mahak	Irigated	Local	210	1700	1.5	11.81	8.11	37721	33551	106850	864	204508	2.6	2



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<b>48</b>	Shri Mahendra Lal	Village - Amoura, Post - Malwan, District – Fatehpur	9984 1674 50	Pitambari	<b>Irigated</b>	<b>Local</b>	1375	1100	25.0	11.81	<b>8.11</b>	34359	30339	70375	55950	14425	200	1.8
<b>49</b>	Shri Ramkrishna	Village - Amoura, Post - Malwan, District - Fatehpur	8052 3924 82	Giriraj - 31	<b>Irigated</b>	<b>Local</b>	2300	1800	27.8	11.81	<b>8.11</b>	37721	33551	117050	91500	2550	301	2.7
<b>50</b>	Shrimati Kiran	Village & Post - Dawatpur District - Fatehpur	8115 1525 77	RH - 725	<b>Irigated</b>	<b>Local</b>	2350	1925	21.5	11.81	<b>8.11</b>	37721	33551	117050	91500	2550	301	2.7
<b>51</b>	Shri Sarvesh Kumar	Village & Post - Senipur Malauni District - Fatehpur	9621 3019 75	Pitambari	<b>Irigated</b>	<b>Local</b>	1400	1200	16.7	11.81	<b>8.11</b>	37721	33551	117050	91500	2550	301	2.7
<b>52</b>	Shri Vinay Tiwari	Village - Gangoly, Shankarpur Sarai, District - Unnao	8004 6672 65	Aazad Mahak	<b>Irigated</b>	<b>Local</b>	2150	1700	26.5	11.77	<b>8.11</b>	37721	33551	117050	91500	2550	301	2.7
<b>53</b>	Shrimati Pushpa Devi	Village - Gangoly, Shankarpur Sarai, District - Unnao	8004 6672 65	Aazad Mahak	<b>Irigated</b>	<b>Local</b>	2100	1700	23.5	11.77	<b>8.11</b>	37721	33551	117050	91500	2550	301	2.7

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<b>54</b>	Shri Prabhat Yadav	Village - Bhavanideen Khera Gangoly, District - Unnao	6392 5129 94	Aazad Mahak	<b>Irigate d</b>	<b>Lo cal</b>	20 50	16 00	28 .1	11.7 7	<b>8.11</b>	3 7 7 2 2 1	33551	1043 00	814 00	22 90 0	2 .8	2 .4
<b>55</b>	Shri Bavlesh Kumar	Village - Gangoly, Shankarpur Sarai, District - Unnao	9936 5820 33	Giriraj - 31	<b>Irigate d</b>	<b>Lo cal</b>	24 00	19 50	23 .0	11.7 7	<b>8.11</b>	3 7 7 2 1	33551	1222 00	992 75	22 92 5	3 .2	3 .0
<b>56</b>	Shri Vinod Kumar Tiwari	Village - Gangoly, Shankarpur Sarai, District - Unnao	9794 0902 22	RH - 725	<b>Irigate d</b>	<b>Lo cal</b>	22 50	18 75	20 .0	11.7 7	<b>8.11</b>	3 7 7 2 1	33551	1145 25	962 88	18 23 7	3 .0	2 .9
<b>57</b>	Shri Pratap Singh	Village - Gangoly, Shankarpur Sarai, District - Unnao	9026 6161 75	RH - 725	<b>Irigate d</b>	<b>Lo cal</b>	23 00	19 00	21 .0	11.7 7	<b>8.11</b>	3 7 7 2 1	33551	1170 75	967 25	20 35 0	3 .1	2 .9
<b>58</b>	Shri Muneshwar Singh	Village - Gangoly, Shankarpur Sarai, District - Unnao	8604 9050 00	RH - 725	<b>Irigate d</b>	<b>Lo cal</b>	22 50	18 50	21 .6	11.7 7	<b>8.11</b>	3 7 7 2 2 1	33551	1145 25	942 25	20 30 0	3 .0	2 .8
<b>59</b>	Shri Virendra Kumar	Village - Gangoly, Shankarpur Sirosi, District - Unnao	9044 9704 02	Aazad Mahak	<b>Irigate d</b>	<b>Lo cal</b>	20 00	17 00	17 .6	11.7 7	<b>8.11</b>	3 7 7 2 1	33551	1018 00	864 25	15 37 5	2 .7	2 .6

60	Shri Shailendra Yadav	Village - Gangoly, Shankarpur Sirosi, District - Unnao	9140 1928 60	Aazad Mahak	Irigated	Local	2100	1 6 5 0	27 .3	11.7 7	8.11	3 7 7 2 1	33551	1068 25	838 25	23 00 0	2 .8	2 .5
61	Shri Satyadev	Village Setubahi, Bangarmau block, Post Janat Nagar, District - Unnao	8948 5332 66	RH - 725	Irigated	Local	2200	1 6 0 0	37 .5	11.7 7	8.11	377 21	33551	11 19 00	81300	30 60 0	3 .0	2 .4
62	Shri Sanjeev Kumar Mishra	Village - Pandri Kala, Ganga Ghat, District - Unnao	9839 8859 25	Aazad Mahak	Irigated	Local	2175	1 6 2 5	33 .8	11.7 7	8.11	377 21	33551	11 06 63	82638	28 02 7	2 .9	2 .5
63	Shri Hakim Singh	Village - Gangoly, Shankarpur, District - Unnao	7275 3140 00	Giriraj	Irigated	Local	2250	1 8 5 0	21 .6	11.7 7	8.11	377 21	33551	11 44 75	94025	20 45 0	3 .0	2 .8
64	Shri Vijay Bhan Singh	Village - Gangoly, Shankarpur, District - Unnao	9451 4140 00	RH - 725	Irigated	Local	2175	1 7 0 0	27 .9	11.7 7	8.11	377 21	33551	11 05 88	86450	24 13 8	2 .9	2 .6
65	Shri Kailash Devi	Tikariya Khurd Kunda Khemipur, District - Pratapgarh	9451 4010 3	Giriraj	Irigated	Local	2350	2 0 0 0	17 .5	12.3 8	8.11	377 21	33551	11 95 75	10182 5	17 75 0	3 .2	3 .0
66	Shrimati Devi	Tikariya Khurd Kunda Khemipur, District - Pratapgarh	9450 4054 25	Giriraj	Irigated	Local	2400	1 8 7 5	28 .0	12.3 8	8.11	377 21	33551	12 22 00	95588	26 61 2	3 .2	2 .8
67	Shri Shravan	Tikariya Khurd Kunda Khemipur, District -	8850 2320	Giriraj	Irigated	Local	2350	1 8	30 .6	12.3 8	8.11	377 21	33551	11 96	91700	27 95	3 .9	2 .9

	Kumar	Pratapgarh	50		d			0						50		0	2	7
68	Shri Narendra Singh	Village - Asewa, Post - Seganpur, District - Auraiya	9026 8810 98	RH - 725	Irrigated	Lo cal	2100	1 7 0 0	23 .5	17.1 3	8.11	377 21	33551	10 69 00	86650	10 25 0	2 .8	2 .6
69	Shri Prahlad Singh	Village - Asewa, Post - Seganpur, District - Auraiya	9648 7154 37	Pitambari	Irrigated	Lo cal	1300	1 1 0 0	18 .2	17.1 3	8.11	343 59	30339	66 20 0	56000	10 20 0	1 .9	1 .8
70	Shrimati Suman Devi	Village - Naveen Nagar, District - Auraiya	6397 1433 19	Giriraj - 31	Irrigated	Lo cal	2400	1 9 0 0	26 .3	17.1 3	8.11	377 21	33551	12 22 00	96750	25 45 0	3 .2	2 .9

**Abbreviations used IR: Irrigated; RF: Rainfed; YIOFP: Yield increase over farmer's practice; CoC: Cost of cultivation; GMR: Gross monetary return; ANMR: Additional Net Monetary Return; IP: Improved practices; FP: Farmers' Practices; B:C Benefit : Cost;**