

## Training Needs of Rice Growers : A Case of Uttarakhand

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### ABSTRACT

*The Evolution of hybrid seed varieties and better technology has resulted in different types of agricultural requirements with different package of practices for a specific crop. Among those specific crops, rice is one important crop which is of Asian origin. District Udham Singh Nagar of Uttarakhand has been recorded the highest rice yielder with the production of 29.27 quintals per hectare. In spite of these impressive achievements in agricultural production, a wide gap exists between productivity at research station and farmers' field. To fill this gap, training is an important tool. Keeping this in view, the present study was carried out on training need assessment of farmers about improved rice cultivation practices. Two blocks mainly Rudrapur and Gadarpur were selected from district Udham Singh Nagar of Uttarakhand state. The data were collected from the farmers with the help of structured interview schedule and knowledge test along with the Focused Group Discussion (FGD). The findings of the study indicate that the major areas of training needs of the rice growers were plant protection measures, seed treatment, fertilizer management and improved varieties of seeds.*

**Key words :** Training, need, Knowledge, Priority areas

**R**ice is an important crop of the world. No wonder, 90 percent of the world's area under rice is in Asia. About 90 percent of people are rice eaters in six countries of Asia namely Bangladesh, Cambodia, Laos, Myanmar, Sri Lanka and Vietnam. In India and China which together hold about half of the world's rice area, 63-68 percent people are rice eaters. This is an indication that rice is staple food of India and consumed in every state of India. In Uttarakhand, rice is cultivated in an area of 0.98 lakh hectare with the production of 1.71 lakh tons and 1742 kilograms per hectare productivity. District Udham Singh Nagar of Uttarakhand state has been recorded the highest rice yielder with 29.27 quintals per hectare. In spite of impressive achievements in Agricultural production, there is a wide gap between the present rice yield and available potentials. Training is a basic and crucial requirement for increasing agricultural production. No one technology is of any consequence unless it is carried out to the ultimate users in usable form.

To keep pace with the development in agricultural technology, it is important to impart training to the farmers. For rapid transfer of improved rice production technology, role of Krishi Vigyan Kendra, training institutes and farmers' training centres is crucial but it would be more effective when these institutes and organizations organize the training programmes by considering the felt training needs of the farmers. Thus, the gaps identified through assessment of training needs would be of great help in designing future training programmes. In this context that a study was planned with following objectives:

1. To identify the training needs of the farmers regarding rice cultivation practices
2. To know the priority areas pertaining to rice cultivation as reported by the farmers

### METHODOLOGY

District Udham Singh Nagar of Uttarakhand state was selected purposively because this district has the highest rice production in the state. Two blocks namely; Rudrapur and Gadarpur were selected for study and from each block, two villages were selected. From each village, 25 rice producing farmers were selected and ultimately 100 rice producing farmers were contacted personally by the investigator and knowledge test especially constructed for the respondents was administered to know the training need whereas, to find out the priority areas farmers were interviewed and also focused group discussions were organized with them in the villages.

### RESULTS AND DISCUSSION

*Preference of the respondents towards training need areas on the basis of training need gratification in the following manner:*

*Selection of soil type and land preparation :* Table 1 depicts that more than half of the farmers (55 %) felt that they need to be trained in the area of selection of soil type and land preparation most urgently whereas, 32 per cent of them thought that it was somewhat urgent and only 13 farmers said that this area was somewhat urgently required by them for training.

Table 1. Training needs Assessment on the basis of preference of the rice-growing farmers

S.No.	Areas	Preferences			Mean scores
		Most urgent Per cent	Urgent Per cent	Some what urgent Per cent	
1	Selection of soil type and land preparation	55	13	32	2.23
2	Improved varieties of seeds	82	14	4	2.78
3	Seed Treatment	86	14	-	2.86
4	Seed rate and spacing	80	11	9	2.71
5	Methods and time of planting	65	22	13	1.57
6	Fertilizer management	84	10	6	2.78
7	Water management	17	10	73	1.27
8	Intercultural operations	7	2	91	1.16
9	Plant protection measures	95	4	1	2.94
10	Harvesting time and yield	12	8	80	1.20

*Improved varieties of seeds* : There was a most urgent need for the farmers (82%) to be trained in the area of improved varieties of seeds followed by those respondents (14 per cent) who needed training urgently in this area of rice cultivation. Only 4 farmers felt that training was somewhat urgent in this area. It is very likely that farmers are eager to know the latest varieties of seeds.

*Seed treatment* : A high majority of the respondents (86 %) expressed training need in this area as most urgent followed by those respondents for whom training was required very urgently (14 %) in the area of seed treatment. None of the respondents felt somewhat urgent training need in this area. It indicates that training in this area is much important.

*Seed rate and spacing* : According to Table 1 we can conclude that most of the respondents (80 %) expressed training need in the area of "seed rate and spacing" as most urgent followed by those respondents (11 %) who preferred urgent training need in this area. For only 9 per cent of the respondents' training in this area was found to be some what urgent.

*Methods and time of planting* : It is very much clear from Table 1 that training in this area was expressed as urgent by most of the respondents (65 %) followed by those respondents (22 %) who showed training need in this area as urgent. Only 13 % of the respondents showed somewhat urgent training need in this area.

*Fertilizer management* : Table 1 gives the feed back that in this area, majority of the respondents (84 %) fell under the category of most urgent training need followed by urgent need category (10 %). Only six farmers felt somewhat urgent need for training in the area of fertilizer management.

*Water management* : Most of the respondents (73 %) fell under the somewhat urgent category. They were much aware about it. This practice was most urgently required to be learnt by 17 per cent of the farmers. Only 10 %

respondents fell under the urgent need category in this training need area. As water is a very important resource for crops and at the same time efficient use of this resource for rice was considered as very important by the respondents.

*Intercultural operations* : Perusal of Table 1 shows that in this area, a high majority of the respondents (91 %) fell under somewhat urgent training need category. It indicates that training in this area is not more urgent for them. Seven per cent of the farmers belonged to most urgent category and only two farmers wanted to be trained in this area urgently.

*Plant protection measures* : Table 1 indicates that this area of rice cultivation is much more important according to training point of view because a very high majority of respondents (95 %) fell under the category of most urgent training need followed by urgent (4 per cent). Only one person said that training in the area of plant protection measures was somewhat urgently required. As it is a known fact that due to lack of knowledge regarding plant protection measures, many farmers in India lose almost half of their crop by the time they seek expert advice, this is a very important aspect of training for the farming community.

*Harvesting time and yield* : As indicated in Table-1, that most of the respondents (80 %) fell under the category of somewhat urgent training need followed by most urgent training need (12 %). Only eight per cent of respondents belonged to urgent training need category in the area of harvesting time and yield indicating that this area was not much needed by them for training.

From the table 1 it is clear that the area of plant protection measures got first rank as the mean score was the highest (2.94) in this area followed by seed treatment (2.86), fertilizer management & improved varieties of seeds (2.78) and seed rates and spacing (2.71). Other areas like selection of soil type and land preparation ranked

sixth as the mean score was 2.23 followed by methods and time of planting (1.57), water management (1.27) and harvesting time and yield (1.20). It was found in the study that intercultural operation was the area of training in which farmers wanted less training as it had got the least mean score (1.16).

The possible reasons could be that most of the crop failure occurs due to diseases and the cause of diseases is improper knowledge of plant protection measures and seed treatment.

*Priorities of training need areas about improved rice production technology:* A perusal of Table 2 shows the priority of training areas for rice cultivation practices.

The following order according to training need areas give the indication about priority of training need areas on rice cultivation and the comparison of the training needs of the respondents between knowledge test and structured interview schedule showed that plant protection measures, seed treatment, fertilizer management, improved seed varieties, seed rates and spacing are the major areas in which farmers' knowledge level is low and they wanted more training in this area. The mean scores as shown in Table 1 also revealed that training in aforementioned areas was more important as the mean scores in these areas were 2.94, 2.86, 2.78, 2.78 and 2.71 respectively. Rest areas were not considered as most important from training point of view.

Table 2. Prioritization of the training need areas

S. No.	Training areas	Marks (Total)	Marks (Obtained)	Per cent of marks obtained	Training needs in Per cent	Ranks
1	Selection of soil type and land preparation	500	375.25	75.05	24.95	VII
2	Improved varieties of seeds	500	330.75	66.15	33.85	IV
3	Seed Treatment	500	325.00	65.00	35.00	III
4	Seed rate and spacing	500	371.25	74.25	25.75	VI
5	Methods and time of planting	500	360.50	72.10	27.90	V
6	Fertilizer management	500	305.00	61.00	39.00	II
7	Water management	500	371.25	75.65	24.35	VIII
8	Intercultural operations	500	385.25	77.05	22.95	IX
9	Plant protection measures	500	270.50	54.10	45.90	I
10	Harvesting time and yield	500	405.00	81.00	19.00	X

## CONCLUSION

It can be concluded from the findings of the study that most of the farmers of the district Udham Singh Nagar wanted a package of practices on rice cultivation. The major areas in which farmers needed more considerations were plant protection measures, seed treatment, fertilizer treatment, improved and hybrid seed varieties, seed rate and spacing and land preparation. In other areas like methods and time of transplanting, water management, harvesting time and intercultural operations

they had sufficient knowledge. Regarding the plant protection measures, farmers wanted knowledge about name of insecticides and pesticides, dose/ quantity of use and also the methods of use those chemicals. Same in the area of seed treatment and fertilizer management they wanted to know the improved high yielding varieties that enhance the productivity. So, a training programme should be designed in such a way that a complete package of practices should be given to the farmers and also, small training programmes of 2-3 days can be organised on specific areas of package of practices.

## REFERENCES

1. Ahmed, N. (1998). Functioning and effectiveness of KVK: A study in U.P. *Ph.D. Thesis (Unpublished)*. G.B.P.U.A. & T., Pantnagar. pp. 196.
2. FAO (2003). Report on statistics of national and international rice production: *Agriculture Today*, **3** (4), pp. 13-16.
3. Hanchial, S. N. (2005). Privatization of extension services: Attitude and preferences of farmers and extension personnel. *Ph.D. Thesis (unpublished)*, University of agricultural sciences, Dharwad (Karnataka), pp. 231.
4. Ramasubhramanian, M., Seetharaman, N. and Rajan, V. S. (2005). Training needs of dry land farmers. *Indian J. of Training and Development*, **XXXV** (2), pp: 106-118.
5. Thanupon, S. (2000). Extension and client system's perception of rice farmers of rice farmer's training need in Chiangmai, Thailand. *Munoj, Nareva Ecija* (Phillipines), **VI** (1&3) June 2000, pp. 208.