

## ASSESSMENT OF TRAINING NEEDS OF FARMERS IN AGRICULTURE

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**Abstract:** A study conducted to assess the training needs in agriculture of paddy and coconut farmers in Trichur district revealed that majority of the farmers (68.32%) perceived medium to high training need. With respect to different subject matter areas, weed control and plant protection in rice and seedling selection and plant protection in coconut ranked high in the training need hierarchy.

**Key words:** Training need, training need index, training need quotient-

### INTRODUCTION

Although a lot of sophisticated know-how is available on research farms for augmenting agricultural production, most of the farmers are still practising conventional methods in agriculture. This is due to the gap between the technology developed and technology available in farmer's fields. Therefore transfer of technology is of greater importance for boosting production and prosperity of nation. Training is a crucial factor in technology transfer. If training is to be more effective, the training needs of the farmers have to be established prior to starting the training programmes so that the subject matter of the training could be determined on the basis of needs of the farmer-trainees. So identification of training needs becomes the most important step in the formulation of training programmes.

### MATERIALS AND METHODS

From the three agricultural subdivisions of the Trichur district, six blocks were randomly selected, two from each subdivision. From each block one panchayat was randomly selected and ten farmers were randomly selected from the six panchayats to comprise the total sample of 60 farmers.

Training need of farmers was the dependent variable in the study. Training need was operationally defined as the perceived need level of training of farmers in relation to different cultivation practices of rice and coconut.

The training needs of farmers in major subject matter areas relating to the two important crops (coconut and rice) were assessed in the study by the use of a three point rating scale with points most needed, somewhat needed, and not at all needed with scores of 3, 2 and 1 respectively.

The frequencies of each response categories were found out and the respective frequencies were multiplied by the score allotted to it.

Table 1. Level of training needs in agriculture

Sl No.	Group	Training need score	Frequency	Percentage
1	Low	68-99	19	31.66
2	Medium	100-124	28	46.66
3	High	125-204	13	21.66
Total			60	100

TNI (training need index) was calculated for each crop with respect to scores obtained for training need of each crop against the maximum possible scores. TNI was obtained by dividing the total score obtained by a respondent by the maximum possible score that could be obtained for all the crops by any respondent. TNI for a crop was worked out by dividing the actual scores assigned for the crop by all the respondents, by the maximum possible score that could be assigned for that particular crop. Similarly, TNI for the major subject matter areas in the cultivation of rice and coconut were also found out.

Table 2. Training need index for rice and coconut

Crop	Total score obtained	Maximum score possible	TNI
Rice	2962	5220	0.58
Coconut	3529	6552	0.54
Total	6645	12240	0.54

Table 3. Training need quotient for different subject matter areas under rice

Subject matter areas	Score obtained	Max. possible score	TNQ	Rank
Seeds and sowing	485	900	0.54	III
Preparatory cultivation	465	900	0.52	IV
Weed control	366	540	0.68	I
Plant protection	825	1260	0.65	II
Nutrient application	369	720	0.51	V
Harvesting	452	900	0.50	VI

The important subject matter areas identified were the following:

Rice: Seeds and sowing, preparatory cultivation, weed control, plant protection, fertilizer application and harvesting.

Coconut: Mother palms and seed nuts, nursery preparation, seedling selection, main field preparation, fertilizer application, plant protection, water management and harvesting and post harvest.

The respondents were divided into three groups with low, medium and high levels of training needs based on the cumulative  $\checkmark$  method suggested by Rao (1983).

The training need quotient for each subject matter area was worked out by dividing the respective training need index by the total number of operations. The data were tabu-

lated and statistically analysed using percentage analysis to make simple comparisons.

## RESULTS AND DISCUSSION

The distribution of the respondents on the basis of their training needs is furnished in Table 1. It is revealed that 31.66% of the fanners perceived low level of training need, 46.66% of the fanners perceived medium level of training need, and 21.66% perceived high level of training need.

As majority of the fanners had not participated in any training programmes, the fanners were interested to attend training programmes.

### Training needs of farmers with respect to rice and coconut

In the case of rice, six subject matter areas were identified and there were a total of 29 items included under these areas.

In the case of coconut, eight subject matter areas including 39 items were identified.

Table 4. Training need quotient for different subject matter areas under coconut

Subject matter	Score obtained	Max. score possible	TNQ	Rank
Selection of mother palm/seed nuts	471	840	0.56	IV
Nursery preparation	349	840	0.42	VIII
Seedling selection	359	504	0.71	I
Main field preparation	360	840	0.43	VII
Fertilizer application	501	840	0.60	III
Plant protection	545	840	0.65	II
Water management	446	840	0.53	V
Harvesting and post harvest	498	1008	0.50	VI

Based on the obtained training need score in these two crops, the training need index was calculated (Table 2). The results indicated that the TNI in respect of rice was higher than that in the case of coconut.

### **Training needs with respect to the major cultivation operations**

It is evident from the Table 3 that farmers had perceived highest training need for weed control closely followed by plant protection. Other areas with moderate training need were seeds and sowing and nutrient application.

The perception of high training need in plant protection was in conformity with the findings of Chandrasekharan (1981) and Alexander (1985). The high training need index in weed control might be due to the prevalence of severe weed problems in rice and the high labour charges involved in weed control.

The results in Table 4 highlighted that highest training need index was observed in the case of seedling selection followed by plant protection and fertilizer application. Other areas of moderate training need were selection

of mother palms/seed nuts and water management.

This study aimed to assess the training need of farmers in various cultivation aspects in rice and coconut cultivation revealed that majority of the farmers (68.32%) perceived medium to high training need. With respect to different subject matter areas, weed control and plant protection in rice and seedling selection and plant protection in coconut ranked high in the training need hierarchy. The results will be of use to the extension agencies in the area in organizing different training programmes for the benefit of farmers cultivating rice and coconut.

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