

Evaluation of a One-day Training programme : Farmers' Training organised by Sugarcane Research & Training Institute

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Sugarcane Research and Training Institute (SRTI) is currently organising 1-3 day duration, practical-oriented training programmes for progressive sugarcane growers of mill as well as non-mill zones to provide and develop their knowledge and skills on Spaced Transplanting (STP) technology. The main objective of this sugarcane growers training is to equip the growers' with minimum use-knowledge and skills required for successful application of STP. These training programmes are being organised at SRTI main station, Ishurdi, Pabna as well as its regional station at Thankurgaon and Sub-stations at Joypurhat, Chuadanga, Rajshahi and Sreepur, Gazipur. Farmers' training programmes at Sub-stations are of one day duration where visits to successful demonstration plots and skills development through practical demonstrations are two major components of training with very less emphasis on theoretical lecture. Farmers training programmes at SRTI main station and Regional station (Thakurgaon) are of 3 day duration. These 3-day duration courses are normally offered to those farmers who agrees to raise demonstration plots or have proven capability to demonstrate higher yields through application of scientific approach.

Considering this broad aim, an evaluation of a single one day duration training course of Joypurhat Sub-station was undertaken with the following specific objectives :

- i. To compare pre-training and post-training knowledge scores of the trainee farmers.
- ii. To study the relationship of trainee farmers' age and education with their pre-training and post-training knowledge scores.
- iii. To seek suggestions from the trainees for making improvements in the future training programmes.

A farmers' training batch comprising 26 progressive sugarcane farmers of Joypurhat sugar mills (JSM) zone were the subjects of this study. Trainee farmers were selected by JSM authority. A specially designed questionnaire containing 15 simple knowledge questions on STP was prepared for this purpose. The same questionnaire was administered twice before and after the conclusion of the training. Data obtained were statistically analysed.

Operational definitions of some measures :

Knowledge Score : Questionnaire had 15 knowledge questions. For correct answer of each question a score of 1 was given and for wrong answer 0 was assigned. So, total knowledge score of a trainee may range from 0 (for all wrong answers) to 15 (for all correct answers).

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Age : Age of the trainee farmers were their individual chronological age as told by them and measured in "year."

Education : Education of a trainee farmers is his total "years" spent in a formal educational institution.

The results of the investigation have been discussed under following sub-headings :

- A. General background of the trainees.
- B. Comparison of pre-training and post-training knowledge score.
- C. Relationship of age and education of the trainees with their pre-training and post-training knowledge scores.
- D. Reactions of the trainees about the training course.

A. General background of the trainees :

Trainees have a mean age of 37.2 years indicating that most of the participants are of young ages. Trainees mean level of education is 9.5 years indicating that the farmers selected were not typical of Bangladesh. It is true that farmers having progressive outlooks, innovative and scientific-orientations are always high in their levels of education.

B. Comparison of pre-training and post-training knowledge score :

Detail informations such as mean knowledge scores, standard deviations and co-efficient of variations in pre-training and post-training knowledge of the trainees are appended in the Table 1.

Table 1. Comparison of pre-training and post-training knowledge scores.

Evaluation	No. of trainees	Total scores	Mean scores obtained by trainees	S.D.	C.V. (%)	t-values
Pre-training	26	15	4.4	1.6	37.2	
Post-training	26	15	8.3	2.4	29.4	9.2 ***

Prior to training, trainee farmers had 29.1% of minimum required knowledge on STP. After training it was found at 55.3 almost double that of pre-training level, but still far below that set for minimum. This was mainly for duration i.e. only 1-day training was not considered enough by the trainee. Increase of knowledge was found highly significant at .001 level of probability. Variation of knowledge scores which was high in pre-training test (37.2) was found to reduce considerably in post-training knowledge (29.4). Similar results were published elsewhere (Islam, 1988; Kashem and Hossain, 1989). This indicates that training if properly planned and organised not only increases knowledge of the trainees but also reduces knowledge gap between the trainees. Significant increase of knowledge in post-training test compared to pre-training bench mark was also reported elsewhere (Jha and Sharma, 1973; Kashem and Hossain, 1989.)

C. Relationship of age and education with knowledge :

Zero-order correlation analysis results between age and education of the trainees with their pre-training and post-training knowledge scores are mentioned in the Tables 2 and 3.

Table 2. Relationship of age and education with pre-training knowledge.

Independent variables	Correlation "r" values	t-Values
1. Age	-0.2227	-1.247
2. Education	0.4287	2.3246*

Simple correlation analysis (Table 2) shows that among two independent variables, education has significant positive relationship with pre-training knowledge scores at 0.05 level of probability. This reveals that as the level of education increases, level of knowledge on STP also increases. This is a widely known phenomenon that educated persons use more sources of information, possess higher comprehension ability than those having low or no education. Several research findings support this view. (Hoffar and Stangland, 1958; Somasundaram and Singh, 1978; Grewal, 1980; Bezborra, 1980; Ali *et al.*, 1986). The other independent variable age though exerted no significant relationship with pre-training knowledge, but the relationship is negative. This reveals that higher the age of respondents, lower the knowledge regarding any particular innovation. Negative relationship of age with knowledge also reported by Bezborra (1980) and Ali *et al.* (1986).

Table 3. Relationship of age and education with post-training knowledge.

Independent variables	Correlation "r" values	t-Values
1. Age	-0.0888	-0.4363
2. Education	0.6233	4.9934 ***

In case of post-training knowledge (Table 3), level of education was found significantly correlated to knowledge, but with higher strength (0.001 level of probability) compared to pre-training scores. Here also age showed no significant relationship, but the trend was negative.

D. Reactions of the trainees about the training :

Reactions on different aspects of the training programme as mentioned by the trainee are mentioned in the Table 4.

Table 4. Reactions of the trainee about different aspects of the training course.

Areas of Course Evaluation	No. of trainee participated		
	Yes	No	No comment
1. Duration of the course was right.	1	25	—
2. Training materials used were appropriate	26	—	—
3. Visit to STP demonstration plots increased your confidence on STP as a superior technology.	26	—	—
4. Trainers' language in the classroom was easily understood.	24	—	2
5. Will you cultivate atleast a portion of your cane by adopting STP ?	23	1	2
6. Do you think that this training will be useful for you ?	26	—	—

Table 4 shows that most of the trainees were dissatisfied with the course duration. In an informal discussion after the post-training evaluation, most of the trainees suggested a 3-day duration training programme. Adults are unwilling to stay more than 3 d away from their workings place. Most of the trainees expressed their desire that they should be trained at SRTI main station.

The trainees put forwarded an important suggestion that the course duration should be increased to 3 d. This aspect is very important feed-back to the organisers of the training courses and must have to be given due consideration in order to achieve maximum benefit of training.

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