

**DWR - Success Stories No. 20** 

Success Stories to Enhance the Productivity and Farmers' Income



ICAR - Directorate of Weed Research Jabalpur (M.P.) ISO 9001 : 2015 Certified





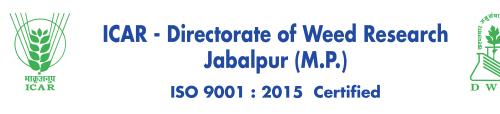




**Success Stories No.-20** 



## Success Stories to Enhance the Productivity and Farmers' Income







#### Citation

Singh P.K., Gharde Yogita, Dubey R.P. and Mishra J.S., 2022. Success stories to enhance the productivity and farmers income. ICAR-Directorate of Weed Research, Jabalpur, 131 p.

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#### Published

April, 2022

#### Published by

Director ICAR-Directorate of Weed Research, Jabalpur (M.P.)

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### Message

Agricultural technologies play an important role in enhancing the overall productivity of farm lands and thereby helping in increasing the income of the farmers. The shift from conventional to knowledge based farming has led to sustainable agriculture growth in recent times. If present day agriculture is to become profitable, it needs to ensure continuous improvisation and upgradation in the technologies which are easily adopted by the farmers. Enhancing the income of farmers is one of the key goals of Government of India. The major objective of the Indian Council of Agricultural Research (ICAR) is to generate the newer technologies at research farms and validating them at farmer's fields. Weeds are one of the major deterrents in increasing the farm productivity and farmers' income. The weed management technologies developed by the ICAR- Directorate of Weed Research (DWR), Jabalpur have been demonstrated to the farmers through various outreach programmes such as *Mera Gaon Mera Gaurav* since last 10 years in various localities of M.P., and in different parts of the country through AICRP-Weed Management centres.

The present publication entitled "Success stories to enhance the productivity and farmers' income" is a compilation of stories of successful farmers who have increased their productivity and income by adopting the technologies developed by the ICAR-DWR. I congratulate the scientists of ICAR-DWR and AICRP-WM for bringing out this compilation. I am sure that these success stories would motivate many more farmers to shift from subsistence farming to modern agriculture, and enhance their farm productivity and income with improved technologies.

(S.K. Chaudhari)

Date : 12-04-2022





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### Foreword



India being an agrarian economy, the contribution of farmers in its development is immense. Prosperity of the farmer is, hence, a key to its developmental journey. The DWR and its AICRP-WM centres are making concerted efforts to create a conducive eco-system to support their hard work so that the farmers get optimum returns on a sustainable basis. Over the years, with the innovative and advanced technologies including improved weed management enabling the agriculture, farmers have been closely mentored for scientific farming and many of them have even started adopting them.

I am extremely heartened that the ICAR- Directorate of Weed research, Jabalpur is bringing out a publication on "Success stories to enhance the productivity and farmers' income" and documenting the best practices adopted by the successful farmers in agriculture and allied sectors across the country. This publication encapsulates stories of progressive farmers who have succeeded by adopting modern agriculture, animal husbandry, improved weed management, organic farming and so on.

I appreciate the efforts of contributors and editors for bringing out this publication which is a testimony to the crucial role played by ICAR-DWR and AICRP-WM centres. I fervently hope that such compilation will encourage other farmers to emulate and replicate such stories in times to come.

Date : 12-04-2022

S. Bhaskar)





## Preface

Agriculture plays a vital role in Indian economy. The resilience of the farming community during adversities like COVID-19 made agriculture the only sector to have clocked a positive growth of 3.4 per cent in 2020-21, when other sectors slipped. The food grains production has increased from 51 million tonnes (MT) in 1950-51 to 309 MT in 2020-21, and expected to reach an all-time record high of 316 MT during 2021-22. However, as per the 3rd survey report of Situation Assessment Survey (SAS) of farm households released by the National Statistical Office in September 2021, there was an alarming fall in income from crop production. This low farm income is causing detrimental effect on the interest in farming, and is also forcing more and more farmers, particularly younger group, to leave agriculture. It is apparent that income earned by a farmer from agriculture is crucial to address agrarian distress and promote farmers welfare. Realizing the need to pay special attention to the plight of farmers, the Hon'ble Prime Minister announced to double the farmers income by 2022 to promote farmers welfare, reduce agrarian distress and bring parity between income of farmers and those working in non-agricultural profession. This initiative however, requires innovative strategies, need-based improved technologies and few policy reforms to achieve the goals. Raising agricultural productivity and input-use efficiency, reducing cost of production and farmer-centric government policies are some of the measures for doubling farmers' income.

Weed management is one of the important aspects of successful crop production. Of the total loss caused by various pests in agriculture, weeds accounts for 37% followed by insects (29%), diseases (22%) and others including nematodes, rodents, mites, birds, etc. (12%). The ICAR-Directorate of Weed Research (DWR), Jabalpur has estimated total actual economic loss due to weeds in 16 major crops to the tune of Rs. 78,591 crores per annum. It has been estimated that on an average, the conventional weed control costs around 33% and 22%, respectively of the total cost of cultivation of *Kharif* and *Rabi* crops. Therefore, adoption of appropriate weed management technologies play a significant role in increasing productivity & input-use efficiency and farmers' income by reducing cost of production.

Present document is a compilation of success stories on doubling/increasing farmers' income through the use of improved weed management technologies in different crops and cropping systems provided by the ICAR-DWR, Jabalpur and its AICRP-Weed Management centres located at different State Agricultural Universities (SAUs).

We would like to acknowledge the efforts of scientists and other staff of the ICAR-DWR, Jabalpur and AICRP-WM centres, and the farmers who shared their experiences in the form of success stories. We consciously hope that these stories would motivate many more to adopt scientific and modern weed management technologies to enhance their income, and also enthuse the youth to consider agriculture as a profitable enterprise.

 Date : 12-04-2022
 Editors

 Success Stories-2022
 Editors





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# **Rice-wheat Cropping System**







Name of farmer : Sh. Shubham Tiwari (Chandra Prakash Tiwari) Address: Pindarai, Bargi, Jabalpur Mobile Number: 9340855377 Age: 35 years

Education: B.E.

Size of land holding (in acre): 5

#### 1) Before Intervention

Component Description			Benchmark (Bas	eline period 2016-17)	)
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income ₹/acre)
Field Crop 1	Rice	4	18.5	28675	17838
Field Crop 2	Wheat	4	14	24290	12480
Total			32.5	52965	30318

#### 2) Status in 2020 ●

Component Description			Period	Period 2020-21 % increase of			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	4	23	42964	32127	27.3	80
Field Crop 2	Wheat	4	20	39500	30597	42.8	145
Total			43	82464	62724	32.3	107

Brief: The farmer used to get net annual income of ₹ 30318/acre from rice and wheat crops. He faced problems like lack of knowledge on improved varieties, weed management and unavailability of happy seed drill machine. With interventions like improved seed, recommended dose of fertilizer and weed management under conservation agriculture, he is getting net annual income of ₹ 62724/acre. In addition, there is cost saving of ₹ 3250/acre in the production of rice and wheat due to savings in field preparation under conservation agriculture.



**Direct-seeded rice** 



Wheat

**Success Stories-2022** 

2







Name of farmer : Sh. Uma Shankar Tiwari

Address: Silua, Bargi, Jabalpur Mobile Number: 8989126444 Age: 50 years Education: Higher Secondary Size of land holding (in acre): 10

#### 1) Before Intervention

Component Description			Benchmark (Baselir	ne period 2016-17)	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income ₹/acre)
Field Crop 1	Rice	4	18	27900	16348
Field Crop 2	Wheat	8	14	24290	12810
Total			32	24290	29158

#### 2) Status in 2020 •

Component Description			Period	2020-21		% increase over	r base year
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	4	23	42964	32127	27.7	96.5
Field Crop 2	Wheat	8	19	37525	28622	35.7	123.4
Total			42	80489	60749	31.25	108.3

Brief: The farmer used to get net annual income of ₹ 29158/acre from rice and wheat crops. He faced problems like lack of technical know-how, unavailability of improved seeds and happy seed drill machine. With DFI interventions like use of balanced fertilizers and weed management under conservation agriculture, he is getting net annual income of ₹ 60749/acre. In addition, there is cost saving of ₹ 3500/acre in the production of rice and wheat.



 $\left(\begin{array}{c}3\end{array}\right)$ 

**Direct-seeded rice** 

Wheat







Name of farmer : Sh. Dhashrath Prasad Sahu Address: Basaniya (Devari), Bargi, Jabalpur Mobile Number: 7879617336 Age: 42 years Education: Primary Size of land holding (in acre): 4

#### 1) Before Intervention

Component	Description		Benchmark (Bas	eline period 2016-17)	)		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	4	19	29450	18613		
Field Crop 2	Wheat	4	15	26025	14545		
Total		34 55475 33158					

#### 2) Status in 2020 •

Component Description			Period	2020-21		% increase ove	r base year
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	24	44832	33995	26.3	82.6
Field Crop 2	Wheat	3	21	41475	32572	40.0	124
Total			45	86307	66567	32.4	101

**Brief :** The farmer used to get net annual income of ₹ 33158/acre from rice and wheat. He faced problems like lack of information on weed management, balanced fertilizers and advanced machineries. With interventions like balanced use of fertilizer and weed management under conservation agriculture, he is getting net annual income of ₹ 66567/acre. In addition, there is cost saving of ₹ 3629/acre in the production of rice and wheat crops due to saving in field preparation under conservation agriculture.

4







Wheat







Name of farmer : Sh. Magan Lal Jhariya Address: Devri (Basaniya), Bargi, Jabalpur Mobile Number: 6265619895 Age: 55 years Education: 8<sup>th</sup> Size of land holding (in acre): 3

#### 1) Before Intervention

Component Description			Benchmark (Bas	eline period 2016-17)	)	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	3	19	29450	18613	
Field Crop 2	Wheat	3	15	26025	14545	
Total		34 55475 331				

#### 2) Status in 2020 •

Component Description			Period	2020-21		% increase over base year       Production     Income       26.3     82.6		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	3	24	44832	33995	26.3	82.6	
Field Crop 2	Wheat	3	22	43450	34547	46.7	138	
Total			46	88282	68542	35.3	107	

Brief : The farmer used to get net annual income of ₹ 33158/acre from rice and wheat. He faced problems like lack of technical know how; knowledge on improved weed management etc. With interventions like improved weed management and adoption of conservation agriculture (CA), his net annual income increased to ₹ 68542/acre. In addition, there is a cost saving of ₹ 3510/acre in the production of rice and wheat due to sowing under zero till condition.

(5)







Success Stories-2022

Wheat







Name of farmer : Sh. Ramkumar Patel Address: Harduli (Mankedi), Bargi, Jabalpur Mobile Number: 9406534600 Age: 67 years Education: 8<sup>th</sup> Size of land holding (in acre): 1.5

#### 1) Before Intervention

Component Description			Benchmark (Bas	eline period 2016-17)	)
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop 1	Rice	1	18.0	27900	17063
Field Crop 2	Wheat	1	14.5	25158	13678
Total			32.5	53058	30741

#### 2) Status in 2020 •

Component Description			Period	2020-21		% increase ove	r base year
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	23	42964	32127	27.8	88
Field Crop 2	Wheat	1	21	41475	32572	44.8	138
Total			44	84439	64699	35.4	111

**Brief :** The farmer used to get net annual income of ₹ 30741/acre from rice and wheat crops. He faced problems like improved seed, lack of technical knowledge on weed management and machineries. With interventions like weed management and use of happy seed drill machine for sowing of crops, he is getting net annual income of ₹ 64699/acre. In addition, there is a cost saving of ₹ 3091/acre in the production of rice and wheat.



Sowing of wheat with Happy Seeder



Wheat

**Success Stories-2022** 

6







Name of farmer : Sh. Bejnath Lodhi

Address: Bharda, Panagar, Jabalpur Mobile Number: -Age: 55 years Education: -Size of land holding (in acre): 1

#### 1) Before Intervention ●

Component	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net (Income ₹/acre)		
Field Crop 1	Rice	1	10	14700	5104		
Field Crop 2	Wheat	1	12	19500	9384		
Total			22	34200	14488		

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	16	29888	33995	26.3	82.6
Field Crop 2	Wheat	1	18	35550	32572	40.0	124
Total			34	65438	50376	55	248

**Brief :** The farmer used to get net annual income of ₹ 14488/acre from rice and wheat. He faced problems like lack of knowledge on advanced herbicide for weed management, balanced use of fertilizer and high cost of cultivation. With interventions like use of recommended dose of fertilizer and weed management under conservation agriculture techniques, he is getting net annual income of ₹ 50376/acre. In addition, there is cost saving of ₹ 4650/acre in the production of rice and wheat.

(7)





Rice

Wheat







Name of farmer : Sh. Netram Patel Address: Bharda, Panagar, Jabalpur Mobile Number: 7489514373

Age: 55 years

Education: 8<sup>th</sup>

Size of land holding (in acre): 1

#### 1) Before Intervention

Component	Description	Benchmark (Baseline period 2016-17)						
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	1	12	17640	9104			
Field Crop 2	Wheat	1	15	19500	10412			
Total			27 37140 19516					

#### 2) Status in 2020 **●**

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	17	31756	24340	42	167
Field Crop 2	Wheat	17	16	31600	23554	33	126
Total			33	63356	47894	38	145

**Brief :** The farmer used to get net annual income of ₹ 19516/acre from rice and wheat. He faced problems like lack of technical know-how on improved weed management and balanced use of fertilizer/seed. With interventions like sowing of crops using Happy seed drill machine and weed management through advanced herbicide, he is getting net annual income of ₹ 47894/acre. In addition, there is cost saving of ₹ 3162/acre in the production of rice and wheat.

8



**Direct-seeded rice** 



Wheat







#### Name of farmer : Sh. Ratan Patel

Address: Bharda, Panagar, Jabalpur Mobile Number: -Age: 50 years Education: Primary Size of land holding (in acre): 3

#### 1) Before Intervention •

Component	Description	Benchmark (Baseline period 2016-17)						
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	3	10	14700	4400			
Field Crop 2	Wheat	3	12	19500	9080			
Total			22 34200 13480					

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	20	37360	30044	100	583
Field Crop 2	Wheat	3	19	37525	29779	58	228
Total			39	74885	59823	77	344

**Brief :** The farmer used to get net annual income of ₹ 13480/acre from rice and wheat. He faced problems like high weed infestation, lack of knowledge on weed management in different crops and high production cost. With interventions like adoption of conservation agriculture and improved weed management, he was able to save money and resources and getting net annual income of ₹ 59823/acre. In addition, there is cost saving of ₹ 5658/acre in the production of rice and wheat due to use of Happy seeder for sowing without field preparation.

9







Wheat







Name of farmer : Sh. Jenu Prasad Bhagdiya Address: Saliwada (Taniya), Bargi, Jabalpur Mobile Number: 9691755901 Age: 42 years Education: Illiterate Size of land holding (in acre): 2

#### 1) Before Intervention •

Component	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	2	8	11760	3882		
Field Crop 2	Wheat	2	8	13000	6382		
Total			16 24760 102				

#### 2) Status in 2020 🌒

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	15	28020	19654	87.5	406
Field Crop 2	Wheat	2	10	19750	11610	25.0	82
Total			25	47770	31264	56.3	205

**Brief :** The farmer used to get net annual income of ₹ 10264/acre from traditional rice and wheat cultivation. He faced problems like lack of knowledge on advanced molecule for weed management, resource conservation techniques, appropriate seed rate and balanced fertilizer. With interventions like proper seed rate, sowing of crops through happy seed drill machine and improved weed management, he is getting net annual income of ₹ 31264/acre. In addition, there is a cost saving of ₹ 3209/acre in the production of rice and wheat.





**Direct-seeded rice** 

Wheat

**Success Stories-2022** 

(10)





## Tar-watter technology of DSR improved farmer's income



Name of farmer : Sh. Gurpreet Singh

Address: Mehraj, Rampura Phul, Bathinda Mobile Number: 9463145292 Age: 35 years Education: Metric Size of land holding (in acre): 28 acre

#### 1) Before Intervention •

Component I	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	28	9.54	51491	34451		
Field Crop 2	Wheat	28	6.91	40137	23470		
Total			16.45	91628	57921		

#### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	28	9.8	52850	37230	2.6	8
Field Crop 2	Wheat	28	7.3	42250	29903	5.3	27
Total			17.1	95100	67133	3.8	16

**Brief :** The farmer used to get annual income of ₹ 57921/acre from rice-wheat rotation. He faced problems like many flushes of resistant *Phalaris* minor in wheat which required 3 to 4 herbicide sprays; higher infestation of weeds in dry-direct seeded rice (DSR) which required 4 irrigations for uniform emergence of crop. With interventions like shifting from puddled transplanted rice to dry DSR and *tarwattar* DSR sowing with Lucky seed drill (for simultaneously sowing and application of pre-emergence herbicide application) resulted into saving of 20-25% water than transplanted rice and 10% water saving than dry-DSR crop; sowing of wheat with happy seeder (energy and time saving technology) and integrated weed management approaches etc., he is now getting annual income of ₹ 67133/acre. In addition, there is cost saving of ₹ 5740/acre and getting the same production from rice-wheat rotation.

(11)





Tar-watter DSR sowing with lucky seed drill Source: AICRP-WM Centre, PAU, Ludhiana

**Success Stories-2022** 

Sowing of wheat with happy seeder





## Direct-seeded rice (tar-wattar) and Zero till wheat improved productivity and income



Name of farmer : Sh. Baldev Singh

Address: Talwandi Bhangerian, Moga Mobile Number: 9417553080 Age: 50 years Education: Metric Size of land holding (in acre): 20 acre

#### 1) Before Intervention

Component D	escription	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	20	31.8	48018	30548	
Field Crop 2	Wheat	20	22.0	35750	19543	
Total			53.8	83768	50091	

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	20	6.50	49075	34105	2.2	11.6
Field Crop 2	Wheat	20	4.64	37700	24893	5.5	27.4
Total			11.1	86775	58998	3.5	17.8

**Brief**: The farmer used to annual income of ₹ 50091/acre from rice-wheat rotation. He faced problems like delayed sowing of wheat which results into early emergence of *Phalaris* minor along with the wheat; being progressive farmer S. Baldev Singh is quit aware about the depletion of under ground water due to puddled transplanted rice in Moga. With interventions like sowing of wheat with happy seeder and sowing of rice in *tar-wattar* condition results into timely sowing of wheat with less infestation of *Phalaris* minor which reduced the herbicide load on the field; saving of 25-29% under ground water as compared to transplanted rice, respectively. He is now getting annual income of ₹ 58998/acre. In addition, there is cost saving of ₹ 5900/acre in rice-wheat rotation.





Tar-wattar direct-seeded rice Source: AICRP-WM Centre, PAU, Ludhiana

(12)

Success Stories-2022

Happy Seeder sown wheat





## Improved weed management increased productivity and income in rice-wheat system



Name of farmer : Sh. Parakash Singh S/O Jagjeet Singh
Address: Village-Balkheda (Motiyapura) Post - Kelakheda Distt- U.S. Nagar, Pin code- 263152
Mobile Number: 9012729461
Age: 54 years
Education: Intermediate
Size of land holding (in acre): 1

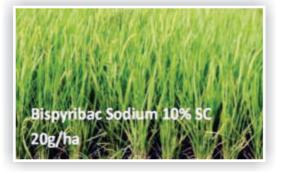
#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	1	22.8	35340	24752		
Field Crop 2	Wheat	1	42.4	31850	23887		
Total			65.2 67190 4863				

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	26.0	48568	36426	14.0	47.2
Field Crop 2	Wheat	1	23.2	44660	33495	18.4	40.2
Total			49.2	93228	69921	16.0	43.8

**Brief**: The farmer used to get get net annual income of ₹ 48639/acre from rice and wheat. He faced problem like high cost of cultivation etc. With interventions in rice like bispyribac-sodium 10% SC 20 g/ha and clodinafop -propargyl 15.3% + metsulfuron-methyl 1% WP 60 + 4g/ha in wheat, he is getting net annual income of ₹ 69921/acre. In addition, there is cost saving of ₹ 2410/acre in the production of rice and wheat.





Wheat

Rice

Source: AICRP-WM Centre , GBPUAT, Pantnagar

Success Stories-2022

(13)





## Herbicide for weed management in rice-wheat system



#### Name of farmer : Sh. Ram Singh S/O Neerjan Singh

Address: Village-Aabad nagar Post-Jhagadpuri (Gaddarpur) Tehsil-Gaddarpur, Distt- U.S. Nagar Pin code- 263152 Mobile Number: 9837590062 Age: 63 years Education: Illiterate Size of land holding (in acre): 1

#### 1) Before Intervention •

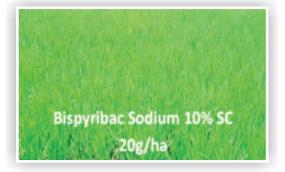
Component I	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	1	21.6	33480	25110		
Field Crop 2	Wheat	1	16.8	27300	20475		
Total			38.4 60780 45585				

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	24.8	44832	33624	14.8	33.9
Field Crop 2	Wheat	1	20.8	40040	30030	23.8	46.7
Total			45.6	84872	63654	18.8	39.6

**Brief :** The farmer used to get annual income of ₹ 45585/acre from rice and wheat. He faced problem like high weed infestation, underground seepage from canal during crop period so planting of wheat is delayed sometimes. With interventions like bispyribac sodium 10%SC 20g/ha in rice and clodinafop - propargyl 15.3% + MSM 1% WP 60 + 4g/ha in wheat for weed management, he is getting net annual income of ₹ 63654/acre. In addition , there is cost saving of ₹ 2410/acre in the production of rice and wheat.

[ 14 ]





Demonstration on weed management in rice Source: AICRP-WM Centre , GBPUAT, Pantnagar

Demonstration on weed management in wheat





## Improved weed management in rice-wheat system



Name of farmer : Sh. Pravind Kumar S/O Virendra Chand Mandal

Address: Village-Jagdeeshpur Post – Kalinagar ( Rudrapur) Distt- U.S. Nagar Pin code- 263152 Mobile Number: 9917351239 Age: 36 years Education: B.A. Size of land holding (in acre): 3

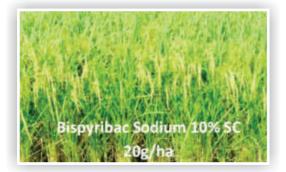
#### 1) Before Intervention ●

Component I	Description	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	3	22.4	34720	26040	
Field Crop 2	Wheat	3	18.4	29900	22425	
Total		40.8 64620 4846				

#### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	25.2	47074	35305	12.5	35.6
Field Crop 2	Wheat	3	22.0	42350	31762	19.6	41.6
Total			47.2	89424	67068	15.7	38.4

**Brief :** The farmer used to get net annual income of ₹ 48465/acre from rice and wheat. The farmer was fully satisfied with his farming during crop period. With interventions like in rice bispyribac-sodium 10%SC 20g/ha and clodinafop - propargyl 15.3% + MSM 1% WP 60 + 4g/ha in wheat, he is getting annual income of ₹ 67068/acre. In addition, there is cost saving of ₹ 2410/acre in the production of rice and wheat.





Demonstration on weed management in rice

Wheat

Source: AICRP-WM Centre , GBPUAT, Pantnagar

**Success Stories-2022** 

(15)





## Herbicides for broad-spectrum weed control in rice-wheat system



#### Name of farmer : Sh. Manjeet Dhali S/O Mangal Dhali

Address: Village-Jagdeeshpur Post - Kalinagar (Rudrapur) Distt- U.S. Nagar Pin code- 263152 Mobile Number: 9639208764 Age: 28 years Education: BBA Size of land holding (in acre): 1

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	1	19.6	30380	22785		
Field Crop 2	Wheat	1	16.0	26000	19500		
Total		35.6 56380 4228					

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	24.0	44832	33624	22.4	47.6
Field Crop 2	Wheat	1	21.6	41580	31185	35.0	59.9
Total			45.6	86412	64809	28.1	53.3

**Brief :** The farmer used to get annual income of ₹ 42285/acre from rice and wheat. The farmer was fully satisfied with his farming during crop period. With interventions like bispyribac-sodium 10%SC 20g/ha in rice and clodinafop - propargyl 15.3% + MSM 1% WP 60+ 4g/ha in wheat, he is getting net annual income of ₹ 64809/acre. In addition, there is cost saving of ₹ 2410/acre in the production of rice and wheat.





**Direct-seeded rice** 

Wheat

Source: AICRP-WM Centre , GBPUAT, Pantnagar

Success Stories-2022

(16)





## Weed management in rice-wheat system



 Name of farmer : Sh. Abnish Kumar S/O Narayan Das
 Address: Village - Motiyapura Aabad nagar Post - Kelakheda Tehshil- Gaddarpur Distt- U.S. Nagar Pin code- 263152
 Mobile Number: 9837029081
 Age: 56 years
 Education: B/A.
 Size of land holding (in acre): 9

#### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	9	20	31000	23250	
Field Crop 2	Wheat	9	15	24736	18552	
Total			35	55736	41802	

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	9	24	45662	34247	22.2	47.3
Field Crop 2	Wheat	9	20	38500	28875	31.4	55.6
Total			44	84162	63122	25.7	51

**Brief :** The farmer used to get net annual income of ₹ 41802/acre from rice and wheat. The farmer faced the problem of connecting road to his farm, the irrigation canal overflow with bounty of weeds and high infestation of insects during the crop period. With interventions like bispyribac- sodium 10%SC 20g/ha in rice and clodinafop - propargyl 15.3% + metsulfuron-methyl 1% WP 60+ 4g/ha in wheat, he is getting net annual income of ₹ 63122/acre. In addition, there is cost saving of ₹ 2410/acre in the production of rice and wheat.

(17)





Weed management in rice Source: AICRP-WM Centre , GBPUAT, Pantnagar

Weed management in wheat





## Herbicides for improved weed management



Name of farmer : Sh. Kulwant Singh S/O Arjun Singh Address: Village-Bawanpuri Post -Subhasnagar Distt- U.S. Nagar Pin code- 263152 Mobile Number: 9927864867 Age: 47 years Education: 10<sup>th</sup> Size of land holding (in acre): 2

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre/no.)	Production (q/acre/litres)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	2	21.6	33480	25110		
Field Crop 2	Wheat	2	18.4	29900	22425		
Other enterprise	Milk production (Cow)	2	1080	27000	14000		
Total	-	-		90380	61535		

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	22.4	41843	31382	3.7	25.0
Field Crop 2	Wheat	2	24.8	47740	35805	34.8	59.7
Total			47.2	89583	67187	18	9.2

Brief : The farmer used to get annual income of ₹ 61535/acre from rice and wheat. He faced problems of increased infestation of insect and diseases which require twice or thrice application of insecticide and fungicides during crop the period. With interventions like Bispyribac Sodium 10%SC 20g/ha in rice and Clodinafop - propargyl 15.3% + MSM 1% WP 60+ 4g/ha in wheat, he is getting annual income of ₹ 67187/acre. In addition, there is cost saving of ₹ 2410/acre in the production of rice and wheat.

[ 18 ]





Weed management in rice though bispyribac sodium

Source: AICRP-WM Centre, GBPUAT, Pantnagar

Weed management in wheat





## DSR improved rice productivity and income



Name of farmer : Sh. Khusdeep Singh

Address: Village- Mahamdakki, Dist. Fatehabad, Haryana Mobile Number: 9416141027 Age: 32 years Education: Higher Secondary Size of land holding (in acre): 60

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)						
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	60	30	44000	33500			
Field Crop 2	Wheat	60	21	33600	26600			
Total			51 77600 60100					

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (Acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	60	30	54000	41600	0	24.2
Field Crop 2	Wheat	60	22	42300	33300	4.8	25.2
Total			52	96300	74900	2.0	25.0

**Brief**: The farmer used to get annual income of ₹ 60100/acre from rice and wheat. He faced problems like labour availability and irrigation facility etc. With interventions like direct sowing of rice (DSR), he is getting annual income of ₹ 74900/acre. In addition, there is cost saving of ₹ 2000/acre in the production of DSR.

(19)



Field visit of Scientists at Khusdeep Singh Field

Source: AICRP-WM Centre, CCSHAU, Hisar



30 days old crop at Khusdeep Singh Field





## Management of herbicide resistant Phalaris minor in wheat



Name of farmer : Sh. Narender Singh Gill Address: Village- Nangla, Dist. Fatehabad, Haryana Age: 54 years Education: Higher secondary Size of land holding (in acre): 26 acre

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	26	30	42000	30000		
Field Crop 2	Wheat	26	20	32000	24500		
Total			50 74000 545				

#### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	26	32	57000	385000	-	28
Field Crop 2	Wheat	26	23	43500	32700	-	33
Total			55	100500	71200	10	30.6

**Brief**: The farmer used to get annual income of ₹ 54500/acre from rice, wheat. He faced problems like *resistant Phalaris minor* etc. With interventions like use of pyroxasulfone + pendimethalin, he is getting annual income of ₹ 71200/acre.

(20)



Wheat sowing as well as pre-emergence spray of pyroxasulfone +pendimethalin with lucky seed drill Source: AICRP-WM Centre, CCSHAU, Hisar



Field sown with lucky deed drill





## Herbicidal weed control in maize



Name of farmer : Sh. Gautam Singh S/o Late Balber Singh Address: Village-Katal Batal, Nagrota, Jammu, J&K Mobile Number: 7051190820 Age: 26 years Education: 12<sup>th</sup> Size of land holding (in acre): 2.5

#### 1) Before Intervention ●

Component	Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	0.25	12.0	16800	10400			
Field Crop 2	Maize	1.25	11.2	15680	8880			
Field Crop 3	Wheat	1.75	11.4	18286	11086			
Total			34.6	50766	30366			

#### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	0.25	20.0	28000	13600	66.67	30.77
Field Crop 2	Maize	1.25	14.4	17280	9680	28.57	9.01
Field Crop 3	Wheat	1.75	12.0	20229	12000	5.00	8.25
Total			46.4	65509	35280	33.99	16.18

**Brief :** The farmer used to get annual income of Rs. 30366/acre from rice, maize and wheat. The farmer faced problem of weeds in maize. With new intervention like tembotrione 100 g/ha + atrazine 500 g/ha at 15-20 DAS, he is getting 28.57% higher yield of maize and 9% higher income from maize as compared to baseline period. The farmer used to get annual income of Rs. 35280/acre.

(21)



Application of tembotrione 100 g/ha + atrazine 500 g/ha at 16 DAS



Wheat

Source: AICRP-WM Centre, SKUAST, Jammu





# Rice-Wheat-Greengram Cropping System





## Diversification of rice-wheat system for higher income

Name of farmer : Sh. Govind Sahu (Koto)



Address: Devari (Basaniya), Bargi, Jabalpur Mobile Number: 6261021271 Age: 35 years Education: 8<sup>th</sup> Size of land holding (in acre): 3.5

#### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)						
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	3	19.2	29760	18923			
Field Crop 2	Wheat	3	14.8	25678	14198			
Total			34.0 55438 3312					

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	24	43898	33061	22.4	74.7
Field Crop 2	Wheat	3	21	39500	30597	35.1	116
Field Crop 3	Greengram	2	6.2	44615	29365	-	-
Total			49.7	128013	93023	46.2	181

Brief : The farmer used to get net annual income of ₹ 33121/acre from rice and wheat. He faced problems like lack of technical know-how on improved agriculture techniques, weed management and limited irrigation facilities. With interventions like improved weed management practices and adoption of conservation agriculture, he is getting net annual income of ₹ 93023/acre. In addition, there is cost saving of ₹ 3489/acre in the production of rice and wheat crops.

(23)



Sowing of summer greengram through Happy Seeder



Greengram at podding stage





## Intensification of rice-wheat system with summer greengram



Name of farmer : Sh. Hira Patel

Address: Charghat Pipariya, Bargi, Jabalpur Mobile Number: 9826347124 Age: 58 years Education: M.Com. and LLB Size of land holding (in acre): 20

#### 1) Before Intervention •

Component Description			Benchmark (Baseline period 2016-17)			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	2	16.5	25575	14738	
Field Crop 2	Wheat	12	14.0	24290	12810	
Total			30.5	49865	27548	

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	12	20.8	38554	28017	26.1	90
Field Crop 2	Wheat	20	18	35550	26647	28.5	134
Field Crop 3	Greengram	2	6.4	46054	30804	-	-
Total			45.2	120158	85468	48.2	210

**Brief**: The farmer used to get net annual income of ₹ 27548/acre from maize and wheat crops. He faced problems like lack of irrigation facilities, lack of know-how on weed management. With interventions such as information on improved variety seed, addition of greengram as third crop in cropping sequence, recommended dose of fertilizer along with improved weed management and adoption of conservation agriculture, he is getting net annual income of ₹ 85468/acre. In addition, there is cost saving of ₹ 2800/acre in the production of rice and wheat due to sowing with happy seeder without field preparation.

(24)



Sowing of summer greengram through happy seeder



Greengram at podding stage







Name of farmer : Sh. Virendra Shukla Address: Rosara, Bargi, Jabalpur Mobile Number: 8959584189 Age: 35 years Education: High School Size of land holding (in acre): 35

#### 1) Before Intervention •

Component I	Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	2	19.0	29450	18613			
Field Crop 2	Wheat	15	15.5	26893	15413			
Total			34.5 56343 3402					

#### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	25	22.8	42590	34753	20.0	86.7
Field Crop 2	Wheat	30	20.5	40488	31585	32.3	105
Field Crop 3	Greengram	4	6.2	44615	29365	-	-
Total			49.5	127693	95703	43.5	181

**Brief :** The farmer used to get net annual income of ₹ 34026/acre from rice and wheat crops. He faced problems like lack of technical knowledge on improved varieties, conservation agriculture, knowledge on weed management and advanced machineries. With interventions like addition of greengram as third crop in cropping sequence and weed management alon with adoption of conservation agriculture, he is getting net annual income of ₹ 95703/acre. In addition, there is cost saving of ₹ 3215/acre in the production of rice and wheat due to sowing with happy seeder without field preparation.

(25)





Wheat

Summer greengram





## Diversification of rice-wheat system for higher income

Name of farmer : Sh. Mool Chand Netam



Address: Saliwada (Tunia), Bargi, Jabalpur Mobile Number: 9407059085 Age: 38 years Education: Primary Size of land holding (in acre): 7

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	3	17.8	27590	16753		
Field Crop 2	Wheat	3	15.5	26893	15413		
Total			33.3	54483	32166		

#### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	22.5	42030	31193	26.0	86.2
Field Crop 2	Wheat	3	21.0	41475	32572	35.5	111
Field Crop 3	Greengram	2	6.4	46054	30804	-	-
Total			49.9	129559	94569	49.8	194

**Brief :** The farmer used to get net annual income of ₹ 32166/acre from rice and wheat. He faced problems like lack of technical know-how on weed management, improved variety seed, balanced fertilizer and unavailability of improved machineries. With interventions like improved weed management, adoption of conservation agriculture (CA) technology; he is getting net annual income of ₹ 94569/acre. In addition, there is cost saving of ₹ 3514/acre in the production of rice and wheat.

(26)







Wheat





### Intensification of rice-wheat system with summer greengram



Name of farmer : Sh. Rajkumar Armo (Hukum Armo) Address: Saliwada (Tunia), Bargi, Jabalpur Mobile Number: 8319388715 Age: 26 years Education: BE Size of land holding (in acre): 2.5

### 1) Before Intervention •

Component Description			Benchmark (Baseline period 2016-17)				
Components	Names	Area (Acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	2	19	29450	18613		
Field Crop 2	Wheat	2	15	26025	14545		
Total			34 55475 331				

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	21	39228	28391	10.5	52.5
Field Crop 2	Wheat	2	17	33575	24672	13.3	69.6
Field Crop 3	Greengram	2	5	35980	28398	100	100
Total			43	108783	81461	26.5	145.7

**Brief :** The farmer used to get net annual income of ₹ 33158/acre from rice and wheat. He faced problems like lack of knowledge on advanced technologies including conservation agriculture, improved varieties and weed infestation in crops. With interventions like weed management under conservation agriculture and inclusion of greengram as third crop in cropping sequence, he is getting net annual income of ₹ 81461/acre. In addition, there is cost saving of ₹ 4654/acre in the production of rice and wheat due to saving under zero till condition.

(27)







Summer greengram





## **Conservation Agriculture in rice-wheat greengram system**



Name of farmer : Sh. Hukum Dubey Address: Rosara, Bargi, Jabalpur Mobile Number: 9753910837 Age: 65 years Education: 6<sup>th</sup> Size of land holding (in acre): 1.25

### 1) Before Intervention

Component I	Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	1	17.5	27125	16288		
Field Crop 2	Wheat	1	15.0	26025	14545		
Total			32.5 53150 30833				

### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	23.5	43898	33061	34.3	103
Field Crop 2	Wheat	1	20.8	41080	32177	38.7	121
Field Crop 3	Greengram	1	5.80	41737	26487	-	-
Total			50.1	126715	91725	54.1	197

**Brief :** The farmer used to get net annual income of ₹ 30833/acre from rice and wheat. He faced problems like lack of information on weed management, improved seed and balanced fertilizer along with limited irrigation facilities. With interventions like use of improved seed of greengram, recommended dose of fertilizer, improved weed management and adoption of conservation agriculture, he is getting net annual income of ₹ 91725/acre. In addition, there is cost saving of ₹ 3026/acre in the production of rice and wheat due to use of happy seeder for sowing.

(28)







Summer greengram





## Integrated weed management in rice-wheatgreengram system under conservation agriculture



### Name of farmer : Sh. Aditya Tiwari

Address: Futatal, Panagar, Jabalpur Mobile Number: 8839493312 Age: 42 years Education: Graduation Size of land holding (in acre): 20

#### 1) Before Intervention

Compone	ent Description	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	20	15	22050	10440	
Field Crop 2	Wheat	20	14	22750	13344	
Field Crop 3	Summer greengram	5	3.5	18288	10088	
Total			32.5	63088	33872	

### 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	20	20	37360	29980	33.3	187
Field Crop 2	Wheat	20	18	35550	27740	28.6	108
Field Crop 3	Summer greengram	10	6.5	46774	38934	85.7	286
Total			44.5	119684	96654	36.9	185

**Brief :** The farmer used to get total net annual income of ₹ 33872/acre from rice, wheat and summer greengram. He faced problems like delayed sowing of subsequent crops of wheat and summer greengram due to longer time in field preparation and lack of information on weed management. With interventions like improved weed management and Zero Tillage sowing immediately after harvesting of preceding crops with Happy Seeder (conservation agriculture), he is now getting total net annual income of ₹ 96654/acre. In addition, there is cost saving of ₹ 6186/acre in the production of rice, wheat and summer greengram.

(29)





Wheat

Summer greengram





## Intensification of rice-wheat system and improved weed management



Name of farmer : Sh. Jitendra Singh Address: Guleda, Patan, Jabalpur Mobile Number: 9165355052 Age: 32 years Education: Higher Secondary Size of land holding (in acre): 22

#### 1) Before Intervention •

Component Description			Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	22	15	22050	11390		
Field Crop 2	Wheat	22	14	22750	13290		
Total			29 44800 246				

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	22	21	39228	31448	40	176
Field Crop 2	Wheat	22	18	35550	28140	28.6	112
Field Crop 2	Greengram	5	6	43176	35836	100	100
Total			45	117954	95424	55	287

**Brief :** The farmer used to get total net annual income of ₹ 24680/acre from wheat and rice. Before intervention, he was unaware of the advanced technologies such as conservation agriculture, improved varieties, weed management, spraying technique and seed treatment etc. With interventions like improved varieties, balanced use of fertilizer, improved weed management and use of Happy seed drill machine for ZT sowing of rice, wheat and greengram, he is now earning net annual income of ₹ 95424/acre. In addition, there is cost saving of ₹ 4930/acre in the production of rice, wheat and greengram.

(30)







Summer greengram





## CA system and improved weed management in rice-wheat-greengram system



Name of farmer : Sh. Pritam Singh Rajpoot

Address: Guleda, Patan, Jabalpur Mobile Number: 9826649108 Age: 47 years Education: BA Size of land holding (in acre): 6

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	6	15	22050	11800		
Field Crop 2	Wheat	6	14	22750	12780		
Total			29	44800	24580		

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	6	18	33624	25944	20	120
Field Crop 2	Wheat	6	17	33575	26165	21	105
Field Crop 2	Greengram	1	5	35980	28540	100	100
Total			40	103179	80649	38	228

**Brief :** The farmer used to get net annual income of ₹ 24580/acre from wheat and rice. He faced problems like lack of knowledge on improved seed/variety, balanced dose of fertilizer and proper weed management. With interventions like inclusion of greengram as third crop and proper weed management under conservation agriculture, he is getting net annual income of ₹ 80649/acre. In addition, there is cost saving of ₹ 5130/acre in the production of rice, wheat and greengram.

(31)







Summer greengram





## Intensification of rice-wheat system with summer greengram



Name of farmer : Sh. Ankit Rajpoot

Address: Guleda, Patan, Jabalapur Mobile Number: 9340631926 Age: 24 years Education: Graduation, ITI Size of land holding (in acre): 7

### 1) Before Intervention

Component Description			Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	7	15	22050	12190			
Field Crop 2	Wheat	7	15	28090	14565			
Total			30 46425 2675					

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	18	33625	25944	20	113
Field Crop 2	Wheat	7	18	35550	28090	20	93
Field Crop 2	Greengram	7	5	35980	28640	100	100
Total			41	105154	82674	37	209

**Brief**: The farmer used to get net annual income of ₹ 26755/acre from rice and wheat before intervention. He faced problems like lack of technical know-how on improved agriculture, seed treatment, machineries and on proper weed management. With interventions like inclusion of greengram as third crop under conservation agriculture and improved weed management in all three crops, he is getting net annual income of ₹ 82674/acre. In addition, there is cost saving of ₹ 4530/acre in the production of rice, wheat and greengram.

(32)





**Direct-seeded rice** 

Wheat





## Diversification of rice-wheat system for higher income



Name of farmer : Sh. Mohit Singh Rajppot Address: Guleda, Patan, Jabalpur Mobile Number: 9301349627 Age: 19 years Education: Higher Secondary Size of land holding (in acre): 6.5

### 1) Before Intervention ●

Component	Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	6.5	14	20580	10880			
Field Crop 2	Wheat	3.0	13	21125	11165			
Field Crop 3	Chickpea	3.5	4	12000	3550			
Total			31	53705	25595			

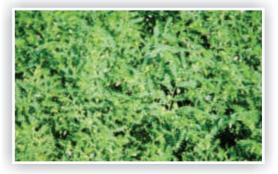
### 2) Status in 2020 🏼

Component	Component Description		Period		% increase over base year		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	6.5	17	31756	24076	21	121
Field Crop 2	Wheat	4	17	33575	25515	31	129
Field Crop 3	Chickpea	2.5	6.5	33150	27240	63	667
Field Crop 4	Summer greengram	6.5	5	35980	28540	100	100
Total			45.5	134461	105371	46.8	312

Brief : The farmer used to get net annual income of ₹ 25595/acre from rice, wheat and chickpea. He faced problems like lack of knowledge on improved varieties, seed treatment, balanced use of fertilizer and improved weed management in different crops. With interventions like introduction of chickpea during Rabi, cultivation of greengram as third crop, recommended dose of fertilizer, and improved weed management under conservation agriculture, he is getting net annual income of ₹ 105371/acre. In addition, there is cost saving of ₹ 6460/acre in the production of rice, wheat, chickpea and greengram.

(33)





Chickpea

Rice







Name of farmer : Sh. Ganesh Singh Rajpoot Address: Guleda, Patan, Jabapur Mobile Number: 7224916216 Age: 45 years Education: 8<sup>th</sup> Size of land holding (in acre): 7

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	7	14	20580	10920		
Field Crop 2	Wheat	7	13	21125	11405		
Total			27	41705	22325		

### 2) Status in 2020 •

Component	Component Description		Period	2020-21		% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	18	33624	26094	28.6	139
Field Crop 2	Wheat	7	17	33575	25615	30.8	125
Field Crop 3	Summer greengram	5	5	35980	28540	100	100
Total			40	103179	80249	48	259

**Brief :** The farmer was cultivating rice and wheat conventionally and getting net annual income of ₹ 22325/acre before intervention. He faced problems like lack of technical information on improved varieties, conservation agriculture, weed management, balanced use of fertilizer and advanced machineries. With interventions like inclusion of greengram as third crop, weed management under conservation agriculture and balanced use of fertilizer, he is now getting net annual income of ₹ 80249/acre. In addition, there is cost saving of ₹ 3890/acre in the production of rice, wheat and greengram.

(34)





Direct-seeded rice

ZT wheat





## **Conservation Agriculture for higher production and income**



Name of farmer : Sh. Randheer Singh

Address: Lakhra, Patan, Jabalpur Mobile Number: 9584251920 Age: 34 years Education: High School Size of land holding (in acre): 20

### 1) Before Intervention ●

Component D	escription		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	20	15	22050	11550			
Field Crop 2	Wheat	20	14	22750	13340			
Field Crop 3	Summer greengram	5	3	15675	7475			
Total			31	60475	32365			

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	20	21	39228	31348	40.0	171
Field Crop 2	Wheat	20	18	35550	28090	28.6	111
Field Crop 3	Summer greengram	10	6	43176	35736	100	378
Total			45	117954	95174	40.6	194

Brief: The farmer used to get net annual income of ₹ 32365/acre from conventional practice of rice, wheat and summer greengram. He faced problems like lack of information on improved seed, balanced fertilizer and weed management. He was not aware of the conservation agriculture technologies. With interventions like weed management under conservation agriculture in all crops, he is now getting net annual income of ₹ 95174/acre. In addition, there is cost saving of ₹ 5330/acre in the production of rice, wheat and summer greengram.





Greengram under conservation agriculture





## Intensification of rice-wheat system with summer greengram



Name of farmer : Sh. Chandresh Biloha

Address: Singhaldeep, Patan, Jabalpur Mobile Number: 9755439023 Age: 35 years Education: B.Sc. Size of land holding (in acre): 11

### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	11	15	22050	11390	
Field Crop 2	Wheat	11	14	22750	13390	
Total			29	44800	24780	

### 2) Status in 2020 🌒

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	11	18	33624	25744	20	126
Field Crop 2	Wheat	11	18	35550	28090	29	110
Field Crop 3	Summer greengram	5	5.5	39578	32238	100	100
Total			41.5	108752	86072	43	247

**Brief :** Before our intervention, farmer used to get net annual income of ₹ 24780/acre from rice and wheat. He faced problems like lack of technical know-how on seed treatment, proper weed management and advanced machineries. With interventions like inclusion of greengram as third crop, use of improved seed/variety and weed management practices under conservation agriculture, he is now getting net annual income of ₹ 86072/acre. In addition, there is cost saving of ₹ 4680/acre in the production of rice, wheat and greengram.

(36)





**Direct-seeded rice** 

Summer greengram





## Diversification of rice-wheat system for higher income



Name of farmer : Sh. Atul Singh Rajpoot

Address: Guleda, Panagar, Jabalpur Mobile Number: 9340631986 Age: 25 years Education: B.Com Size of land holding (in acre): 8

#### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	8	14	20580	9720	
Field Crop 2	Wheat	8	14	22750	12670	
Total			28	43330	22390	

### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	8	20	37360	29830	42.9	207
Field Crop 2	Wheat	6	18	35550	27540	28.6	117
Field Crop 3	Chickpea	2	7.5	38250	32240	100	100
Field Crop 4	Summer greengram	3	6	43176	35236	100	100
Total			51.5	154336	124846	83.9	458

**Brief :** The farmer used to get net annual income of ₹ 22390/acre from rice and wheat. He faced problems like lack of knowledge on advanced crop cultivation techniques along with weed management. With interventions like addition of greengram as third crop under conservation agriculture and improved weed management in all crops, he is getting net annual income of ₹ 124846/acre. In addition, there is cost saving of ₹ 5400/acre in the production of rice and wheat crops.

(37)





**Direct-seeded rice** 

Chickpea





## **Conservation Agriculture in rice-wheat system**



Name of farmer : Sh. Shailendra Singh Rajpoot Address: Guleda, Patan, Jabapur Mobile Number: 8827818219 Age: 30 years Education: Higher Secondary Size of land holding (in acre): 22

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	22	15	22050	11150	
Field Crop 2	Wheat	22	13	21125	11715	
Total			28	43175	22865	

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	22	20	37360	29680	33.3	166
Field Crop 2	Wheat	22	18	.5550	27680	38.5	136
Field Crop 3	Greengram	5	6.5	46774	39334	100	100
Total			44.5	119684	96694	59	322

**Brief**: Before intervention, farmer was getting net annual income of ₹ 22865/acre from rice and wheat. He faced problems like lack of knowledge on proper weed management and advanced cultivation techniques. With interventions like proper weed management, adoption of conservation agriculture (CA), use of improved varieties and balanced fertilizer, he is getting net annual income of ₹ 96694/acre. In addition, there is cost saving of ₹ 4760/acre in the production of rice, wheat and greengram.





Wheat field sown with Happy Seeder

Wheat in CA

**Success Stories-2022** 

(38)





## Diversification of rice-wheat system for higher income



Name of farmer : Sh. Manohar Singh Rajpoot Address: Guleda, Patan, Jabalpur Mobile Number: 9340631986 Age: 52 years Education: BA Size of land holding (in acre): 7

### 1) Before Intervention ●

Component Description			Benchmark (Baseline period 2016-17)			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	7	15	22050	11940	
Field Crop 2	Wheat	4	14	22750	13340	
Field Crop 3	Chickpea	3	5	20000	13725	
Total			34	64800	39005	

### 2) Status in 2020 🌒

Componen	Component Description		Period	2020-21		% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	15	33624	26044	20.0	118
Field Crop 2	Wheat	4	14	33575	26165	21.4	96
Field Crop 3	Chickpea	3	5	35700	29690	40.0	116
Field Crop 4	Summer greengram	5	34	39578	32238	100	100
Total			68	142477	114137	39.7	196

**Brief :** The farmer used to get net annual income of ₹ 39005/acre from rice, wheat and greengram. He faced problems like lack of technical knowledge on improved seed/variety, weed management and profitable technologies in raising crops. With interventions like improved weed management, use of Happy seed drill for sowing, balanced fertilizer and improved varieties, he is getting net annual income of ₹ 114137/acre. In addition, there is cost saving of ₹ 5490/acre in the production of rice, wheat and greengram.

(39)





Wheat

**Success Stories-2022** 

Chickpea







### Name of farmer : Sh. Sanjay Dubey

Address: Bharda, Panagar, Jabalpur Mobile Number: 9827813962 Age: 45 years Education: Higher Secondary Size of land holding (in acre): 3

### 1) Before Intervention ●

Compone	Component Description		iod 2020-21		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop 1	Rice	3	13	19110	7574
Field Crop 2	Wheat	3	14	22750	10194
Field Crop 3	Summer greengram	3	2.5	13063	3963
Total			29.5	54923	21731

### 2) Status in 2020 •

Compone	Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	3	20	37360	29944	53.9	295	
Field Crop 2	Wheat	3	19	37525	29969	35.7	194	
Field Crop 3	Summer greengram	3	6	43176	35254	140	790	
Total			45	118061	95167	52.5	338	

**Brief :** The farmer used to get net annual income of ₹ 21731/acre from rice, wheat and summer greengram. He faced problems like lack of technical knowledge on improved agriculture practices, balance use of fertilizers, proper weed management and machineries. With interventions like improved varieties, proper weed management under conservation agriculture and balance use of fertilizer, he is getting net annual income of ₹ 95167/acre. In addition, there is cost saving of ₹ 8298/acre in the production of rice, wheat and summer greengram.3

(40)





Wheat

Direct-seeded rice







### Name of farmer : Sh. Ravi Garg

Address: Padaria, Panagar, Jabalpur

Age: 50 years

Education: Higher Secondary

Size of land holding (in acre): 2

### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	2	13	19110	7760	
Field Crop 2	Wheat	2	12	19500	8404	
Total			25	38610	16164	

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	18	33624	26244	38.5	238
Field Crop 2	Wheat	2	17	33575	25815	41.7	207
Field Crop 3	Summer greengram	2	5	35980	28040	100	100
Total			40	103179	80099	60	396

**Brief**: Before intervention, farmer used to get net annual income of ₹ 16164/acre from rice and wheat. He faced problems like high weed infestation and lack of knowledge on improved seed/variety, balanced use of fertilizers and seed treatment. With interventions like appropriate seed rate, inclusion of greengram as third crop in cropping sequence, balance use of fertilizer and weed management under conservation agriculture, he is getting net annual income of ₹ 80099/acre. In addition, there is cost saving of ₹7306/acre in the production of rice and wheat.

(41)





**Direct-seeded rice** 

Summer greengram







Name of farmer : Sh. Kamlesh Garg Address: Padaria, Panagar, Jabalpur Mobile Number: 9300111431 Age: 47 years Education: Higher Secondary Size of land holding (in acre): 6

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	6	14	20580	9280	
Field Crop 2	Wheat	6	14	22750	11580	
Total			28	43330	20860	

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	6	20	37360	30030	42.9	224
Field Crop 2	Wheat	6	18	35550	27804	28.6	140
Field Crop 3	Summer greengram	6	5.5	39578	31738	100	100
Total			43.5	112488	89572	55.34	329

**Brief :** The farmer used to get net annual income of ₹ 20860/acre from rice and wheat. He faced problems like lack of technical know-how on improved weed management and profitable cultivation techniques. With interventions like improved agriculture practices, inclusion of greengram as third crop and proper weed management under conservation agriculture, he is getting net annual income of ₹ 89572/acre. In addition, there is cost saving of ₹ 7394/acre in the production of rice, wheat and summer greengram.6

(42)





Wheat

Summer greengram





## Intensification of rice-wheat system with summer greengram



### Name of farmer : Sh. Rahul Lodhi

Address: Bharda, Panagar, Jabalpur Mobile Number: 6261857883 Age: 28 years Education: 9<sup>th</sup> Size of land holding (in acre): 6.5

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	6.5	12	17640	7704	
Field Crop 2	Wheat	6.5	13	21125	9929	
Total			25	38765	17633	

### 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	6.5	18	33624	26308	50.0	242
Field Crop 2	Wheat	6.5	18	35550	27994	38.5	182
Field Crop 3	Summer greengram	3.0	4.5	32382	24700	100	100
Total		·	40.5	101556	79002	62.0	348

**Brief :** The farmer used to get net annual income of ₹ 17633/acre from rice and wheat. He faced problems like lack of knowledge on balance use of fertilizer/seed, proper weed management and use of advanced machineries. With interventions like weed management and adoption of conservation agriculture, he is getting net annual income of ₹ 79002/acre. In addition, there is cost saving of ₹ 6260/acre in the production of rice and wheat crop due to sowing with Happy seeder without field preparation.

(43)





Wheat

**Direct-seeded rice** 







Name of farmer : Sh. Heera Lal Kushwah

Address: Bharda, Panagar, Jabalpur Mobile Number: -Age: 35 years Education: Primary Size of land holding (in acre): 2.5

### 1) Before Intervention ●

Component I	Description	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	2.5	12	17640	7904	
Field Crop 2	Wheat	2.5	11	17875	6487	
Total			23	35515	14391	

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2.5	19	35492	24426	58.3	209
Field Crop 2	Wheat	2.5	18	35550	27790	63.6	328
Field Crop 3	Summer greengram	2.5	5.5	39578	31638	100	100
Total			42.5	110620	83854	84.8	483

**Brief :** The farmer used to get net annual income of ₹ 14391/acre from rice and wheat. He faced problems like lack of knowledge on improved technologies of crop production and weed management. With interventions like balance use of fertilizer, quality seeds of improved varieties, weed management through new herbicide molecules and raising of crops under conservation agriculture, he is now getting net annual income of ₹ 83854/acre. In addition, there is a cost saving of ₹ 6034/acre in the production of rice, wheat and greengram.





Wheat

Direct-seeded rice

**Success Stories-2022** 

(44)







### Name of farmer : Sh. Anand Sahu

Address: Padaria, Panagar, Jabalpur Mobile Number: 6260581313 Age: 23 years Education: Higher Secondary Size of land holding (in acre): 7

### 1) Before Intervention ●

Component I	Description	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	7	13	19110	7600	
Field Crop 2	Wheat	7	14	22750	11334	
Total			27	41860	18934	

### 2) Status in 2020 ●

Compon	ent Description		Period		% increase over base year		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	20	37360	29980	53.9	295
Field Crop 2	Wheat	7	18	35550	27790	28.6	145
Field Crop 3	Summer greengram	5	5.5	39578	32488	100	100
Total			43.5	112488	90258	61	377

**Brief :** The farmer used to get net annual income of ₹ 18934/acre from rice and wheat. He faced problems like lack of knowledge on appropriate use of fertilizers, seed and weed management practices. With interventions like use of improved variety, balanced fertilizer, quality seeds of improved variety and weed management under conservation agriculture, he is getting net annual income of ₹ 90258/acre. In addition, there is cost saving of ₹ 7786/acre in the production of rice, wheat and greengram.





**Direct-seeded rice** 

Summer greengram

Success Stories-2022

(45)





## **Conservation Agriculture in rice-based cropping system**



Name of farmer : Sh. Satish Dubey

Address: Bharda, Panagar, Jabalpur Mobile Number: 8839753977 Age: 50 years Education: High School Size of land holding (in acre): 7.0

### 1) Before Intervention ●

Compone	ent Description	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	7	12	17640	6784	
Field Crop 2	Wheat	5	14	22750	11994	
Field Crop 3	Chickpea	2	5	20000	11425	
Field Crop 4	Summer greengram	3	3	15675	6575	
Total			34	76065	36778	

### 2) Status in 2020 O

Compone	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	22	41096	33880	83	399
Field Crop 2	Wheat	5	22	43450	35894	57	199
Field Crop 3	Chickpea	2	10	51000	44790	100	292
Field Crop 4	Summer greengram	7	6.5	46774	38852	117	491
Total			60.5	182320	153416	78	317

**Brief :** The farmer used to get net annual income of Rs. 36778/acre from rice, wheat, chickpea and summer greengram. He faced problems like lack of technical know-how on advanced agriculture practices, proper weed management, recommended dose of fertilizer and conservation agriculture. With interventions like use of improved seeds, fertilizer and proper weed management under conservation agriculture, he is getting net annual income of Rs. 153416/acre. In addition, there is cost saving of Rs. 10383/acre in the production of rice, wheat, chickpea and summer greengram.7.0

(46)





Wheat

**Direct-seeded rice** 







### Name of farmer : Manish Paliwal

Address: Mangaw Simaria, Sehora, Jabalpur Mobile Number: 9926552399 Age: 36 years Education: Graduate Size of land holding (in acre): 12

### 1) Before Intervention ●

Compon	ent Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	12	13	19110	7914		
Field Crop 2	Wheat	12	14	22750	11254		
Field Crop 3	Summer greengram	2	3.0	15675	6075		
Total			30	57535	25243		

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	12	19	35492	28076	46.2	255
Field Crop 2	Wheat	12	18	35550	27994	28.6	149
Field Crop 3	Summer greengram	12	6.5	46774	39092	117	544
Total			43.5	117816	95162	45	277

Brief : The farmer used to get net annual income of ₹ 25243/acre from rice, wheat and summer greengram. He faced problems like lack of information on improved cultivation practices, varieties, proper use of herbicide for weed management, balanced fertilizer and appropriate seed rate for crops. With interventions like improved varieties, use of recommended doses of fertilizer, use of happy seed drill for sowing of crops and proper weed management, he is getting net annual income of ₹ 95162/acre. In addition, there is cost saving of ₹ 9638/acre in the production of rice, wheat and summer greengram.

(47)







Greengram under conservation agriculture







Address: Bharda, Panagar, Jabalpur Mobile Number: 6263410965 Age: 43 years Education: 8<sup>th</sup> Size of land holding (in acre): 3

Name of farmer : Sh. Yashvant Dubey

### 1) Before Intervention ●

Compone	Component Description		eriod 2020-21		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop 1	Rice	3	11	16170	6650
Field Crop 2	Wheat	2	12	19500	9840
Field Crop 3	Chickpea	1	5	20000	12180
Field Crop 4	Summer greengram	2	3	15675	7755
Total			31	71345	36425

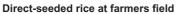
### 2) Status in 2020 •

Compone	Component Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	20	37360	29930	82	350
Field Crop 2	Wheat	2	20	39500	31944	67	225
Field Crop 3	Chickpea	1	9	45900	39790	80	227
Field Crop 4	Summer greengram	2	6.5	46774	38949	117	402
Total			55.5	169534	140613	79	286

**Brief :** The farmer used to get net annual income of ₹ 36425/acre from rice, wheat, chickpea and greengram. He faced problems like lack of technical information on profitable cultivation techniques, improved weed management, and recommended doses of fertilizer. With interventions like sowing with Happy seed drill machine, use of improved varieties, balanced fertilizer and improved weed management in crops, he is getting net annual income of ₹ 140613/acre. In addition, there is cost saving of ₹ 5999/acre in the production of rice, wheat, chickpea and greengram.

(48)







Greengram under conservation agriculture



## Intensification of rice-wheat system with summer greengram



Name of farmer : Sh. Sankar Singh Thakur

Address: Bharda, Panagar, Jabalapur Mobile Number: -Age: 73 years Education: Illiterate Size of land holding (in acre): 4

### 1) Before Intervention •

Component Description			Benchmark (Baseline period 2016-17)			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	4	13	19110	9854	
Field Crop 2	Wheat	4	14	22750	12922	
Total			27	41860	22776	

### 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	4	17	31756	24620	30.8	150
Field Crop 2	Wheat	4	19	37525	29779	35.7	131
Field Crop 3	Summer greengram	4	6	43176	35594	100	100
Total			42	112457	89993	55.6	295

**Brief :** The farmer used to get net annual income of ₹ 22776/acre from rice and wheat. He faced problems like high weed infestation in crops, lack of technical knowledge on proper weed management, balanced use of fertilizer and proper seed rate. With interventions like use of Happy seed drill machine for sowing under conservation agriculture (CA), balanced use of fertilizer and improved weed management, he is getting net annual income of ₹ 89993/acre. In addition, there is cost saving of ₹ 4202/acre in the production of rice and wheat.

(49)





Wheat

Greengram



## CA-based rice-wheat-greengram system improved farmer's income



Name of farmer : Neeraj Prasad Gontia Address: Tindni, Panagar, Jabalpur Mobile Number: 8720057050 Age: 30 years Education: 6<sup>th</sup>

Size of land holding (in acre): 5

### 1) Before Intervention ●

Compon	ent Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	5	13	19110	8650	
Field Crop 2	Wheat	5	14	22750	11630	
Field Crop 3	Summer greengram	2	3	15675	6375	
Total			30	57535	26655	

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	5	20	37360	30044	54	247
Field Crop 2	Wheat	5	19	37525	29969	36	158
Field Crop 3	Summer greengram	5	6.5	46774	39552	117	520
Total			45.5	121659	99565	52	274

**Brief :** The farmer used to get net annual income of ₹ 26655/acre from rice, wheat and summer greengram. He faced problems like lack of technical know-how on advanced weed management techniques, balanced use of fertilizer and conservation agriculture. With interventions like weed management and adoption of conservation agriculture, he is getting net annual income of ₹ 99565/acre. In addition, there is cost saving of ₹ 8786/acre in the production of rice, wheat and summer greengram.

(50)





**Direct-seeded rice** 

Wheat under CA





## Conservation Agriculture and weed management in rice-wheat system



### Name of farmer : Sh. Prasant Patel

Address: Chaurai, Bargi, Jabalpur Mobile Number: 9826979495 Age: 39 years Education: 12<sup>th</sup> Size of land holding (in acre): 22

### 1) Before Intervention Intervention

Compon	ent Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	10	15	22050	14624		
Field Crop 2	Wheat	10	14	22750	16664		
Field Crop 3	Summer greengram	2	4	20900	13280		
Total			33	65700	44568		

### 2) Status in 2020 ●

Compon	Component Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	16	18	33624	25258	20	73
Field Crop 2	Wheat	22	18	35550	26594	29	60
Field Crop 3	greengram	5	6	43176	34994	50	164
Total			42	112350	86846	27	95

Brief: The farmer used to get net annual income of ₹ 44568/acre from rice, wheat and greengram. He faced problems like lack of technical know-how on spraying techniques, advanced herbicides for weed management and high cost of cultivation. With interventions like improved weed management in all crops and sowing of crops with happy seed drill machine, he is getting net annual income of ₹ 86846/acre. In addition, there is cost saving of ₹ 4371/acre in the production of rice, wheat and greengram.

(51)





**Direct-seeded rice** 

Wheat under conservation agriculture





## Conservation Agriculture and weed management in rice-wheat-greengram system



### Name of farmer : Sh. Jagdish Pradhan

Address: Nagason, Rewa, Bargi, Jabalpur Mobile Number: 7489191594 Age: 60 years Education: 5<sup>th</sup> Size of land holding (in acre): 1.5

### 1) Before Intervention •

Component Description			Benchmark (Bas	)	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop 1	Rice	1	8	11760	2402
Field Crop 2	Wheat	1	8	13000	5622
Field Crop 3	Greengram	1	3	15675	7275
Total			19	40435	15299

### 2) Status in 2020 ●

Compon	Component Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1.5	15	28020	21054	88	777
Field Crop 2	Wheat	1.5	14	27650	19394	75	245
Field Crop 3	Greengram	1.5	6	43176	35694	100	391
Total			35	98846	76142	84	398

**Brief :** The farmer used to get net annual income of ₹ 15299/acre from rice, wheat and greengram. He faced problems like high weed infestation, lack of knowledge on proper use of herbicides and balanced use of fertilizer. With interventions like use of improved weed management technologies and raising of crops under conservation agriculture techniques in place of conventional tillage, he is getting net annual income of ₹ 76142/acre. In addition, there is cost saving of ₹ 4433/acre in the production of rice, wheat and greengram.

(52)





Wheat

**Direct-seeded rice** 





## Intensification of rice-wheat system with summer greengram



Name of farmer : Sh. Dhaniram Netam

Address: Saliwada Tuniya, Bargi, Jabalpur Mobile Number: 9669174858 Age: 35 years Education: 9<sup>th</sup> Size of land holding (in acre): 8

### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	4	10	14700	4642	
Field Crop 2	Wheat	4	10	16250	6132	
Total			20	30950	10774	

### 2) Status in 2020 •

Compon	Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	4	15	28020	19654	50	323	
Field Crop 2	Wheat	4	16	31600	22644	60	269	
Field Crop 3	Greengram	3	5	35980	27798	100	100	
Total			36	95600	70096	80	551	

Brief : The farmer used to get net annual income of ₹ 10774/acre from rice and wheat. He faced problems like limited irrigation facility, lack of technical knowledge on proper use of herbicide for weed management and high cost of cultivation. With interventions like inclusion of greengram as third crop and improved weed management along with raising of crops under conservation agriculture technique, he is getting net annual income of ₹ 70096/acre. In addition, there is cost saving of ₹3854/acre in the production of rice and wheat.

(53)





Wheat

Summer greengram





# Inclusion of summer grengram in rice-wheat system for higher income



### Name of farmer : Sh. Shekh Sarif

Address: Sahajpuri, Bargi, Jabalpur Mobile Number: 9753928845 Age: 40 years Education: 8<sup>th</sup> Size of land holding (in acre): 9

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	4	10	14700	6062		
Field Crop 2	Wheat	6	12	19500	11982		
Total			22	34200	18044		

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	5	15	28020	19654	50	224
Field Crop 2	Wheat	8	15	29625	20669	25	73
Field Crop 3	Greengram	2	5	35980	27798	100	100
Total			36	93625	68121	59	278

**Brief :** The farmer used to get net annual income of ₹ 18044/acre from rice and wheat. He faced problems like lack of technical know-how on weed management and high cost of cultivation. With interventions like inclusion of greengram as third crop, improved weed management and raising of crops under conservation agriculture technique, he is getting net annual income of ₹ 68121/acre. In addition, there is cost saving of ₹ 3266/acre in the production of rice and wheat.

(54)





Wheat

**Direct-Seeded rice** 







### Name of farmer : Sh. Krapal Gond

Address: Sahaspuri (Mankedi), Bargi, Jabalpur Mobile Number: 8819913067 Age: 61 years Education: 5<sup>th</sup> Size of land holding (in acre): 3

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	2	10	14700	4834	
Field Crop 2	Wheat	2	12	19500	10382	
Total			22	34200	15216	

### 2) Status in 2020 •

Compon	Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	2	17	31756	23390	70	384	
Field Crop 2	Wheat	2	15	29625	20669	25	99	
Field Crop 3	Greengram	2	5	35980	27798	100	100	
Total			37	97361	71857	68	372	

**Brief**: The farmer used to get annual income of ₹ 15216/acre from rice and wheat. He faced problems like lack of technical knowledge on use of herbicides, balanced use of fertilizer/seed and high cost of cultivation. With interventions like addition of greengram as third crop, improved weed management and sowing of crops with happy seed drill machine, he is getting net annual income of ₹71857/acre. In addition, there is cost saving of ₹3162/acre in the production of rice and wheat.

(55)





**Direct-seeded rice** 

Greengram





## Diversification of rice-wheat system for higher yield & income



### Name of farmer : Sh. Ram Kumar Patel

Address: Sahajpuri (Harduli), Bargi, Jabalpur Mobile Number: 7804832911 Age: 65 years Education: 5<sup>th</sup> Size of land holding (in acre): 1.5

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	1.5	10	14700	5522	
Field Crop 2	Wheat	1.5	12	19500	10242	
Total			22	34200	15764	

### 2) Status in 2020 •

Compon	Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	1.5	15	28020	19654	50	256	
Field Crop 2	Wheat	1.5	15	29625	20669	25	102	
Field Crop 3	Greengram	1.0	5	35980	27798	100	100	
Total			35	93625	68121	59	332	

**Brief**: The farmer used to get net annual income of ₹ 15764/acre from rice and wheat. He faced problems like lack of technical know-how on use of herbicide and high cost of cultivation. With interventions like introduction of greengram as third crop, proper weed management and sowing of crops with happy seed drill machine without tillage operations, he is getting net annual income of ₹68121/acre. In addition, there is cost saving of ₹3114/acre in the production of rice and wheat.

(56)





Sowing of wheat through Happy seeder

Wheat



## Internsification of rice-wheat system with summer greengram



### Name of farmer : Sh. Devidin

Address: Maangoo Simaria, Gosalpur, Jabalpur Mobile Number: -Age: 52 years Education: Matriculation Size of land holding (in acre): 16

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	16	13	19110	7774		
Field Crop 2	Wheat	16	15	24375	12879		
Total			28	43485	20653		

### 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	16	19	35492	28076	46	261
Field Crop 2	Wheat	16	18	35550	27994	20	117
Field Crop 3	Summer greengram	5	6.5	46774	39092	100	100
Total			43.5	117816	95162	55	361

**Brief :** The farmer used to get net annual income of ₹ 20653/acre from rice and wheat. He faced problems like high weed infestation, lack of technical knowledge on balance use of fertilizer and improved weed management. With interventions like addition of greengram as third crop, weed management with advanced herbicide and use of happy seed drill for sowing, he is getting net annual income of ₹ 95162/acre. In addition, there is cost saving of ₹ 7860/acre in the production of rice and wheat.





Wheat

Rice

**Success Stories-2022** 

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## Improved weed management and CA system for higher yield & income



Name of farmer : Sh. Kamlesh Rajak

Address: Maungoo Simariya, Gosalpur, Jabalpur

Age: 52 years

Education: Matriculation

Size of land holding (in acre): 6

### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	6	14	20580	9044		
Field Crop 2	Wheat	6	13	21125	10229		
Total			27	41705	19273		

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	6	20	37360	30030	42.9	232
Field Crop 2	Wheat	6	18	35550	27790	38.5	172
Field Crop 3	Summer greengram	6	6	43176	35236	100	100
Total			44	116086	93056	63.0	383

**Brief :** The farmer used to get net annual income of ₹ 19273/acre from rice and wheat. He faced problems like lack of technical know-how on proper weed management and advanced profitable cultivation techniques. With interventions like proper use of fertilizer/seed, use of Happy seed drill for sowing and improved weed management, he is getting net annual income of ₹ 93056/acre. In addition, there is cost saving of ₹ 7342/acre in the production of rice and wheat.

(58)





**Direct-seeded rice** 

Summer greengram





# Rice-based cropping system





## **CA-based rice-chickpea system improved farmer's income**



### Name of farmer : Sh. Manoj Nath

Address: Rewa, Bargi, Jabalpur Mobile Number: 6261418446 Age: 35 years Education: 9<sup>th</sup> Size of land holding (in acre): 8

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	2	10	14700	5122	
Field Crop 2	Chickpea	2	8	32000	22842	
Total			18	46700	27964	

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	15	28020	19654	50	284
Field Crop 2	Chickpea	2	10	51000	44090	25	93
Total			25	79020	63744	39	128

**Brief**: The farmer used to get annual income of ₹ 27964/acre from rice and chickpea. He faced problems like high weed infestation, limited irrigation facility and lack of technical knowledge on use of herbicide. With interventions like improved weed management and balanced use of fertilizer/seed, he is getting annual income of ₹ 63744/acre. In addition, there is cost saving of ₹ 3461/acre in the production of rice and chickpea due to cost saving in weed management through herbicide in place of manual weeding.

(60)





**Direct-seeded rice** 

Chickpea





## Direct-seeded rice improved productivity and income



### Name of farmer : Sh. Satwinder Singh

Address: Village Naushehra Nalbandan, Distt Pathankot Mobile Number: 9855141794 Age: 48 years Education: Senior Secondary Size of land holding (in acre): 20 acre

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Puddled transplanted rice	20	26	46800	34800		

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Direct-seeded rice (DSR)	10	27	54000	44000	4	26

**Brief**: The farmer used to get annual income of ₹ 34800/acre from transplanted rice. He faced problems like unavailability of labour, water for transplanting and weed infestation in fields. With replacement of transplanted rice with direct-seeded rice and pre-emergence application of pendimethalin for weed management, he is getting annual income of ₹ 44000/acre. In addition, there is cost saving of ₹ 3000/acre in rice production.

(61)





DSR with pre-emergence spray of pendimethalin Source: AICRP-WM Centre, PAU, Ludhiana

DSR crop





## **Diversification with Boro rice improves farmer's income**



### Name of farmer : Sh. Bogai Bordoloi

Address: Sidhabari Vil., P.O. Noduagaon, PS, Dist.: Morigaon Mobile Number: 8134955903 Age: 45 years Education: Class IX Size of land holding (in acre): 1.83

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Kharif rice	1.00	12.1	15911	5587	
Field Crop 2	Jute (Fibre crop)	0.17	8.1	18623	6478	
Total			20.2	34534	12065	

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Kharif rice	1.65	14.2	22672	9717	17.4	73.9
Field Crop 2	Boro rice	0.33	16.2	25911	11741	100	100
Field Crop 3	Jute (Fibre crop)	0.33	9.7	31093	14899	19.8	130
Total			40	79676	36357	98.5	201

**Brief :** The farmer used to get net annual income of ₹ 12065/acre from rice, jute etc. He faced problems like irrigation, electricity, severe infestation of weeds etc. With interventions like area expansion and inclusion of boro (summer) rice with the help of shallow tube well, weed management implements, FLD, training etc., he is getting net annual income of ₹ 36357/acre.

(62)





Discussion with farmer Source: AICRP-WM Centre, AAU, Jorhat

**Bumper Jute crop** 





# Boro rice increased farmer's income



Name of farmer : Sh. Pramod Dewri

Address: Sidhabari Vil., P.O. Noduagaon, PS, Dist.: Morigaon Mobile Number: 8099336918 Age: 55 years Education: Middle Size of land holding (in acre): 5

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Kharif rice	1.32	9.7	12729	2405		

# 2) Status in 2020 ●

Component Description			Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Kharif rice	2.65	13.0	20729	7772	34	223	
Field Crop 2	<i>Boro</i> rice	1.65	17.0	27207	13036	100	100	
Total			30.0	47936	20808	209	765	

**Brief :** The farmer used to get annual income of ₹ 2405/acre from kharif rice etc. He faced problems like irrigation, electricity, weed infestation etc. With interventions like area expansion and inclusion of boro (summer) rice with the help of shallow tube well, improved weed management practices, FLD, training etc., he is getting annual income of ₹ 20808/acre now.

(63)





A Hands-on training on weed management Source: AICRP-WM Centre, AAU, Jorhat

**Success Stories-2022** 

**Rice field of farmers** 





# Improved weed management for higher rice productivity



#### Name of farmer : Sh. Jogeswar Bordoloi

Address: Sidhabari vil., P.O. Noduagaon, PS, Dist.: Morigaon Mobile Number: 7896840259 Age: 46 years Education: Class IX Size of land holding (in acre): 5.5 acre

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Kharif rice	4.96	8.5	11138	814		

#### 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Kharif rice	4.96	13.8	22024	9069	62.4	1014
Field Crop 2	Boro rice	0.83	18.2	29150	14980	100	100
Total		5.79	32.0	51174	24049	276.5	2854

**Brief**: The farmer used to get annual income of ₹ 814/acre from only Kharif rice. He faced problems like lack of irrigation facility, electricity, high weed infestation etc. With interventions like inclusion of boro (summer) rice with the help of shallow tube well, weed management implements, FLD, training etc., he is getting annual income of ₹ 24049/acre.

(64)



Implement distribution to the farmers



Farmer in his rice field

Source: AICRP-WM Centre, AAU, Jorhat





# Boro rice for higher productivity and income



Name of farmer : Sh. Rekh Ram Bordoloi

Address: Sidhabari vil., P.O. Noduagaon, PS, Dist.: Morigaon Mobile Number: 9395129709 Age: 62 years Education: Class IV Size of land holding (in acre): 3.96 acre

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Kharif rice	2.65	10.5	13789	3466	
Field Crop 2	Jute (Fibre Crop)	0.33	8.5	19555	7409	
Total			19.0	33344	10875	

### 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Kharif rice	5.29	13.0	20729	7773	23.8	124
Field Crop 2	Boro rice	1.32	16.2	25911	11741	100	100
Field Crop 3	Jute (Fibre Crop)	0.83	10.1	32389	16194	18.8	119
Total			39.3	79029	35708	107	228

**Brief :** The farmer used to get annual income of ₹ 10875/acre from rice and jute crop. He faced problems like lack of irrigation facility, electricity, severe weed infestation etc. With interventions like area expansion and inclusion of Boro (summer) rice with the help of shallow tube well, weed management implements, FLD, training etc., he is getting annual income of ₹ 35708/acre.

(65)



Farmer in his Jute field Source: AICRP-WM Centre, AAU, Jorhat



Discussion with farmers at Sidhabari





# Boro rice for higher productivity and income



Name of farmer : Sh. Moneswar Bordoloi

Address: Sidhabari vil., P.O. Noduagaon, PS, Dist.: Morigaon Mobile Number: 8135861531 Age: 65 years Education: Class IV Size of land holding (in acre): 7.5 acre

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Kharif rice	6.60	9.7	12729	2405	
Field Crop 2	Jute (Fibre crop)	0.17	8.1	18623	6478	
Total			17.8	31352	8883	

### 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Kharif rice	6.60	12.1	19433	6478	24.7	169
Field Crop 2	Boro rice	1.65	16.2	25911	11741	-	-
Field Crop 3	Jute (Fibre crop)	0.66	10.5	33684	17490	29.6	170
Total			38.8	79028	35709	118	302

**Brief**: The farmer used to get annual income of ₹ 8883/acre from rice and jute crop. He faced problems like lack of irrigation facility, electricity, weed infestation on the field etc. With interventions like area expansion and inclusion of boro (summer) rice with the help of shallow tube well, weed management implements, FLD, training etc., he is getting annual income of ₹ 35709/acre.

(66)



Implements and training given to farmer Source: AICRP-WM Centre, AAU, Jorhat



Weed management in farmers' field





# Improved weed management in rice increased productivity and farmer's income



## Name of farmer : Sh. Keshavarajan KD

Address: Kodapully (House), Alappad (P.O.), Thrissur, Kerala Mobile Number: 9447401725 Age: 60 years Education: Diploma Size of land holding (in acre): 33

### 1) Before Intervention ●

Component	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Rice	33	27.9	62121	46970		

# 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Rice	33	33.3	92727	72727	19.4	54.8

**Brief :** The farmer used to get annual income of ₹ 46970/acre from rice. He faced problem of high infestation of weeds like Leptochloa and Echinochloa and non availability of labour for hand weeding. With interventions on weed control through herbicides, he is getting annual income of ₹ 72727/acre and there is a cost saving to the tune of ₹ 6000/acre.

(67)







Scientist visited farmers field

Source: AICRP-WM Centre, KAU, Thrissur





# Broad-spectrum weed control in rice improved farmer's income



Name of farmer : Sh. T M Madhavan (Kuttan)

Address: Thannikkal (House), East Vellanikkara, Mangode Thrissur, Kerala Mobile Number: 9562212742 Age: 69 years Education: SSLC Size of land holding (in acre): 1.75

### 1) Before Intervention ●

Component De	escription		Benchmark (Base	)	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop	Rice	1.75	17.1	37714	17714

## 2) Status in 2020 •

Compon	ent Description	Period 2020-21			% increase over ba		er base year
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1.75	20	56000	26171	16	48

**Brief :** The farmer used to get annual income of ₹ 17714/acre from rice. He faced problems like high cost and non availability of labour and lack of knowledge about correct choice and dosage of herbicide. With intervention on use of broad spectrum herbicides like bispyribac sodium, he is now getting annual income of ₹ 26171/acre.



Rice



Demonstration at farmer's field

Source: AICRP-WM Centre, KAU, Thrissur

**Success Stories-2022** 

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# Broad-spectrum herbicides for weed management in rice



### Name of farmer : Oliver M J

Address: Muriyattil (House), Ayyapankav (P.O), Thrissur, Kerala Mobile Number: 9072804363 Age: 57 years Education: SSLC Size of land holding (in acre): 4

#### 1) Before Intervention ●

Component De	escription		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)Production (q/acre)Gross Income (₹/acre)Net (₹/						
Field Crop	Rice	4	17.5	38500	21250			

## 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Rice	4	20.3	56700	26700	16	26

**Brief :** The farmer used to get annual income of ₹ 21250/acre from rice. He faced problems like severe weed competition and non-availability of labour for hand weeding. With intervention on timely use of broad-spectrum herbicides, he is getting annual income of ₹ 26700/acre.





Excellent crop of rice at farmer's field

Source: AICRP-WM Centre, KAU, Thrissur





# Weed managment in rice for higher yield and income



#### Name of farmer : Sh. Ramesh R

Address: Punnamkulam (House), Kattussery, Alathur, Palakkad, Kerala Mobile Number: 9447922262 Age: 41 years Education: Diploma Size of land holding (in acre): 3

#### 1) Before Intervention •

Component Description			Benchmark (Baseline period 2016-17)			
Components	Names	Area (acre)Production (q/acre)Gross Income (₹/acre)Net (₹/				
Field Crop	Rice	3	20	46000	32667	

## 2) Status in 2020 ●

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Rice	3	22.5	63000	39667	13	21

Brief : The farmer used to get annual income of ₹ 32667/acre from rice. He faced problems like unavailability of timely labour and lack of knowledge on selection of herbicide for Leptochloa control. With interventions like use of stale seed bed and post-emergent herbicides fenoxaprop or cyhalofop, he is getting annual income of ₹ 39667/acre. In addition, there is cost saving of ₹ 4000/acre for weeding in the production of rice.





Source: AICRP-WM Centre, KAU, Thrissur



Rice

**Success Stories-2022** 

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# Management of grassy weeds in rice improved farmer income



#### Name of farmer : Sh. Gouthaman K D

Address: Kizhakkambram (House), Kattussery, Alathur , Palakkad Mobile Number: 9745644213 Age: 57 years Education: Pre degree Size of land holding (in acre): 4 acre

### 1) Before Intervention Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Rice	4	20	46500	31500		

### 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Rice	4	21	58500	38500	5	22

**Brief :** The farmer used to get annual income of ₹ 31500/acre from rice cultivation. He faced problems like high weed infestation, especially graminaceous flora. With interventions on right choice of herbicides, he is getting annual income of ₹ 38500/acre. In addition, there is cost saving of ₹ 10000/acre in weed control compared to hand weeding.

(71)



Rice



Farmers-scientist Interaction at demonstration site

Source: AICRP-WM Centre, KAU, Thrissur





# Herbicidal weed control in rice improved farmers' income



### Name of farmer : Sh. Balakrishnan E R

Address: Edathura (H), Ayyapankav (P.O), Mulayam, Thrissur Mobile Number: 9387804363 Age: 65 years Education: Diploma Size of land holding (in acre): 1.5

# 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Rice	1.5	15	33000	18000		

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Rice	1.5	20	54000	31000	33	72

**Brief :** The farmer used to get annual income of ₹ 18,000/acre from rice. He faced weed problems and labour scarcity. With interventions like use of advance herbicides for the control of weeds, he is getting annual income of ₹ 31,000/acre.





Rice

Field demonstration on rice

Source: AICRP-WM Centre, KAU, Thrissur

**Success Stories-2022** 

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# Higher yield and income with herbicidal weed control



### Name of farmer : Sh. Sunil Kumar Tudu

Address: Village- Srikrishnapur, Habra-II block, P.S.- Haringhata, Dist.- Nadia, West Bengal
Mobile Number: 9088226347
Age: 28 years
Education: Graduate
Size of land holding (in acre): 1

#### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	1	15.2	19500	9600		
Field Crop 2	Mustard	1	3.7	19950	12790		
Field Crop 3	Jute fibre	1	9.6	99830	55920		
Total			28.5	139280	78310		

# 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	19.8	29166	14358	30.3	49.6
Field Crop 2	Mustard	1	4.5	23705	15197	20.7	18.8
Field Crop 3	Jute fibre	1	11.6	118862	66578	21.0	19.1
Total			35.9	171733	96133	25.9	22.8

**Brief**: The farmer used to get net annual income of ₹ 78310/acre from rice, mustard, jute etc. He faced problems like weed problem, higher cost of cultivation, low market price etc. With interventions like use of newer molecule of herbicide etc., he is getting annual income of ₹ 96133/ acre.

(73)



Jute fibre crop with herbicide use Source: AICRP-WM Centre, BCKV, Kalyani



Intervention of herbicide in rice crop





# Effective weed control in rice-lentil system increased yield and income



#### Name of farmer : Sh. Chandan Baskey

Address: Village- Panchkahania, Haringhata block, P.S.- Haringhata, Dist.- Nadia, West Bengal Mobile Number: 8509531061 Age: 61 years Education: Primary Size of land holding (in acre): 0.6

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	0.6	12.67	16333	7917		
Field Crop 2	Lentil	0.6	3.16	17167	10833		
Total			15.83	33500	18750		

## 2) Status in 2020 🌒

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	0.6	16.3	22833	12167	29.0	39.8
Field Crop 2	Lentil	0.6	3.9	20641	13000	21.6	20.2
Total			20.2	43475	25167	27.5	34.2

**Brief :** The farmer used to get annual income of ₹ 18750/acre from rice, lentil etc. He faced problems like high weed infestation, high labour cost etc. With interventions like use of herbicide for effective weed control etc., he is getting annual income of ₹ 25167/acre.

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Threshing of rice crop

Source: AICRP-WM Centre, BCKV, Kalyani



Lentil with chemical weed management





# Improved weed management through herbicides increased farmer's income



#### Name of farmer : Sh. Kuddush Sahaji

Address: Village- Panchkahania, Haringhata block, P.S.-Haringhata, Dist.- Nadia, West Bengal
Mobile Number: 9732265223
Age: 61 years
Education: Class II
Size of land holding (in acre): 0.5

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	0.5	15.2	19800	9500	
Field Crop 2	Mustard	0.5	3.76	20680	13040	
Total			18.96	40480	22540	

## 2) Status in 2020 🔍

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	0.5	19.6	27000	14400	28.95	51.58
Field Crop 2	Mustard	0.5	4.54	24970	15320	20.74	17.48
Total			24.1	51970	29720	27.3	31.9

**Brief :** The farmer used to get net annual income of ₹ 22540/acre from rice, mustard etc. He faced problems like high weed infestation etc. With interventions like improved weed management through herbicide etc., he is now getting net annual income of ₹ 29720/acre.





Rice

Mustard

Source: AICRP-WM Centre, BCKV, Kalyani

**Success Stories-2022** 

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# Improved weed management through herbicides increased farmer's income



Name of farmer : Sh. Bhagban Sahu

Address: S/o Mahendra Sahu, Bhokila Pada, Bhapyur, Nayagarh, Odisha
Mobile Number: 7326817369
Age: 40 years
Education: 5<sup>th</sup>
Size of land holding (in acre): 03

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	2	25	14000	8000	
Field Crop 2	Greengram	1	2	8000	6500	
Total			27	22000	14500	

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	40	21000	15000	60	87.5
Field Crop 2	Greengram	1	4	18000	15000	100	131
Total			44	39000	30000	63	107

Brief: The farmer used to get net annual income of ₹ 14500/acre from rice and greengram cultivation etc. He faced problems like heavy weed infestation, poor crop yield etc. With interventions like improved weed management through herbicide etc., he is getting net annual income of ₹ 30000/acre. In addition, there is cost saving of ₹ 6000/acre in the production of rice and greengram due to labour savings.

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Rice

Imazethapyr of 75 g/ha

Source: AICRP-WM Centre: OUAT, Bhubaneswar





# Improved weed management in rice and sugarcane increased income



Name of farmer : Sh. Gobind Nayak

Address: S/O Jambeswar Nayak, Bhapur, Nayagarh Mobile Number: 9348961944 Age: 45 years Education: 7<sup>th</sup> Size of land holding (in acre): 5

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	3.0	15	17333	6667	
Field Crop 2	Sugarcane	2.0	30	36000	24000	
Total			45	53333	30667	

# 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice blackgram (Paira cropping)	3 1.5	20 2.3	22667 8000	10000 6000	33.3 100	140
Field Crop 2	Sugarcane	2.0	38	45000	32500	26.7	35.4
Total			60.3	75667	48500	34.0	58.1

**Brief :** The farmer used to get annual income of ₹ 30667/acre from rice and sugarcane. He faced problems like weed menace, pest problems etc. With interventions like improved weed management and timely phyto- sanitary measures etc., he is getting annual income of ₹ 48500/acre. In addition, there is cost saving of ₹ 4000/ as labour savings in the production of these crops.





Rice Source: AICRP-WM Centre: OUAT, Bhubaneswar Success Stories-2022 77

Sugarcane





# Improved weed management saves labour and increased farmer's income



## Name of farmer : Sh. Shyam Sundar Nayak

Address: S/0 Chaitan Nayak, Ranipada, Khandapada, Nayagarh, Odisha
Mobile Number: 9853532468
Age: 58 years
Education: Class 2<sup>nd</sup>
Size of land holding (in acre): 6

#### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Rice	6	7000				

## 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	6	20.0	26333	13667	66.7	95.2
Field Crop 2	Black gram as paira cropping	3	2.3	10667	8000	100.0	100.0
Total			22.3	37000	21667	86.1	209.5

**Brief :** The farmer used to get annual income of ₹ 7000/acre from rice only. He faced problems like high infestation of weeds. With interventions like improved weed management, he is getting annual income of ₹ 21667/acre. In addition, there is cost saving of ₹ 4200/acre as labour savings in the production of rice.





Rice

Quizalofop-p-ethyl 50 g/ha

Source: AICRP-WM Centre: OUAT, Bhubaneswar

**Success Stories-2022** 

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# Increased productivity and income through improved weed management



Name of farmer : Sh. Manu Bhoi (SCSP Beneficiary)

Address: S/O Dama Bhoi, Kharipadia Sahi, Alipingala, Puri, Odisha Mobile Number: 8260314747 Age: 63 years Education: 3<sup>rd</sup> Size of land holding (in acre): 4

#### 1) Before Intervention ●

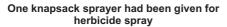
Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	3	18	19667	10667		
Field Crop 2	Maize	1	20	46000	32000		
Total			38	65667	42667		

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	3	20.7	28000	17667	14.8	65.6
Field Crop 2	Maize	1	28	69000	42000	40.0	31.3
Total			48.7	97000	59667	28.1	39.8

**Brief**: The farmer used to get annual income of ₹ 42667/acre from rice & maize etc. He faced problems like early stage weed infestation and poor yield etc. With interventions like proper weed management technology, he is getting annual income of ₹ 59667/acre. In addition, there is cost saving of ₹ 6000/acre as labour savings in the production of these crops.







Maize

Source: AICRP-WM Centre: OUAT, Bhubaneswar

**Success Stories-2022** 

(79)





# Crop-diversification and weed management in rice-based system



Name of farmer : Sh. Hemanta Kumar Narendra

Address: S/O Banabihari, Sujanpur, Kothabada, Delang, Puri Mobile Number: 9937247237 Age: 49 years Education: Graduation (Arts.)

Size of land holding (in acre): 25

### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	20	11.3	11250	6000		
Field Crop 2	Maize	5	12.0	17600	12400		
Total			23.3 28850 184				

# 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	10	20	26000	17500	77.8	275
Field Crop 2	Black gram	5	2	6400	5000	100	-
Field Crop 3	Groundnut	5	4	20000	13000	-	-
Total			26	52400	35500	11.8	92.9

**Brief :** The farmer used to get annual income of ₹ 18400/acre from rice, maize etc. He faced problems like poor yield, severe weed problems etc. With interventions like proper weed management technology and additional crop etc., he is getting annual income of ₹ 35500/acre. In addition, there is cost saving of ₹1600/acre in the production of these crops.





Use of green manuring and line sowing with pretilachlor application 500 g/ha

80

Source: AICRP-WM Centre: OUAT, Bhubaneswar





# Maize-wheat-greengram cropping system





# Diversification and CA system improved farmer's income



Name of farmer : Rupesh Tengahiya

Address: Mankedi, Bargi, Jabalpur Mobile Number: 6261890066 Age: 39 years Education: M.Sc. Size of land holding (in acre): 10

#### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	5	15	22050	13401		
Field Crop 2	Wheat	10	14	22750	11270		
Field Crop 3	Greengram	5	4	20900	12100		
Total			33	65700	36771		

## 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	3	22	40700	31717	-	-
Field Crop 2	Wheat	10	18	35550	26647	29	136
Field Crop 3	Greengram	5	6	43176	35694	50	195
Total			46	119426	94058	39	156

**Brief :** The farmer used to get net annual income of ₹ 36771/acre from rice, wheat and greengram crops. He faced problems like lack of knowledge on improved agriculture practices and conservation agriculture along with weed management. With diversification of rice-wheat system with maize-wheat, use of improved seed, improved weed management practices, adoption of conservation agriculture, balanced use of fertilizer, he is getting net annual income of ₹ 94058/acre. In addition, there is cost saving of ₹ 4700/acre in the production of maize, wheat and greengram.

(82)





Maize

Greengram





# Intensification of maize-wheat system with legumes for increased yield and income



### Name of farmer : Narmada Prasad Sahu

Address: Rewa, Bargi, Jabalpur Mobile Number: 8839973445 Age: 44 years Education: Higher Secondary Size of land holding (in acre): 10

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Maize	4	12	16380	5972	
Field Crop 2	Wheat	4	12	19500	12182	
Total			24	35880	18154	

### 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	10	25	46250	37617	108	530
Field Crop 2	Wheat	8	18	35550	26594	50	118
Field Crop 3	Greengram	2	7	50372	42190	100	100
Total			50	132172	106401	108	486

**Brief :** The farmer used to get net annual income of ₹ 18154/acre from maize and wheat. He faced problems like lack of knowledge on profitable cultivation techniques, improved weed management and proper dose of fertilizer along with high cost of cultivation. With interventions like inclusion of greengram as third crop in cropping sequence and improved weed management along with sowing of crops through happy seed drill, he is getting net annual income of ₹ 106401/acre. In addition, there is cost saving of ₹ 3139/acre in the production of maize, wheat and greengram.

(83)





Wheat

Maize





# Crop diversification and zero tillage improved productivity and income



Name of farmer : Sh. Kailesh Prasad Lati

Address: Chillaghat, Saliwada, Bargi, Jabalpur Mobile Number: 7509084801 Age: 42 years Education: High School Size of land holding (in acre): 2.5

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Arhar	1	5	25250	15100	
Field Crop 2	Chickpea	1	7	28000	19400	
Total			12	53250	34500	

# 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	2	22	40700	31717	-	-
Field Crop 2	Wheat	2	15	29625	20669	-	-
Field Crop 3	Greengram	2	5	35980	27798	-	-
Total			42	106305	80184	250	132

**Brief :** The farmer used to get net annual income of ₹ 34500/acre from arhar and chickpea. He faced problems like lack of information on herbicide spraying, advanced molecule of herbicide and balanced use of fertilizer. With interventions like inclusion of greengram as third crop, improved weed management and raising of maize and wheat under conservation agriculture, he is getting net annual income of ₹ 80184/acre. In addition, there is cost saving of ₹ 3811/acre in the production of maize, wheat and greengram.

(84)







Wheat under conservation agriculture





# Diversification of rice-wheat system for higher productivity and income



Name of farmer : Sh. Ramnarayan Patel

Address: Mankedi, Bargi, Jabalpur Mobile Number: 8819061788 Age: 55 years Education: B.A. Size of land holding (in acre): 1.5

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	1	10	14700	5162	
Field Crop 2	Wheat	1	12	19500	12622	
Total			22	34200	17784	

## 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	1	22	40700	32817	-	-
Field Crop 2	Wheat	1	18	35550	27194	50	116
Field Crop 3	Greengram	1	6	43176	35594	100	100
Total			46	119426	95605	109	438

**Brief**: The farmer used to get net annual income of ₹ 17784/acre from rice and wheat. He faced problems like high weed infestation, lack of technical information on availability of seed and balanced use of fertilizer. With diversification of conventional rice-wheat system with rice-wheat system under conservation agriculture, improved weed management technologies and inclusion of greengram as third crop, he is getting net annual income of ₹ 95605/acre. In addition, there is cost saving of ₹ 3770/acre in the production of wheat and maize.

(85)







Summer greengram





# Maize-based cropping system





# Diversification of rice-wheat system with legumes improved farmer's income

## Name of farmer : Sh. Rajesh (Ram Sharan) Patel



Address: Harduli, Bargi, Jabalpur Mobile Number: 8518981712 Age: 75 years Education: 5<sup>th</sup> Size of land holding (in acre): 1.5

### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	1	10	14700	6122	
Field Crop 2	Wheat	1	10	16250	8232	
Total			20	30950	14354	

# 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize chickpea	1	20	37000	28717	-	-
Field Crop 2	Chickpea	1	10	71960	65050	-	-
Total			30	108960	93767	50	553

**Brief**: The farmer used to get net annual income of ₹14354/acre from rice and wheat. He faced problems like high weed infestation, lack of technical know-how on advanced weed management and balanced use of fertilizer and high cost of cultivation. With interventions like improved weed management and balanced use of seed/fertilizer, he is getting net annual income of ₹93767/acre. In addition, there is cost saving of ₹3404/acre in the production of maize and chickpea.

(87)





Chickpea

Maize





# Diversification and weed management improved system productivity and income



Name of farmer : Sh. Gangaram Uikay

Address: Saliwada (Tuniya), Bargi, Jabalpur Mobile Number: 9174847885 Age: 51 years Education: 8<sup>th</sup> Size of land holding (in acre): 4

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	3	10	14700	5562	
Field Crop 2	Wheat	3	12	19500	11482	
Total			22	34200	17044	

# 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	2	20	37000	28717	-	-
Field Crop 2	Wheat	2	12	61200	54290	-	-
Field Crop 3	Greengram	2	5	35980	27798	100	100
Total			37	134180	110805	68	550

**Brief**: The farmer used to get net annual income of ₹17044/acre from rice and wheat. He faced problems like lack of knowledge on weed management, balance use of fertilizer and high cost of cultivation. With interventions like inclusion of greengram as third crop and weed management under conservation agriculture, he is getting net annual income of ₹110805/acre. In addition, there is cost saving of ₹3964/acre in the production of maize and chickpea.





Sowing of summer greengram through Happy seeder

Summer greengram

**Success Stories-2022** 

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# Improved weed management increased crop yield and income



Name of farmer : Sh. Umashankar Patel

Address: Charghat (Pipariya), Bargi , Jabalpur Mobile Number: 9340097822 Age: 30 years Education: 12<sup>th</sup> Size of land holding (in acre): 10

## 1) Before Intervention •

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Wheat	5	12	19500	12282		

## 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Wheat	5	18	35550	27294	50	122
Field Crop 2	Maize	5	20	37000	28717	100	100
Total			38	72550	56011	217	356

**Brief**: The farmer used to get net annual income of ₹ 12282/acre from wheat. He faced problems like limited irrigation facility, lack of technical know-how on improved weed management and balanced use of fertilizer. With interventions like maize cultivation in Kharif and improved weed management in wheat and maize, he is getting net annual income of ₹ 56011/acre. In addition, there is cost saving of ₹ 1538/acre in the production of wheat.



Maize

Wheat

**Success Stories-2022** 

(89)





# Post-emergence herbicides improved maize productivity and farmer's income



Name of farmer : Sh. Sansar Singh Address: Village Dhaki Saidan Mobile Number: 7814011360 Age: 52 years Education: Higher Secondary Size of land holding (in acre): 22

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	15	15	19500	11500		

## 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Maize	15	18	30600	19600	20	70.4

**Brief**: The farmer used to get net annual income of ₹11500/acre from maize . He faced problems like appearance of mixed weed flora in the fields. With interventions like post-emergence application of tembotrione, he is getting effective weed control, higher yield and net annual income of ₹19600/acre.



Untreated crop



Tembotrione treated crop

Source: AICRP-WM Centre, PAU, Ludhiana

**Success Stories-2022** 

(90)





# Improved weed management for higher yield & profit in maize based system



Name of farmer : Sh. Duda Ram Ji S/o Sgh. Jet Ram Ji Meghwal
Address: Village: Bhanwarasia, Post – Daroli; Tehsil: Vallabhnagar, Dist.: Udaipur (Raj)
Mobile Number: 7976309595
Age: 48 years
Education: 10<sup>th</sup>
Size of land holding (in acre): 1.5

#### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.7	4.2	26460	11795		
Field Crop 2	Greengram	0.4	2.4	36990	22390		
Field Crop 3	Wheat	1.0	12.8	91400	67900		
Total			19.4	154850	102085		

# 2) Status in 2020 ●

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.7	5.2	32760	18095	23.81	53.4
Field Crop 2	Black gram	0.6	2.8	42030	27430	-	-
Field Crop 3	Wheat	1.0	14.8	105490	79990	15.6	17.8
Total			22.8	180280	125515	17.5	22.9

**Brief :** The farmer used to get annual income of ₹ 102085/acre from crops etc. He faced problems availability of quality seed in time & space and proper marketing facilities for crop produce. With interventions like improved seed, use of FYM and bio-fertilizers, weed control., he is getting annual gross income of ₹ 125515/acre.





Maize

Source: AICRP-WM Centre, MPUAT, Udaipur







# Improved crop management increased farmer's yield and income

Name of farmer : Smt. Dali Bai W/o Jeetaram Meghwal



Address: Village Bhavradiya Post: Daroli Tehsil : Vallabhanagr Dist.: Udaipur (Raj)
Mobile Number: 7976309595
Age: 70 years
Education: 3rd
Size of land holding (in acre): 0.9

### 1) Before Intervention •

Component I	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.5	3.94	24465	3610		
Field Crop 2	Black gram	0.3	2.48	37890	18080		
Field Crop 3	Wheat	1.0	14.4	104100	73600		
Total			20.82	166455	95290		

# 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.55	4.44	29400	11735	12.7	225
Field Crop 2	Greengram	0.3	2.8	42840	25240	-	-
Field Crop 3	Wheat	1.0	15.4	110890	80390	6.9	9.2
Total			22.64	183130	117365	8.7	23.2

**Brief**: The farmer used to get annual income of ₹ 95290/acre from crops etc. He faced problems availability of good quality seed and proper marketing facilities for crop produce. With interventions With interventions like improved seed, use of FYM and bio-fertilizers, weed control., She is getting annual gross income of ₹ 117365/acre.

(92)





Maize Source: AICRP-WM Centre, MPUAT, Udaipur

Greengram





# Improved weed management helped in improving farmer's income



Name of farmer : Sh. Gopa S/o Uda Meghwal

Address: Village Bhavradiya Post: Daroli Tehsil : Vallabhanagr Dist.: Udaipur (Raj)
Mobile Number: 8890229302
Age: 70 years
Education: 5th
Size of land holding (in acre): 0.9

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.4	4.48	29040	5375		
Field Crop 2	Soyabean	0.3	3	46170	23570		
Field Crop 3	Wheat	0.6	14	102200	70200		
Total			21.48	177410	99145		

# 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.55	5.2	33270	15605	16.1	190
Field Crop 2	Soybean	0.3	3.44	51660	34060	14.7	44.5
Field Crop 3	Wheat	0.6	16.4	115130	84630	17.1	20.6
Total			25.04	200060	134295	16.6	35.5

**Brief :** The farmer used to get annual income of Rs. 99145/acre from crops etc. He faced problems like labour, cost of cultivation, availability of quality seed in time & space and proper marketing facilities for crop produce. With interventions like improved seed, weed control, he is now getting net annual income of Rs.134295/acre.

(93)





Soybean Source: AICRP-WM Centre, MPUAT, Udaipur

**Field View** 





# Improved seed and weed management increased farmer's income



Name of farmer : Sh. Gulab singh S/o Lakshman Singh

Address: Village Basiwada Post: Rohimala Tehsil : Jhadole Dist.: Udaipur (Raj)
Mobile Number: 9680220112
Age: 44 years
Education: 10th
Size of land holding (in acre): 2

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	1.0	4.8	31515	7850		
Field Crop 2	Blackgram	0.7	2.64	41580	18980		
Field Crop 3	Wheat	1.0	14.8	105745	73600		
Total			22.24	178840	100575		

# 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	1.0	6	37290	19625	25.0	150
Field Crop 2	Greengram	0.7	3	46440	28840	13.6	52
Field Crop 3	Wheat	1.0	16	114760	84260	8.1	14
Total			25	198490	132725	12.4	32

**Brief :** The farmer used to get annual income of ₹ 100575/acre from crops etc. He faced problems like availability of quality seed, proper marketing facilities for crop produce. With interventions like improved seed, weed control, he is now getting net annual income of ₹132725/acre.





Wheat

Maize Source: AICRP-WM Centre, MPUAT, Udaipur

**Success Stories-2022** 

(94)





# Increased yield and income through weed management in maize based cropping system



Name of farmer : Nathi Bai W/o Deep Lal

Address: Village Bhavradiya Post: Daroli Tehsil: Vallabhanagr Dist.: Udaipur (Raj)
Mobile Number: 8890229302
Age: 35 years
Education: 5th
Size of land holding (in acre): 0.9

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.4	4.16	25545	545		
Field Crop 2	Black gram	0.3	3	44550	19950		
Field Crop 3	Wheat	0.6	14	101180	68180		
Total			21.16	171275	88675		

# 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	1.0	4.54	28755	3755	9.1	589
Field Crop 2	Blackgram	0.7	3.4	51210	26610	13.3	33.4
Field Crop 3	Wheat	1.0	15.2	108920	75920	8.6	11.4
Total			23.14	188885	106285	9.4	19.9

**Brief :** The farmer used to get annual income of ₹ 88675/are from crops etc. He faced problems like availability of quality seed, proper marketing facilities for crop produce. With interventions like improved seed, weed control., She is getting annual gross income of ₹ 188885. He is now getting net annual income of ₹106285/acre.





Wheat

Maize Source: AICRP-WM Centre, MPUAT, Udaipur

**Success Stories-2022** 

(95)





# Horticulture-based System





# Herbicide use in rice-based cropping system increased yield and profits



Name of farmer : Sh. Uday Krishna Sarkar

Address: Paschim Shimulia, Ranaghat-II block, P.S.- Gangnapur, Dist.- Nadia, West Bengal
Mobile Number: 9932329044
Age: 42 years
Education: Graduate
Size of land holding (in acre): 1

### 1) Before Intervention ●

Component Description			Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	0.5	15.2	19800	9500			
Field Crop 2	Mustard	0.5	3.76	20700	13040			
Floriculture 1	Marigold	0.5	5.8	90000	64000			
Total			24.8	130500	86540			

## 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	0.5	19.4	27000	14400	27.6	51.6
Field Crop 2	Mustard	0.5	4.54	25170	15320	20.7	17.5
Floriculture 1	Marigold	0.5	7.80	133920	95232	34.5	48.8
Total			31.7	186090	124952	28.2	44.4

**Brief :** The farmer used to get net annual income of ₹ 86540/acre from rice, mustard and marigold. He faced problems like weed problem, high cost of cultivation etc. With interventions like herbicide use for effective weed control etc., he is getting net annual income of ₹ 124952/acre.

(97)



Intervention of weed management in rice crop Source: AICRP-WM Centre, BCKV, Kalyani



Chemical weed control in mustard





# Improved weed management increased farmer's income



#### Name of farmer : Sh. Gofur Mandal

Address: Village- Panchkahania, Haringhata block, P.S.- Haringhata, Dist.- Nadia, West Bengal Mobile Number: 7001086337 Age: 43 years Education: Class VIII pass Size of land holding (in acre): 1

#### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	1	12.7	18900	10160		
Field Crop 2	Cowpea	1	127.4	35620	24090		
Total			40.1	54520	34250		

# 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1	16.2	24300	14800	27.6	45.7
Field Crop 2	Cowpea	1	34.8	48720	34100	27.0	41.6
Total			51.0	73020	48900	27.2	42.8

**Brief :** The farmer used to get net annual income of ₹ 34250/acre from rice, cowpea, etc. He faced problems like high weed infestation in his field etc. With interventions like improved weed management etc., he is now getting annual income of ₹ 48900/acre.

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Rice with improved weed management Source: AICRP-WM Centre, BCKV, Kalyani



Cowpea with improved weed management





### Improved weed management in rice-cabbage system



### Name of farmer : Sh. Abbas Mandal

Address: Village- Panchkahania, Haringhata block, P.S.- Haringhata, Dist.- Nadia, West Bengal Mobile Number: 8653328323 Age: 45 years Education: Class IX Size of land holding (in acre): 1.5

#### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	1.5	12.80	19200	11867	
Veg. Crop 1	Cabbage	1.0	151.6	80364	53038	
Total			164.4	99564	64905	

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	1.5	16.8	25200	17533	31.3	47.8
Veg. Crop 1	Cabbage	1.0	177.8	97801	67981	17.3	28.2
Total			194.6	123001	85514	18.4	31.8

**Brief :** The farmer used to get net annual income of ₹ 64905/acre from rice, cabbage etc. He faced severe weed problem. With interventions like improved weed management, he is now getting net annual income of ₹ 85514/acre.





Cabbage

Rice Source: AICRP-WM Centre, BCKV, Kalyani

Success Stories-2022

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## Herbicidal weed control in rice-mustard system



### Name of farmer : Sh. Muzam Mandal

Address: Village- Panchkahania, Haringhata block, P.S.- Haringhata, Dist.- Nadia, West Bengal Mobile Number: 7076372494 Age: 57 years Education: Class IV Size of land holding (in acre): 2

### 1) Before Intervention Intervention

Component I	Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)			
Field Crop 1	Rice	2	12.6	18900	12100			
Field Crop 2	Mustard	1	3.62	19910	12410			
Veg. Crop 1	Cabbage	1	148.3	78599	51197			
Total			164.52	117409	75707			

### 2) Status in 2020 🏼

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	16.8	25200	17650	33.3	45.9
Field Crop 2	Mustard	1	4.46	24530	15330	23.2	23.5
Veg. Crop 1	Cabbage	1	173.0	94952	64500	16.4	26.0
Total			194	144682	97480	17.8	28.7

**Brief :** The farmer used to get annual income of ₹ 75707/acre from rice, mustard, cabbage, etc. He faced problems of severe weed infestation in field. With interventions like herbicide application for weed control, he is now getting annual income of ₹ 97480/acre.





Mustard Source: AICRP-WM Centre, BCKV, Kalyani

Cabbage

**Success Stories-2022** 

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## Direct seeded rice and weed management increased farmer's income



### Name of farmer : Sh. Ashish Punia

Address: Village- Dhani Majra, Dist. Fatehabad, Haryana Mobile Number: 7398977777 Age: 24 years Education: Graduation Size of land holding (in acre): 35

### 1) Before Intervention ●

Compone	ent Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice (Transplanted)	20	25	35000	25000		
Field Crop 2	Wheat	20	22	35700	27500		
Hort. Crop 1	Kinnow	2.5		25000	20000		
Total				95700	72500		

### 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice (DSR)	8 (DSR) +12	24	43200	32500	-	30.0
Field Crop 2	Wheat	20	22	41800	34000	-	23.6
Hort. Crop 1	Kinnow	-	-	28000	28000	-	40.0
Total				113000	94500		30.3

**Brief :** The farmer used to get annual income of ₹ 72500/acre from rice, wheat, kinnnow. He faced problems like labour availability etc. With interventions like direct sowing of rice (direct-seeded rice), he is getting annual income of ₹ 94500/acre. In addition, there is cost saving of ₹ 2000/acre in the production of DSR.



Machine used for sowing of DSR as well as pre-emergence spray



Rice

Source: AICRP-WM Centre, CCSHAU, Hisar

**Success Stories-2022** 

(101)





## Management of orobanche in mustard



### Name of farmer : Sh. Sandeep Berwal

Address: Village- Dariyapur, Dist. Bhiwani Haryana Mobile Number: -Age: 39 years Education: Graduation Size of land holding (in acre): 26

### 1) Before Intervention Intervention

Component D	escription		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Cotton	6	8	30500	16700		
Field Crop 2	Bajra + Clusterbean	15	-	13500	6700		
Field Crop 3	Mustard	20	4	14800	9000		
Total				58800	32400		

### 2) Status in 2020 •

Compon	Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Cotton	14	8	42800	25000	0	49.7	
Field Crop 2	Bajra + Clusterbean	8	-	18750	10000	-	49.2	
Field Crop 3	Mustard	22	8	32000	23000	100.0	156	
Total				93550	58000		79	

**Brief :** The farmer used to get net annual income of ₹ 32400/acre from cotton, bajra, mustard. He faced problems like Orobanche in mustard etc. With interventions like use of glyphosate 25 ml at 25-30 DAS and 50 ml at 50-55 DAS, he is getting annual income of ₹ 58000/acre.





Cotton

Mustard

Source: AICRP-WM Centre, CCSHAU, Hisar

**Success Stories-2022** 

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## Management of orobanche in mustard improved farmer's income



### Name of farmer : Sh. Ramesh

Address: Village- Jainawas, Dist. Bhiwani Haryana Mobile Number: 9813774697 Age: 51 years Education: 10<sup>th</sup> Size of land holding (in acre): 10

### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Cotton	8		25000	15000		
Field Crop 2	Mustard	8	4	14800	10000		
Total				39800	25000		

### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Cotton	8	-	31300	18000	-	20
Field Crop 2	Mustard	8	9	39400	30000	125	200
Total				70700	48000	-	92

**Brief :** The farmer used to get annual income of ₹ 25000/acre from cotton, bajra, mustard. He faced problems like *Orobanche* in mustard etc. With interventions like use of glyphosate 25 ml at 25-30 DAS and 50 ml at 50-55 DAS, he is getting annual income of ₹ 48000/acre.

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Spray of glyphosate at 30 DAS Source: AICRP-WM Centre, CCSHAU, Hisar



45 Days old crop





## **Crop-diversification and weed management** in rice-based system



Name of farmer : Sh. Shiv Komra

Address: Turakhar Mobile Number: 6263662011 Age: 45 years Education: 12<sup>th</sup> Size of land holding (in acre): 7

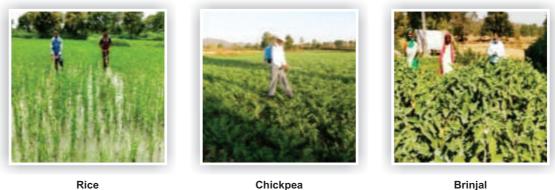
### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Rice	5.00	15.3	22462	7462	
Field Crop 2	Chickpea	1.95	5.7	22769	9709	
Total			21.0	45231	17171	

### 2) Status in 2020 ●

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	5.00	15.9	29701	13601	3.9	82
Field Crop 2	Chickpea	1.95	5.9	29000	13950	3.5	44
Veg. Crop 1	Brinjal	0.34	10.3	104412	58824	100	100
Total			32.1	163113	86374	52.9	403

Brief : The farmer used to get net annual income of ₹ 17171/acre from rice and chickpea crops. He faced problems like unavailability of certified seed at time, labour, lack of awareness about improved production technology. With interventions like weed management technology for rice and through crop diversification, he is getting annual income of ₹86374/acre from rice, chickpea and brinjal.



Brinjal

Source: AICRP-WM Centre: IGKV, Raipur

**Success Stories-2022** 

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# Herbicidal weed control saved labour and increased farmer's income



Name of farmer : Sh. Santosh Ku. Swain

Address: S/O Dasarathi Swain, Bhokilapada, Bhapur, Nayagarh, Odisha
Mobile Number: 9348345336
Age: 35 years
Education: 8<sup>th</sup>
Size of land holding (in acre): 8

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	6.0	15.8	17667	8667		
Veg. Crop 1	Brinjal	2.0	17.5	35000	22500		
Total			33.3	52667	31167		

### 2) Status in 2020 O

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice						
Field Crop 2	Blackgram (Paira)	6.0	20.0	26000	14000	26.3	119.2
Veg. Crop 1	Brinjal	3.0	2.2	7583	5000	100	
Veg. Crop 2	Tomato	2.0	29.0	44000	25500	65.7	13.3
Total			51.2	77583	44500	53.5	42.8

**Brief :** The farmer used to get annual income of ₹ 31167/acre from rice, vegetable etc. He faced problems like weed problems at early stages and poor marketing etc. With interventions like preemergence herbicide and proper fertilizer management etc., he is getting annual income of ₹ 44500/acre. In addition, there is cost saving of ₹ 2200/acre as manual labour savings in the production of these crops.





Brinjal
Source: AICRP-WM Centre: OUAT, Bhubaneswar

Success Stories-2022

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### Management of parasitic weed orobanche in Brinjal



Name of farmer : Sh. Madhaba Behera (SCSP Beneficiary)

Address: S/O Chandramani Behera, Alipingala, Nimapada, Puri, Odisha
Mobile Number: 8117876247
Age: 50 years
Education: 5<sup>th</sup>
Size of land holding (in acre): 8

### 1) Before Intervention

Component l	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	5.0	12	12400	6800		
Field Crop 2	Groundnut	2.0	3	10500	7500		
Veg. Crop 1	Brinjal	1.0	25	37500	22000		
Total			40	60400	36300		

### 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	4.0	20.0	26000	14000	66.7	106
Field Crop 2	Groundnut	3.0	3.3	14000	10333	11.1	37.8
Veg. Crop 1	Brinjal	1.0	42.0	75000	38000	68.0	72.7
Total			65.3	115000	62333	63.3	71.7

**Brief :** The farmer used to get annual income of ₹ 36300/acre from rice, groundnut and brinjal etc. He faced problems like weed problems and parasitic weed (*Orobanche*) etc. With interventions like improved weed managment, he is getting annual income of ₹ 62333/acre. In addition, there is cost saving of ₹ 3500/acre in the production of these crops.



Distribution of knapsack sprayer for herbicide spray



Rice

Source: AICRP-WM Centre: OUAT, Bhubaneswar

**Success Stories-2022** 

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### Mechanical weeding in maize for higher yield and income



Name of farmer : Sh. Manoranjan Singh

Address: S/O Lt. Suklambar Singh, Berboi, Delang, Puri Mobile Number: 9437280609 Age: 52 years Education: Graduation (Arts.) Size of land holding (in acre): 15

### 1) Before Intervention •

Component I	Description	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	7.5	18.0	18933	11200		
Field Crop 2	Maize	5.0	15.0	22500	14400		
Hort. Crop 1	Coconut	2.5	200 Nuts	22000	18400		
Total				63433.3	44000.0		

### 2) Status in 2020 ●

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre)/No.	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7.5	22.4	29660	16533	24.4	47.6
Field Crop 2	Maize	5.0	17.4	27000	14800	16.0	2.8
Hort. Crop 1	Coconut	2.5	2720 Nuts	54400	38000	23.6	107
Veg. Crop 1	Ginger	1.5	13.3	66667	42667	100	338
Total			-	177727	112000	-	155

**Brief :** The farmer used to get annual income of ₹ 44000/acre from rice, maize and coconut etc. He faced problems like poor crop yield, severe weed problems, poor copra size, etc. With interventions like proper weed management technology and intercropping etc., he is getting annual income of ₹ 112000/acre. In addition, there is cost saving of ₹ 2545/acre in the production of these crops.





Use of mechanical weeding in maize

Rice

Source: AICRP-WM Centre: OUAT, Bhubaneswar

**Success Stories-2022** 

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### Integrated weed management increased farmer's income



Name of farmer : Sh. P.Saminathan S/O Palanisamy

Address: No. 253 Karunkalthottam, Krishnapuram, Alagamalai, Tiruppur
Mobile Number: 9047923626
Age: 58 years
Education: 8<sup>th</sup>
Size of land holding (in acre): 15

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre)/No.	Gross Income (₹/acre)	Net Income (₹/acre)		
Veg. Crop 1	Turmeric	2	27.5	178750	84250		
Veg. Crop 2	Onion	4	58	145000	32500		
Hort. Crop 1	Coconut plantations	4	9200 Nos	64900	38150		
Total		6		388650	154900		

### 2) Status in 2020 ●

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre)/No.	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Veg. Crop 1	Turmeric	3	24.3	189800	96200	-11.64	14.18
Veg. Crop 2	Onion small	6	63.0	157500	53667	8.62	65.13
Hort. Crop 1	Coconut	4	13200	92400	60400	43.48	58.32
Total		13.00		439700	210267		35.7

**Brief :** The farmer used to get annual income of ₹ 154900/acre from agriculture and other allied activities etc., He faced problems like weeds, pests etc., with interventions like integrated weed management in turmeric and onion; he is getting net annual income of ₹ 210267/acre. In addition, there is cost saving of ₹ 6923/acre in the production of the above crops.

(108)







Integrated weed management in onion





### Integrated weed management for higher profit



### Name of farmer : Sh. N. Thangaraj

Address: S/o Nachimuthugounder, No. 4/303, Thonguttipalayam, Tiruppur, 641665 Mobile Number: 9003449911 Age: 67 years Education: 8<sup>th</sup> Size of land holding (in acre): 3.55

#### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Veg. Crop 1	Turmeric	2	27	175500	72000		
Veg. Crop 2	Onion small	2	58	145000	20000		
Total				320500	92000		

### 2) Status in 2020 •

Compon	Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Maize	1	25.0	35500	22500	-	-	
Veg. Crop 1	Turmeric	2	16.0	211950	108450	28.0	50.6	
Veg. Crop 2	Onion small	2	32.5	162500	37500	12.06	87.5	
Total				409950	168450		83	

**Brief :** The farmer used to get annual income of ₹ 92000/acre from turmeric and onion etc., He faced problems like high infestation of weeds, pests etc., with interventions like integrated weed management; he is getting net annual income of ₹ 168450/acre . In addition, there is cost saving of ₹ 11,000/acre in the production of the above crops.

(109)



Integrated weed management in Onion

Source: AICRP-WM Centre - Coimbatore

Integrated weed management in Turmeric





### Integrated weed management improved farmer's income



### Name of farmer : Sh. P. Palanisamy

Address: S/o Perumal, No.2/522C, Pethikuttai, Irumborai, Coimbatore-638459 Mobile Number: 9750133971 Age: 56 years Education: Nil Size of land holding (in acre): 2

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	
Field Crop 1	Groundnut	1	10	55000	7000	
Veg. Crop 1	Onion small	1	60	136500	36500	
Total			70	191500	43500	

### 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Groundnut	1	11	660000	18000	10.0	157
Veg. Crop 1	Onion small	1	72	180000	80000	20.0	119
Total			83	840000	98000	18.6	125

**Brief :** The farmer used to get annual income of ₹ 43500/acre from groundnut and onion crops. He faced problems like infestation of weeds, pests etc., with interventions like integrated weed management in crops; he is getting net annual income of ₹ 98000/acre. In addition, there is cost saving of ₹ 5500/acre in the production of the above crops.

(110)



Integrated weed management in groundnut
Source: AICRP-WM Centre - Coimbatore



Integrated weed management in onion





## Integrated weed management in onion and turmeric improved farmer's income



### Name of farmer : Sh. R.Palanisami

Address: S/o Rakkiyappan, No. 2/189, Kollikalipalaiyam post, Tiruppur-641665
Mobile Number: 9843091484
Age: 65 years
Education: Nil
Size of land holding (in acre): 4

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Veg. Crop 1	Onion small	3	57	150000	35000		
Veg. Crop 2	Turmeric	1	27	175000	76500		
Total			84	325000	111500		

### 2) Status in 2020 ●

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Veg. Crop 1	Onion small	3	60	150000	43333	5.3	23.8
Veg. Crop 2	Turmeric	1	32	256000	157000	18.5	105
Total			92	406000	200333	9.5	79.7

**Brief :** The farmer used to get annual income of ₹ 111500/acre from onion and turmeric. He faced problems like high infestation of weeds, pests etc., With interventions like integrated weed management, he is getting net annual income of ₹ 200333/acre. In addition, there is cost saving of ₹ 11500/acre in the production of the above crops.

(111)



Integrated weed management in Onion

Source: AICRP-WM Centre: Coimbatore



Integrated weed management in Turmeric





## Animal-based production system





## Herbicidal weed management in rice & wheat improved farmer's income



### Name of farmer : Sh. Jageer Singh

Address: S/O Survan Singh Motiyapura Aabad nagar Post - Kelakheda, Distt- U.S. Nagar Pin code- 263152 Mobile Number: 9012729461

Age: 58 years

Education: Illiterate

Size of land holding (in acre): 2

### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	2	18.8	29140	21855		
Field Crop 2	Wheat	2	15.2	24700	18525		
Other enterprises	Milk Production (Buffalo)	1	1680	58800	29800		
Total				112640	70180		

### 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	2	24.4	45579	25000	29.79	14.39
Field Crop 1	Wheat	2	21.6	41580	21000	42.11	13.36
Other enterprises	Milk Production (Buffalo)	1	2340	93600	46800	39.29	57.05
Total				180759	92800	-	32.23

**Brief :** The farmer used to get net annual income of ₹ 70180 /acre/number from rice, wheat and Buffalo. He faced inadequate irrigation facilities during crop period because the water in canal does not released on time and sometimes agricultural field get flooded due to more water in canal. With interventions like in rice bispyribac-sodium 10%SC 20g/ha and clodinafop -propargyl 15.3% + metsulfuron-methyl 1% WP 60+ 4g/ha in wheat, he is getting annual income of ₹ 92800. In addition, there is cost saving of ₹ 4820 in the production rice and wheat.

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Demonstration on weed management in rice Source: AICRP-WM Centre : GBPUAT, Pantnagar Demonstration on weed management in wheat





## Herbicidal weed management in rice & wheat improved farmer's income



Address: Village-Durgapur no. 2 Post -Dineshpur Tehshil- Gaddarpur, Distt- U.S. Nagar Pin code- 263152 Mobile Number: 9917225558 Age: 48 years Education: 12<sup>th</sup> Size of land holding (in acre): 7

### 1) Before Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	7	21	32860	24645		
Field Crop 2	Wheat	7	17	27950	20962		
Other enterprise	Milk Production (Buffalo)	1	2520	88200	44200		
Total				149010	89807		

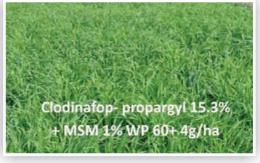
### 2) Status in 2020 •

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	26	47821	35866	23.8	45.5
Field Crop 2	Wheat	7	22	42350	31762	29.4	51.5
Other enterprise	Milk Production (Buffalo)	1	2940	147000	74000	16.7	67.4
Total				237171	141628	-	57.4

Brief : The farmer used to get net annual income of ₹ 89807/acre from rice, wheat and milk production. He told that cost of diesel has been increased by almost two times but rise in MSP has somewhat compensated the cost incurred during crop period. With interventions like bispyribac-sodium 10%SC 20g/ha in rice and clodinafop - propargyl 15.3% + metsulfuron-methyl 1% WP 60+ 4 g/ha in wheat, he is getting annual income of ₹ 141628/acre. In addition, there is cost saving of ₹16870 in the production of rice, wheat and milk production.

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Demonstration on weed management in rice Source: AICRP-WM Centre, GBPUAT, Pantnagar

Success Stories-2022

Demonstration on weed management in wheat





## Herbicidal weed management improved yield and income



### Name of farmer : Sh. Satnam Singh

Address: S/O Jogendra Singh Village- Motiyapura Post-Kelakheda Distt- U.S. Nagar, Pin code- 263152
Mobile Number: 9917443836
Age: 48 years
Education: M.B.A.
Size of land holding (in acre): 7

### 1) Before Intervention ●

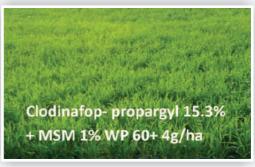
Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	7	21	32240	24180		
Field Crop 2	Wheat	7	18	28600	21450		
Other enterprise	Milk Production (Cow)	2	4860	88200	60750		
Total	-	-		182340	106380		

### 2) Status in 2020 •

Compon	ent Description		Period	% increase over base year			
Components	Names	Area (acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	7	24	44832	33624	14.3	39.1
Field Crop 2	Wheat	7	22	43120	32340	22.2	50.8
Other enterprise	Milk Production (Cow )	2	5040	201600	100800	3.7	65.9
Total				289552	166764	-	56.8

Brief : The farmer used to get net annual income of ₹ 106380/acre from per acre rice, wheat and milk production. The farmer has not satisfied with MSP/sale of the produce on cost incurred and market of Milk is not proper so he is not getting the real or fix costs of the milk during crop period/year. With interventions like bispyribac sodium 10%SC 20g/ha in rice and clodinafop -propargyl 15.3% + MSM 1% WP 60+ 4g/ha in wheat, he is getting annual income of ₹ 166764/acre from per acre rice, wheat and milk production .In addition, there is cost saving of ₹ 2410/acre in the production of rice and wheat.





Weed management in rice

Weed management in wheat

Source: AICRP-WM Centre , GBPUAT, Pantnagar

**Success Stories-2022** 

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# Weedy rice management improved rice yield and income



Name of farmer : Sh. Madan Lal Sharma

Address: Village Rattian , RS Pura block, Jammu, J&K Mobile Number: 9419125297 Age: 60 years Education: 10<sup>th</sup> Size of land holding (in acre): 5

### 1) Before Intervention ●

Component D	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/number)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	4.5	12	30000	18000		
Field Crop 2	Wheat	3.75	13.3	21333	12800		
Other enterprise	Poultry	1 Unit (1000 bird)	15	105000	30000		
Total				156333	60800		

#### 2) Status in 2020 ●

Compon	ent Description	Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)/No.	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	4.75	12.6	33684	21053	5.26	17.0
Field Crop 2	Wheat	4.00	14.5	26100	14500	8.75	13.3
Other enterprise	Poultry	1 Unit (1200 bird)	16	110000	35000	6.66	16.7
Total				169784	70553	7.10	16.0

**Brief :** The farmer used to get annual income of ₹ 60800/acre from rice, wheat and poultry. He faced problems like weedy rice in transplanted rice. With new intervention for weedy rice management like stale seed-bed with glyphosate @ 1.5 kg/ha or stale seed-bed with paraquat @ 0.8 kg/ha at 15-20 days before transplanting, he is getting increased rice yield by 5.26% and 17.0% higher income from rice. He is now getting net annual income of ₹ 70553/acre.

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Glyphosate @1.5 kg application on germinated weedy rice plant in stale seed bed at 15-20 days before transplanting

Source: AICRP-WM Centre: SKUAST-Jammu



Effect of glyphosate @1.5 kg application on germinated weedy rice plant in stale seed bed





# Crop-diversification and dairy increased farmer's income



Name of farmer : Sh. Ramesh Chand

Address: Vill. Dhakrair Po Punner The. Palampur Distt. Kangra Mobile Number: 9816516523 Age: 44 years Education: Middle Size of land holding (in acre): 1.25

### 1) Before Intervention

Component	Description		Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	0.5	10.0	14126	7804		
Field Crop 2	Wheat	0.5	4.0	8600	5160		
	Total		14.0	22726	12964		

### 2) Status in 2020 ●

Component Description			Period	% increase over base year			
Components	Names	Area (Acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Rice	0.438	20.5	35959	21575	105	176
Field Crop 2	Wheat	0.406	7.4	21429	12857	85	149
Veg. Crop 1	Chilli	0.0313	3.2	127796	89457	-	-
Veg. Crop 2	Okra	0.0313	31.9	63898	47923	-	-
Veg. Crop 3	Onion	0.0625	80.0	160000	112000	-	-
Veg. Crop 4	Garlic	0.0313	31.9	319489	239617	-	-
Other enterprises	Dairy	1	10	96000	58600	-	-
	Total		185.0	824570	582029	1222	1089

**Brief :** The farmer used to get annual income of ₹ 12964/acre of rice and wheat crops and labour. He faced problems like insects, diseases and unavailability of improved varieties of seed etc. With interventions like veterinary camp, training and seeds distributions etc., he is getting annual income of ₹ 582029/acre

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Before intervention (Farmer with Paddy crop) Source: AICRP-WM Centre: CSHPKV, Palampur



After Intervention (Farmer with chilli crop)





## Improvement production technologies increased farmer's income



### Name of farmer : Sh. Ramesh Kumar

Address: Vill. Dhakrair Po Punner Teh., Palampur Distt. Kangra Mobile Number: 9816494391 Age: 60 years Education: Middle Size of land holding (in acre): 1.25

### 1) Before Intervention Intervention

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.125	4.0	7904	4744		
Field Crop 2	Rice	0.375	10.7	15067	9053		
Field Crop 3	Wheat	0.5	4.0	8600	5160		
Other enterprises-1	Dry Fodder	0.75	16.0	6400	4267		
Other enterprises-2	Dairy	1	5.0	36000	26600		
	Total		39.7	73971	49824		

### 2) Status in 2020 •

Component Description			Period 202	20-21		% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre/litre)	0.0000	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.125	7.2	17400	10440	80.0	120.1
Field Crop 2	Rice	0.625	12.8	22400	13440	20.0	48.5
Field Crop 3	Wheat	0.75	5.3	13867	8320	33.3	61.2
Other enterprises-1	Dry Fodder	0.5	20.0	12000	9000	25.0	110.9
Other enterprises-2	Dairy	2	7.0	67200	40320	40.0	51.6
	Total		52.3	132867	81520	31.9	63.6

**Brief :** The farmer used to get annual income of ₹ 49824/acre from agriculture, dairy etc. He faced problems like high infestation of insect and diseases in the fields. With interventions like veterinary camp, training and seeds distributions etc., He is getting annual income of ₹ 81520/acre.

(118)



Farmer with maize crop Source: AICRP-WM Centre: CSHPKV, Palampur



Farmer with rice and Kiwi Plants





# Crop-diversification and weed management improved farmer's income



### Name of farmer : Sh. Sunil Kumar

Address: Vill. Dhakrair Po Punner Teh. Palampur Distt. Kangra Mobile Number: 7047227052 Age: 40 years Education: +2 Size of land holding (in acre): 0.625

### 1) Before Intervention •

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	0.25	8.0	11300	5060		
Field Crop 2	Wheat	0.375	4.0	10267	5040		
Other enterprises-1	Dry fodder	0.25	16.0	6400	4800		
Other enterprises-2	Dairy	1	6.0	43200	26200		
	Total		34.0	71167	41100		

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (Acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.125	8.0	19200	12800	-	-
Field Crop 2	Rice	0.25	16.0	28000	16800	100.0	232
Field Crop 3	Wheat	0.375	6.7	18533	11120	66.7	121
Other enterprises	Dairy	1	10.0	96000	57600	66.7	120
	Total		40.7	161733	98320	19.6	139

**Brief :** The farmer used to get annual income of ₹ 41100/acre from cultivation of rice, wheat and dry fodder alon with dairy and pension etc. He faced problems like high infestation of weeds and diseases etc. With interventions like veterinary camp, training and seeds distributions etc., he is getting annual income of ₹ 98320/acre.

(119)



Farmer with Maize crop



Progressive farmer with kiwi plants

Source: AICRP-WM Centre: CSHPKV, Palampur





# Crop-diversification and integrated farming increase farmer's income



Name of farmer : Sh. Bandhan Patial

Address: Vill. Malag Po Malnu Teh. Palampur, Distt. Kangra Mobile Number: 9816808171 Age: 34 yrs Education: +2 Size of land holding (in acre): 1.5

### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Rice	0.75	8.0	11300	4900		
Field Crop 2	Wheat	0.75	4.0	8400	5040		
Other enterprises 1	Berseem	0.375	64.0	25600	21333		
Other enterprises 2	Dry fodder	0.375	16.0	6400	4267		
Other enterprises 3	Dairy	1	5.0	36000	22600		
	Total		97.0	87700	58140		

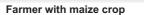
### 2) Status in 2020 🌒

Component Description			Period 2020-21				% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	0.125	8.0	19200	12800	-	-	
Field Crop 2	Shorgun (g)	0.25	16.0	28000	16800	100.0	232	
Field Crop 3	Wheat	0.375	6.7	18533	11120	66.7	121	
Other enterprises 1	Berseem (g)	1	10.0	96000	57600	66.7	120	
Other enterprises 2	Dairy	1	9.0	86400	51840	80	129	
Other enterprises 3	Goat	2	0.0	10000	7000	-	-	
	Total		231.0	217400	143840	-	147	

**Brief :** The farmer used to get annual income of ₹ 58140/acre from crop cultivation and dairy etc. He faced problems like unavailability of improved seeds and diseases etc. With interventions like training and seeds distributions etc., he is getting net annual income of ₹ 143840/acre.

(120)





Source: AICRP-WM Centre: CSHPKV, Palampur



Progressive farmer with rice crop





# Crop-diversification with vegetables increased farmer's income



### Name of farmer : Sh. Jagdish Chand

Address: Vill. Malag Po Malnu Teh. Palampur, Distt. Kangra Mobile Number: 9816382038 Age: 65 years Education: Middle Size of land holding (in acre): 2.5

### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.125	4.0	7904	4744		
Field Crop 2	Wheat	0.125	4.0	8400	5040		
Other enterprises 1	Dry fodder	2.25	16.0	6400	4444		
Other enterprises 2	Dairy	1	6.0	43200	25920		
	Total		30.0	65904	40148		

### 2) Status in 2020 🌒

Component Description			Period 202	% increase over base year			
Components	Names	Area (acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.125	8.0	19000	11400	100	140
Field Crop 2	Shorgun (g)	0.375	120.0	36000	26667	-	-
Field Crop 3	Wheat	0.125	8.0	23200	13920	100	176
Vegetable-1	Okra	0.0625	16.0	32000	27200	-	-
Vegetable-2	Cauliflower	0.0625	48.0	96000	72000	-	-
Other enterprieses	Dairy	1	11.0	105600	63360	83	144
	Total		211.0	311800	214547	603	434

**Brief :** The farmer used to get annual income of ₹40148/acre from crops like maize, wheat, dairy and shop etc. He faced problems like unavailability of improved seeds and high infestation of insects etc. With interventions like training and seeds distributions etc. He is getting annual income of ₹214547/acre.

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Progressive farmer with vegetable crop

Farmer with maize crop Source: AICRP-WM Centre: CSHPKV, Palampur





# Crop-diversification with vegetables increased farmer's income



Name of farmer : Sh. Inderjeet Singh

Address: Vill. Dugni Po Malahu Teh. Palampur, Distt. Kangra Mobile Number: 9816198736 Age: 62 years Education: Matric Size of land holding (in acre): 1.625

### 1) Before Intervention •

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.125	0.5	978	593		
Field Crop 2	Wheat	0.250	1	2100	1260		
Other enterprises	Dry fodder	1.5	24	9600	7000		
	Total			12678	8853		

### 2) Status in 2020 •

Component De	Component Description		Period	2020-21		% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre/kutre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.125	1	2375	1425	200	242
Field Crop 2	Paddy	0.250	3.5	6125	3675	-	-
Field Crop 3	Wheat	0.3125	2.5	6950	4170	200	264
Veg. Crop 1	Cauliflower	0.031	0.5	1000	800	-	-
Veg. Crop 2	Onion	0.018	0.3	600	400	-	-
Veg. Crop 3	Garlic	0.0125	0.1	1500	1100	-	-
Other enterprises 1	Dry fodder	1.25	25	15000	12000	125	187
Other enterprises 2	Dairy	1	9	86400	51840	-	-
	Total			119950	64610	-	186

**Brief :** The farmer used to get annual income of ₹ 8853/acre from crops and pension etc. He faced problems like infestation of insects and weeds etc. With interventions like training and seeds distributions etc. He is getting annual income of ₹ 64610/acre.





Farmer with horticullture plants and green fodder

Source: AICRP-WM Centre: CSHPKV, Palampur

**Success Stories-2022** 

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## Integration of dairy with crops for increased farmer's income



### Name of farmer: Smt. Kusum Lata

Address: Vill. Malag Po Malnu Teh. Palampur, Distt. Kangra Mobile Number: 8894050940 Age: 45 years Education: Matric Size of land holding (in acre): 0.375

### 1) Before Intervention ●

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income ₹/acre)		
Field Crop 1	Maize	0.125	6.0	11696	7024		
Field Crop 2	Rice	0.250	8.0	11300	5060		
Field Crop 3	Wheat	0.375	4.0	8400	5040		
Other enterprises	Dairy	1	7.0	50400	30000		
	Total		25.0	81796	<b>4712</b> 4		

### 2) Status in 2020 •

Component Description			Period	% increase over base year			
Components	Names	Area (acre)/No.	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.1875	8.0	19333	11600	33	65
Field Crop 2	Rice	0.1875	16.0	28000	16800	100	232
Field Crop 3	Wheat	0.375	6.7	18533	11120	67	121
	Dairy	1	10.0	96000	57600	43	92
	Total		40.7	161867	97120	63	106

**Brief :** The farmer used to get annual income of Rs 47124/acre from agriculture and Dairy etc. She faced problems like insect etc. With interventions like Training and seeds distributions etc. She is getting annual income of Rs. 97120/acre.



Farmer with dairy animal



Progressive farmer with maize crop

Source: AICRP-WM Centre: CSHPKV, Palampur







## **Crop-diversification for higher income**



### Name of farmer : Sh. Karm Chand

Address: Vill. Dugni Po Malahu Teh. Palampur, Distt. Kangra Mobile Number: 9816518475 Age: 47 years Education: Middle Size of land holding (in acre): 3.75

### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.250	4.0	7900	4740		
Field Crop 2	Rice	1.125	8.9	12556	6156		
Field Crop 3	Wheat	1.375	4.4	9164	5498		
Other enterprises 1	Dry fodder	2.375	16.0	6400	5053		
Other enterprises 2	Dairy	1	4.0	38400	23040		
	Total		37.3	74419	44486		

### 2) Status in 2020 🔹

Component Description			Period 2020-21				% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Maize	0.375	6.7	16000	9600	67	103	
Field Crop 2	Rice	1	16.0	28000	16800	80	173	
Field Crop 3	Wheat	1.09	7.3	21284	12771	68	132	
Veg. Crop 1	Cauliflower	0.125	48.0	96000	72000	-	-	
Veg. Crop 2	Onion	0.0625	24.0	48000	32000	-	-	
Veg. Crop 3	Garlic	0.0313	11.2	167732	127796	-	-	
Other enterprises	Dairy	2	8.0	115200	69120	100	200	
	Total		121.2	492216	340086	225	664	

**Brief :** The farmer used to get annual income of ₹ 44486/acre from agriculture, dairy and Pvt. Job etc. He faced problems like infestation of more insects and diseases etc. With interventions like training and seeds distributions etc. He is getting annual income of ₹ 340086/acre after intervention.

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Farmer with maize crop
Source: AICRP-WM Centre: CSHPKV, Palampur

Farmer with rice Kiwi Plants





## **Diversification & integrated farming for improved income**



### Name of farmer : Sh. Bahadur Ram

Address: VPO Kasba Punner Teh. Palampur, Distt. Kangra Mobile Number: 9816535870 Age: 66 years Education: Illterate Size of land holding (in acre): 1.875 (Leased in 1.25)

#### 1) Before Intervention

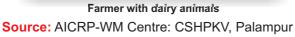
Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre) /Number	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.125	6.0	11696	6984		
Field Crop 2	Rice	0.5	12.0	16950	10630		
Field Crop 3	Wheat	0.5	5.0	10400	6300		
Other enterprises 1	Berseem	0.125	64.0	25600	20800		
Other enterprises 2	Dairy	2	3.0	28800	17325		
	Total		90.0	93446	62039		

### 2) Status in 2020 🌒

Component De	scription		Period 2	020-21		% increase ove	% increase over base year	
Components	Names	Area (acre)/No.	Production (q/acre/litre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income	
Field Crop 1	Rice	1.375	16.0	28000	14364	33.3	35.1	
Field Crop 2	Maize	0.375	8.0	16000	10667	33.3	52.7	
Field Crop 3	Wheat	0.125	24.0	48000	32000	-	-	
Veg. Crop 1	Okra	1.625	6.2	12308	6154	23.1	-2.3	
Veg. Crop 2	Potato	0.0625	40.0	60000	32000	-	-	
Other enterprises 1	Dairy-1	3	5.0	48000	19200	66.7	10.8	
Other enterprises 2	Goat -2	8	0.0	5000	3500	-	-	
Other enterprises 3	Poultry-3	20	0.0	400	300	-	-	
Other enterprises 4	Berseem (g)	0.1875	80.0	40000	32000	25.0	53.8	
	Total		179.2	257708	150184	99.1	142.1	

**Brief :** The farmer used to get annual income of ₹ 62039/acre from Agriculture and Dairy etc. He faced problems like insect, pest and diseases etc. With interventions like Veterinary camp, Training and seeds distributions etc. He is getting annual income of ₹ 150184/acre.







Farmer with goats

**Success Stories-2022** 

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### Integrated weed management for higher income



### Name of farmer : Sh. Sabroop Kumar

Address: VPO Kasba Punner Teh. Palampur Distt. Kangra Mobile Number: 9805848947 Age: 51 years Education: Middle Size of land holding (in acre): 10

#### 1) Before Intervention ●

Component De	escription	Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop 1	Maize	0.5	4.0	7000	4200		
Field Crop 2	Paddy	1.5	5.3	11300	4900		
Field Crop 3	Wheat	2.5	4.0	8400	5040		
Other enterprises 1	Berseem	0.125	64.0	25600	20800		
Other enterprises 2	Dry grass	7.375	6.8	2712	2169		
	Total		84.1	55012	37109		

### 2) Status in 2020 •

Component De	escription		Period 2	2020-21		% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop 1	Maize	0.125	6.0	12000	6400	50	52
Field Crop 2	Sorghum (fodder)	2	120.0	3600	2750	-	-
Field Crop 3	Wheat	1.75	5.7	16000	9143	43	81
Other enterprises 1	Makkhan grass	0.875	68.6	34286	25143	-	-
Other enterprises 2	Dry grass	7.375	7.5	4475	3254	10	50
	Total	<u> </u>	207.7	70360	46690	147	26

**Brief**: The farmer used to get annual income of ₹ 37190/acre from agriculture and other allied activities etc., He faced problems like high infestation of weeds, pests etc. With interventions like use of integrated weed management, he is getting net annual income of ₹ 46690/acre. In addition there is cost saving of ₹ 55,000 in the production of the above crops.





Maize

Source: AICRP-WM Centre: CSHPKV, Palampur

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# Miscellaneous





## Zero-tillage and weed management in wheat for higher income



Name of farmer : Sh. Naveen Kumar Address: Village Bhoa, Distt. Pathankot Mobile Number: 9855497950 Age: 40 yrs Education: Higher Secondary Size of land holding (in acre): 5

### 1) Before Intervention •

Component Description			Benchmark (Bas	)	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop	Wheat	5	19	32300	21300

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Wheat	5	21	39900	30900	9.5	26

**Brief :** The farmer used to get annual income of ₹ 21300/acre from conventional wheat. He faced problems like *Phalaris minor* in wheat and incorporation of paddy straw. With interventions like sowing of wheat in anchored rice straw with Happy seeder, applying need based post-emergence herbicides and weed seed harvest, he is now getting annual income of ₹ 30900/acre. In addition, there is cost saving of ₹ 2000/acre in the production of wheat.



Sowing of wheat with Happy seeder in anchored rice straw



Control of *Phalaris minor* in Happy seeder sown wheat

Source: AICRP-WM Centre, PAU, Ludhiana







# Management of *Phalaris minor* with new herbicides



### Name of farmer : Gurtej Singh S/o Balwant Singh

Address: Village Dholan, Tehsil-Jagraon, District - Ludhiana Mobile Number: 9915642191 Age: 27 years Education: Graduation Size of land holding (in acre): 18

### 1) Before Intervention

Component Description			Benchmark (Base		
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)
Field Crop	Wheat	18	18	18	19600

### 2) Status in 2020 ●

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Wheat	18	20	38000	28000	11	43

**Brief**: The farmer used to get annual income of ₹ 19600/acre from wheat. He faced problems like poor control of *Phalaris minor* in wheat with existing herbicides. With interventions like ZT wheat sowing, pre-emergence herbicide pyroxasulfone and post-emergence herbicide clodinafop + metribuzin and herbicide rotation, he is getting annual income of Rs. 28000/acre now. In addition, there is cost saving of ₹ 2000/acre in the production of wheat due to sowing with ZT machine.

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Poor control of P. minor in wheat

Source: AICRP-WM Centre, PAU, Ludhiana



Use of new herbicide pyroxasulfone in wheat





# CA in wheat controls weeds and increases farmer's income

Name of farmer : Joginder Singh S/o Balwant Singh



Address: Village Baude, District - Moga Mobile Number: 9876197996 Age: 52 years Education: Matric Size of land holding (in acre): 20

### 1) Before Intervention

Component Description			Benchmark (Baseline period 2016-17)				
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Wheat	20	16	27200	25200		

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Wheat	20	20	38000	29000	25	15

**Brief**: The farmer used to get annual income of ₹ 25200/acre from wheat. He faced problems like *Phalaris minor* in wheat. With interventions like sowing with Happy Seeder, need-based herbicide application and weed seed harvest, he is getting annual income of ₹ 29,000/acre. In addition, there is cost saving of ₹ 2000/acre in the production of wheat.



Poor control of Phalaris minor in wheat



Wheat under CA

Source: AICRP-WM Centre, PAU, Ludhiana

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## Weed management increased productivity and farmer's income



### Name of farmer: Sh. Suryamani Nayak

Address: S/o Bhimsen Nayak, Analmada, Khandapada, Nayagarh, Odisha
Mobile Number: 9938420531
Age: 42 years
Education: 2
Size of land holding (in acre): 5

### 1) Before Intervention Intervention

Component Description		Benchmark (Baseline period 2016-17)					
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)		
Field Crop	Sugarcane	5.0	160	37000	19600		

### 2) Status in 2020 •

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (acre)	Production (q/acre)	Gross Income (₹/acre)	Net Income (₹/acre)	Production	Income
Field Crop	Sugarcane	5.0	240	76800	42000	50	114

**Brief :** The farmer used to get annual income of ₹ 19600/acre from sugarcane. He faced problems like parasitic weeds and other early stage weeds etc. With interventions like pre-emergence herbicide and parasitic weed management etc., he is now getting annual income of ₹ 42000/acre. In addition, there is cost saving of ₹ 3600/acre as labour saving in the production of sugarcane.





Sugarcane

Source: AICRP-WM Centre: OUAT, Bhubaneswar

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