

## Evaluation of Short Term Farmers Training on Spaced Transplanting of Sugarcane

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A short term farmers training programme was jointly organized by On-Farm Research Division, BARI and SRTI on spaced transplanting (STP) technology of sugarcane cultivation. STP is a sugarcane planting technology generated and recommended by Sugarcane Research and Training Institute (SRTI), Ishrudi, Pabna. STP involves in transplanting sugarcane seedlings (equivalent to seedlings of other crops) raised either in polythene bags or in soil beds from single and two-budded sets respectively instead of planting three-budded sets directly in the field. It is a superior technology compared to existing conventional planting method which ensures production of desired millable stalk density (Ali, 1993).

Training is one of the process of improving the knowledge and skills for changing the attitude of an individual for performing a specific job (Filippo, 1976). Therefore, a short term training of farmers was organized jointly to increase knowledge on STP.

Evaluation is often necessary for continued improvement of the training programme. It is only possible through proper evaluation to identify weakness of the training programme on STP. The present study was undertaken with the following objectives:

1. To determine the usefulness of training programme.
2. To measure the gained knowledge on spaced transplanting technology of sugarcane cultivation.

Four day long training programme was jointly organized by On-Farm Research Division and SRTI Sub-Station, Rajshahi at local CARITAS training complex and twenty eight farmers took part in the training programme. For determining, the usefulness of the training, the participants were asked to give their opinion for each

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of the 17 statements of the subject matter areas by checking whether they "strongly agreed", "agreed", "undecided", "disagreed" or "strongly disagreed". Weights assigned to these response were 4,3, 2,1, and 0 respectively. The score for opinion towards the usefulness of the training programme for respondent was determined by adding the weights for his response to all the statements. The usefulness of scores could thus range from 0 to 68 indicating very unfavorable to very favorable opinion. The subject matter knowledge gained by the farmers was assessed through two sets of questionnaires having similar questions in both pre and post test. Paired t-test was done to find out if there was any significant difference in the gain of knowledge from this training.

**Background of the Participants:** All the participant farmers in training programme had at least primary education. The highest level was an arts graduate who was a part time businessman but personally takes care of his farming.

**Usefulness of the Training Programme:** During the post training evaluation test, the opinion of the participants were sought about the usefulness of the present training programme. About 79 percentage of the respondents indicate that the training was very useful, while 21 percent opined the course as useful (Table 1). None of the participants graded the training as less or not useful. This finding agreed with the results obtained by Mirza *et al.* (1992).

**Table 1. Distribution of trainees on the basis of their opinion regarding the usefulness of the training.**

| Degree of usefulness<br>(Scoring range 0-68) | Trainees |            |
|----------------------------------------------|----------|------------|
|                                              | Number   | Percentage |
| Very useful (50 and above)                   | 22       | 78.6       |
| Useful (30-49)                               | 6        | 21.4       |
| Not useful (>30)                             | 0        | 0          |

**Gain in subject matter knowledge of the participants:** To evaluate the impact of training in gaining subject matter knowledge is the most important phase of a training programme. However, it is very difficult to measure the change in skill and attitude within limited period of time. The success and failure of a training programme depends mostly upon the knowledge gained by the participants through training. Generally, the subject matter knowledge gained by the trainees is taken as a criterion for measuring the success of a training programme. The Comparison of the results of pre-test and post-test on the subject matter knowledge is one of the recognised criterion for judging the extent of success and failure of a training programme. The

results of the pre-test and post-test of the present training programme are shown in the Table 3.

Table 2. Overall impression of the participants about the training.

| Overall impression | Participants |            |
|--------------------|--------------|------------|
|                    | Number       | Percentage |
| Excellent          | 4            | 14         |
| Good               | 18           | 65         |
| Fair               | 4            | 14         |
| Poor               | 0            | 0          |
| No comment         | 2            | 7          |
| Total              | 28           | 100        |

Table 3. Pre-test and Post-test scores on the subject matters knowledge of the participants.

| Test | Total marks | Mean score | Range | Standard deviation | CV (%) | t. value |
|------|-------------|------------|-------|--------------------|--------|----------|
| Pre  | 100         | 39.9       | 30-50 | 6.9                | 17.3   | 10.55**  |
| Post | 100         | 73.1       | 60-90 | 10.6               | 14.5   |          |

It is seen from the Table 3 that the subject matter knowledge of the participants increased significantly as a result of training. Similar findings on the impact of training in gaining subject matter knowledge have also been reported elsewhere (Ali *et al.*, 1988; Mahboob and Kashem, 1988; Islam, 1988). Statistical analysis by paired t-test showed that the difference of gaining subject matter knowledge before (pre) and after (post) the training was highly significant. Training of farmers essentially contributes to human resource development as has been found in this study. As the outcome of training an increase, in terms of knowledge gain was evidenced which may be considered as a positive indicator of success of the programme.

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