

## TRAINING NEED ASSESSMENT OF NWDPR A BENEFICIARY FARMERS IN JAIPUR REGION OF RAJASTHAN

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### ABSTRACT

Conservation of soil and water have great importance in Indian economy specially in Rajasthan where bulk of the rural poor live in the rain fed regions and crop production depends upon rainfed technology. The challenge before Indian agriculture is to transfer rain fed farming in to more sustainable and productive systems and to better support the production dependent upon it. Realising the importance of rain fed /dry land agriculture, National Watershed Development Project for Rainfed Areas(NWDPR A) was implemented for productivity enhancement by the Govt. of India in which the skill of farmers may be improved through training, specially in the areas of contour vegetative hedges, contour farming, tillage practices, contour bunding, gully control measures, live fencing, ditch cum bund fencing, check dams for upper, middle and lower reaches, pasture development, agro-forestry, mixed/inter cropping, crop rotation, use of organic matter, soil testing, fertilizer management, plant protection measures, inter-culture operations, sowing of cover crops, mulching, use of high yielding varieties of crops, maintenance of plant population, mid-season corrections, use of harvested water for irrigation, house hold production system, breed improvement through A.I, castration of scrub bulls, green fodder production and health care of animals.

### INTRODUCTION

Rainfed agriculture is a complex diverse and risk prone practice which is characterized by low levels of productivity and low input usage. Therefore, improved crop production technology with the efficient utilization of available rain water, plays a significant role in increasing the rainfed / dryland crop yield per unit area. Rainfall in Rajasthan generally remains abnormal being irregular, scanty, ultimately, unevenly distributed with prolonged drought periods. Thus in Rajasthan, soil and moisture conservation by adopting watershed development technology have of critical importance to bring growth as well as stability in agriculture production from rainfed areas. The watershed technology have some major components of soil management like conservation of natural resources, in-situ moisture conservation and also crop management like sustainable farming system, use of land use based crops, horticulture, agro-forestry, livestock management and household production systems. To keep up-to-date knowledge of watershed, intensive trainings should be imparted

among beneficiary farmers after assessing the training needs on different components of watershed technology of NWDPR A so that the farmers may adopt watershed technology. Keeping the importance in view the study entitled Training need assessment of NWDPR A beneficiary farmers in Jaipur region of Rajasthan was undertaken.

### RESEARCH METHODOLOGY

The present investigation was conducted in four districts viz...Churu, Jaipur, Jhunjhunu and Sikar of Jaipur Region of Rajasthan state purposively as having comparatively higher number of watersheds with similar soil moisture conservation and cultivation practices. Total eight watersheds from four selected watershed districts were selected randomly. In all 160 farmers as beneficiary respondents (20 beneficiaries from each selected watershed) were randomly selected. On the basis of review of literature, experts' opinion and watershed technology as recommended by State Government of Rajasthan, eleven aspects of soil and water conservation technology and nineteen

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aspects of production technology were included. All the 160 respondents were asked to rate their perception and their responses were recorded by using personal interview method in three categories i.e. "Most Needed", "Needed" and "Not Needed" against each of the aspect of watershed technology. The ratings were quantified by assigning given scores like 3, 2, and 1 for "Most Needed", "Needed" and "Not Needed" categories, respectively. The responses so collected were tabulated and analysed. The aspect-wise need hierarchy for each respondent was made on the basis of Mean score (MS) and ranks were assigned accordingly.

## RESULTS AND DISCUSSION

The results are presented in two tables followed by discussions. The data in table-1 indicate that the highest training need was felt about tillage practices by the beneficiary farmers among soil and water conservation technology of NWDPR. Hence it was ranked on top position with mean score 2.59. The second most important aspect was

contour farming (2.56) where farmers needed the training followed by contour bunding (2.45). The fourth rank was assigned to live fencing with mean score 2.40. The fifth rank was obtained by both aspects contour vegetative hedges and ditch cum bund fencing with mean score 2.36. The sixth, seventh, eighth and ninth ranks were assigned to the practices like gully control measures (MS 2.32), pasture development (MS 2.28), water control measures at lower reaches (MS 2.24) and check dams at middle reaches (MS 2.23), respectively. It could be concluded that watershed beneficiary farmers need more training on soil and water conservation technology of NWDPR especially on tillage practices, contour farming, contour bunding, livefencing, contour vegetative hedges and ditch cum bunding fencing. Therefore, watershed functionaries should emphasize and include these aspects of soil and water conservation technology of NWDPR in their training programme on priority basis.

**Table 1. Training Needs of Beneficiary farmers' about Soil and Water Conservation Technology**

n=160						
S.No.	Name of Technology	Most Needed	Needed	Not Needed	Mean score	Rank
1.	Contour farming	315	80	15	2.56	II
2.	Contour vegetative hedges	249	104	25	2.36	V
3.	Tillage practices	330	70	15	2.59	I
4.	Contour bunding	285	84	23	2.45	III
5.	Gully control measures	237	108	27	2.32	VI
6.	Live fencing	270	90	25	2.40	IV
7.	Ditch cum bund fencing	255	96	27	2.36	V
8.	Check dams for upper reaches	183	144	27	2.21	X
9.	Check dams for middle reaches	201	126	30	2.23	IX
10.	Water control measures at lower reaches	207	122	30	2.24	VIII
11.	Pasture development	222	116	28	2.28	VII
<b>Over all Mean Score</b>					<b>2.36</b>	

The data in Table-2 reveals that the watershed beneficiary farmers were given highest priority to training need of use of high yielding varieties of crops amongst all practices of Crop Production Technology which was obtained the highest mean score 2.71. The second and third rank for training were assigned to plant protection measures and soil testing with mean score 2.86 and 2.83,

respectively. The fourth rank was obtained by both practices i.e. use of harvested water for irrigation and household production system amongst all the practices of Crop Production Technology of NWDPR. It was also observed that use of organic matter (2.79), fertilizer management (2.77), crop rotation (2.73), mixed/inter cropping (2.71), breed improvement through

A.I. (2.70) and agro-forestry practices (2.68) of Crop Production Technology were ranked fifth, sixth, seventh, eighth, ninth and tenth, respectively. The data in Table-2 also indicate that the training about sowing of cover crops and mulching was needed by watershed farmers with combined ranked as eleventh (MS 2.66). The twelfth rank was obtained by both inter cultural operations and maintenance of plant population with mean score 2.65. The mid season correction and green fodder production

(2.63) were ranked thirteenth, in the hierarchy of training needs. The last rank was assigned to health care of animals with mean score 2.53. It might be concluded that the NWDPRA beneficiary farmers demanded and prioritized the training needs of crop production technology, in which use of high yielding varieties of crops was given in top priority while lowest training felt by farmers was Health care of animals.

**Table 2. Training Needs of Beneficiary farmers' about Crop Production Technology**

n=160

S.No.	Name of Technology	Most Needed	Needed	Not Needed	Mean score	Rank
1.	Agro-forestry	345	80	05	2.68	X
2.	Mixed/inter cropping	363	66	06	2.71	VIII
3.	Crop rotation	369	62	06	2.73	VII
4.	Use of organic matter	393	50	04	2.79	V
5.	Soil testing	408	42	03	2.83	III
6.	Fertilizer management	384	56	04	2.77	VI
7.	Plant protection measures	420	38	01	2.86	II
8.	Inter-culture operations	336	82	07	2.65	XII
9.	Sowing of cover crops	342	78	07	2.66	XI
10.	Mulching	348	70	09	2.66	XI
11.	Use of high yielding varieties of crops	435	30	00	2.71	I
12.	Maintenance of plant population	339	78	08	2.65	XII
13.	Mid-season corrections	324	90	07	2.63	XIII
14.	Use of harvested water for irrigation	396	50	03	2.80	IV
15.	House hold production system	339	86	04	2.80	IV
16.	Breed improvement through A.I.	354	74	05	2.70	IX
17.	Castration of scrub bulls	303	80	19	2.51	XV
18.	Green fodder production	327	86	08	2.63	XIII
19.	Health care of animals	312	76	18	2.53	XIV
<b>Over all Mean Score</b>					<b>2.70</b>	

## CONCLUSION

It could be concluded that all the practices related to soil and water conservation practices as well as crop production technology should included in the training programmes of NWDPRA. It might be further concluded that NWDPRA implementing agency should consider all these practices of watershed in the training programme so that farmers income might be increased by adopting the soil and water conservation and crop production technology based on priorities of their training needs.

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