

ADOPTION OF BENEFICIARY FARMERS AS COMPARED TO NON-BENEFICIARY FARMERS ABOUT RECOMMENDED BAJRA PRODUCTION TECHNOLOGY

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ABSTRACT

Bajra is the major food crop of Rajasthan. This millet can be grown in sandy soils under rainfed conditions and hence assumes importance in the arid region of Rajasthan. This food grain crop is also grown abundantly in the arid tracts of Gujarat, Uttar Pradesh, Karnataka, Maharashtra and Andhra Pradesh. It has multiple uses – besides being a staple food, its fodder is an important feed of the milch animals. The study was conducted in 8 FLD villages of three panchayat samities namely, Nagaur, Jayal and Mundwa panchayat samities of Nagaur district, adopted by the KVK, Nagaur were included and a sample of 100 beneficiary and 50 non-beneficiary farmers were selected purposively. It was found that the beneficiary farmers possessed maximum extent of adoption regarding “High yielding varieties” (74.00 per cent) and while least extent of adoption was observed about “Plant protection measures” (57.50 per cent) of recommended bajra production technology. It was also found that the non-beneficiary farmers possessed maximum extent of adoption regarding “sowing of seed and spacing” (67.33 per cent), and whereas, the least extent of adoption was found about “Harvesting” (50.67%) of recommended bajra production technology.

INTRODUCTION

Bajra is the major food crop of Rajasthan. This millet can be grown in sandy soils under rainfed conditions and hence assumes importance in the arid region of Rajasthan. This food grain crop is also grown abundantly in the arid tracts of Gujarat, Uttar Pradesh, Karnataka, Maharashtra and Andhra Pradesh. It has multiple uses – besides being a staple food, its fodder is an important feed of the milch animals.

The Front Line Demonstration is an important method of transfer of latest package of practices in totality to farmers. Through it, farmers learn latest technologies of cereals production under real farming situation at his own field, which may lead to higher adoption. Further, these demonstrations are designed carefully where provisions are made for speedy dissemination of demonstrated technologies among farming communities through organization of other supportive extension activities, such as field days and farmers convention.

RESEARCH METHODOLOGY

The study was conducted in 8 FLD villages of three panchayat samities namely, Nagaur, Jayal and Mundwa panchayat samities of Nagaur district, adopted by the KVK, Nagaur were included and a sample of 100 beneficiary and 50 non-beneficiary farmers were selected purposively.

The data in Table 1 reveal that majority of beneficiary farmers (58 per cent) and non-beneficiary farmers (62 per cent) had medium extent of adoption, whereas 17 and 28 per cent and 25 and 10 per cent beneficiary farmers and non-beneficiary farmers were having low and high extent of adoption about recommended bajra production technology, respectively.

The data in table 2 depict that the highest extent of adoption (74.00 per cent) among beneficiary farmers was found about cultivation practice “High yielding varieties “ of recommended bajra production technology, whereas the highest extent of adop-

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RESULTS AND DISCUSSION

Extent of adoption of recommended Bajra production technology by beneficiary farmers as compared to non-beneficiary farmers.

Table 1: Extent of adoption of recommended bajra production technology by beneficiary farmers as compared to non-beneficiary farmers.

S. No.	Extent of adoption	Beneficiary (n=100)		Non-beneficiary (n=50)	
		f	%	f	%
1.	Low (Scores below 11.68)	17	17	14	28
2.	Medium (Scores between 11.68 to 23.60)	58	58	31	62
3.	High (Scores above 23.60)	25	25	5	10
	Total	100	100	50	100

$\bar{X} = 17.64$, $s = 05.96$

F=Frequency %-Percentage

tion (67.33 per cent) among non-beneficiary farmers was found about practice "sowing of seed and spacing" of recommended bajra production technology.

The second highest extent of adoption (72.00 per cent) among beneficiary farmers was found about cultivation practice "sowing of seed and spacing" while, among non-beneficiary farmers, the second highest extent of adoption (67.00 per cent) was observed in practice "High yielding varieties" of recommended bajra production technology.

The third rank was awarded to the extent of adoption (70.40 per cent) in practice "Seed treatment and soil" among beneficiary farmers while among non-beneficiary farmers, the third highest extent of adoption (63.33 per cent) was observed in practice "Soil and field preparation" of recommended bajra production technology. Fourth rank was assigned to the extent of adoption (70.00 per cent) among beneficiary farmers was found about cultivation practice "Soil and field preparation" whereas, the extent of adoption (61.60 per cent) in non-beneficiary farmers was found about practice "Seed treatment and soil" of recommended bajra production technology.

Table 2. Practice wise extent of adoption of recommended Bajra production technology by beneficiary farmers as compared to non-beneficiary farmers.

S. No.	Package of practices	Beneficiary (n=100) MPS	Rank	Non-beneficiary (n=50) MPS	Rank
1	Soil and field preparation	70.00	IV	63.33	III
2	High yielding varieties	74.00	I	67.00	II
3	Sowing of seed and spacing	42.00	II	67.33	I
4	Seed treatment and soil	70.40	III	61.60	IV
5	manure and fertilizer management	63.71	VII	54.28	VII
6	Plant protection measures	64.16	VI	61.00	V
7	Weed management	57.50	IX	53.33	VIII
8	Harvesting	63.33	VIII	50.67	IX
9	Storage	66.50	V	57.00	VI

$r_s = 0.93^{**}$ $t = 6.9$

r_s = rank correlation ** = significant at 1% level

MPS = Mean per cent score

The fifth rank was awarded to the extent of adoption (66.50 per cent) in practice "Storage" among beneficiary while among non-beneficiaries farmers, the fifth highest extent of adoption (61.00. per cent) was observed in practice "Weed management" of recommended bajra production technology.

The sixth rank was awarded to the extent of adoption (64.16 per cent) among beneficiary farmers about cultivation practice "Weed management" while the extent of adoption (57.00 per cent) in non-beneficiary farmers was found about "Storage" of recommended bajra production technology. The seventh rank was assigned to the extent of adoption 63.71 and 54.28 per cent among beneficiary farmers and non-beneficiary farmers, respectively about practices "Weed management" of recommended bajra production technology.

The eighth rank was awarded to the extent of adoption (63.33 per cent) was in practice "Harvesting" among beneficiary farmers while among non-beneficiary, the eighth highest extent of adoption (53.33 per cent) was observed in practice "Plant protection measures" of recommended bajra production technology.

The lowest rank was assigned to the extent of adoption (57.50 per cent) was in practice "Plant protection measures" among beneficiary farmers while among non-beneficiary farmers, the lowest extent of adoption (50.67 per cent) was observed in practice "Harvesting" of recommended bajra production technology.

The beneficiary farmers were having lesser extent of adoption in comparison to non-beneficiary farmers about all the cultivation practices of bajra. This might be due to the facts that the beneficiary farmers might have gained the more exposure and recommended their knowledge and skill through these training, demonstrations, field days which encouraged for higher extent of adoption lower down the extent of adoption.

Comparison of extent of adoption between beneficiary and non-beneficiary farmers regarding recommended bajra production technology.

The data related to extent of adoption of both beneficiary and non-beneficiary respondents incorporated in Table 3 show that calculated 'Z' value was higher than the tabulated value at 1 per cent level of significance in all the nine package of practices of bajra production technology.

Table 3: Comparison of extent of adoption between beneficiary and non-beneficiary farmers regarding recommended bajra production technology.

S. No.	Package of practice	Beneficiary (n=100)		Non-beneficiary (n=50)		'Z' Value
		Mean	SD	Mean	SD	
1	Soil and field preparation	2.10	0.69	0.95	0.81	9.67**
2	High yielding varieties	1.48	0.50	0.67	0.52	10.04**
3	Sowing of seed and spacing	2.16	0.68	1.01	0.65	10.93**
4	Seed treatment	3.52	1.37	1.54	1.44	8.91**
5	Manure and fertilizer management	4.66	1.42	1.90	1.42	12.29**
6	Weed management	3.85	1.03	1.83	1.02	12.46**
7	Plant protection measures	3.45	1.49	1.60	1.48	7.88**
8	Harvesting	1.90	0.98	0.76	0.89	7.70**
9	Storage	1.33	0.74	0.57	0.78	6.32**

** Significant at 1% level of significance

This calls for rejection of null hypothesis and acceptance of alternative hypothesis leading to conclusion that there is a significant difference in extent of adoption of beneficiary and non-beneficiary respondents regarding all nine practices of bajra cultivation. In other words, there is no similarity between the extent of adoption of beneficiary and non-beneficiary farmers regarding bajra production technology.

The higher extent of adoption of recommended bajra production technology among the beneficiary in comparison of non-beneficiary respondents, might be due to the reason that the FLDs were conducted on the fields of beneficiary farmers only by the KVK, Nagaur and they have also been provided necessary guidance, literature and training by the KVK scientists and SMS of ARSS, Nagaur. Whereas, the FLDs were not conducted on the field of non-beneficiary farmers and might have not been provided any type of guidance and training by the SMSs. This might have resulted in lower extent of adoption among non beneficiary farmers in comparison to beneficiary farmers.

The findings are in conformity with the findings of Bhimawat, and Gupta (2005) and Geengar(2006)

CONCLUSION

It was found that the beneficiary farmers possessed maximum extent of adoption regarding "High

yielding varieties" (74.00 per cent) and while least extent of adoption was observed about "Plant protection measures" (57.50 per cent) of recommended bajra production technology. It was also found that the non-beneficiary farmers possessed maximum extent of adoption regarding "sowing of seed and spacing" (67.33 per cent), and whereas, the least extent of adoption was found about "Harvesting" (50.67%) of recommended bajra production technology.

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