



Agricultural Extension
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Evaluation of youth training on agriculture offered by two selected youth training centers of Bangladesh

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ABSTRACT

This study was conducted to describe the training achievement of the participants, and problems faced by them during and after the training through descriptive survey research. The training achievement was determined based on difference between the score of pre and post training evaluation score. The mean of pre training score was 21.2% and post training score 71.60% that indicates the training was effective in terms of training achievement. The training was mainly arranged for unemployed youth that had lack of proper knowledge for self-employment and development. During training, the participants faced many problems such as lack of modern laboratory, budget comes after training, lack of permanent library, lack of sufficient credit facilities after training, food and accommodation condition of the hostel and poor training allowance. The trainees were also suggested for probable solutions of the problems faced during their training and sufficient need based training should be arranged in future for creating efficient manpower.

Keywords: Training, score, youth, problems

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1 Introduction

Bangladesh is an agro-based densely populated country. With this increasing population the opportunity of employment is decreasing day by day in the country. The economy of Bangladesh mainly depends on agricultural product. Our traditional agricultural system is not being able to fulfill 21st century's demand. That's why in present condition the vital needs are to

acquaint with modern improved technology and new policy. Youth make up a substantially higher proportion of the labor force in developing countries than in industrialized economies (Blanchflower and Freeman, 1999). Skilled manpower is crucial factor for the economic development of the country. Youth develop the knowledge and skills to demonstrate leadership and participate in community life through training. Youth development is best promoted through activ-

ities and experiences that help youth develop competencies in social, ethical, emotional, physical, and cognitive domains (Eccles and Gootman, 2002; Roth and Brooks-Gunn, 2003).

Bangladesh has been realizing the truth of youth training with the financial and moral support of national and international organizations since 1982. Training among the vagrant school dropout youth and women of both urban and rural areas are provided for various sectors like nursery, fisheries, livestock, forestry and veterinary (Anonymous, 1993). Youth development means mainly the welfare of the youth and providing them with guidance, education, training and employment. Within the age group of 15-30 years the youth constitute over 30% of the population of Bangladesh. Around 80% of this age group lives in rural areas. In 1991, the youth accounted for 40% of total labor force of the country and the ratio for males 36.7 and for females 45.8. The youth being the most energetic, creative, dynamic and innovative segment of the labor force, however, was not considered in the past as a special group for which the government could plan employment promotion programs for sustainable development (BBS, 1991).

The Department of Youth Development (DYD) provide vocational education and training to the underemployed and unemployed youth for their gainful employment and enhanced opportunities for income generation. The main objectives of youth development programs of the government are to encourage the youth for gainful self employment through motivation, skill training, micro credit and other necessary input support.

Now, youth development programs of the government have been expanded to 470 upazilas. The DYD imparts residential training on livestock, poultry rearing and pisciculture to unemployed youths of the rural areas. 250,000 unemployed youths are now given skill development training annually on various trades through 297 training centers in 64 districts. Different activities are also being pursued through youth clubs and these include empowerment of rural women, environmental protection, poverty alleviation, health care of mother and child and raising awareness about effects of high rate of growth of the population (Ahmed, 2001). Mitchell (1982) has indicated that training is basically a teaching and learning process. It is an attempt by the clientele organization to change the behavior of its members through this process in order to increase their efficiency (Bhuiyan, 1987). Henrichs (1976) defined training as “a systematic intentional process of altering behavior of organizational members in a direction which contributes to organizational effectiveness”. So, this study was conducted to evaluate the effectiveness of the training program, to find out the probable solutions of the problems. Thus, this study is expected to be useful for the planners, policy makers and the administra-

tors associated with youth training center, as well as to describe the training achievement of the participants, their perception of training utilization, problems faced by them during and after the training

2 Methodology

This study was designed to describe the training achievement of the participants, their perceived training utilization, problems faced by them during and after the training. The locations of study were Youth Training Center (YTC) of Bagerhat and Jessore. The study was based on the participants of the center who were engaged for three months training on livestock, poultry, fisheries and nursery. Data were collected from randomly selected 115 YTC training participants from both centers through questionnaire survey and secondary source of data was YTC office records. A questionnaire containing both open and close ended questions was designed and used to collect the needed information from the respondents. The questionnaire included questions about the socio-demographic characteristics of the respondents, effectiveness of the training and problems faced by them during training. To measure the perceived training utilization of the respondents, a 4-point Likert-type scale indicating high, medium, low and no utilization was used. The review of literature and conceptual framework of this study provided the basis for developing the instrument.

Each of the 115 randomly selected respondents was given a questionnaire just after the opening of the training. The respondents were ascertained about the confidentiality of their responses and that their responses would be used for study purpose only. They were encouraged to complete and return the questionnaire. After three months of training, same questionnaire was also given to the respondents for post-evaluation and another questionnaire facing the problems. But after going through the secondary data, it was found that out of these 115 respondents responded, nine left the training and six didn't take part the examinations. So, these 15 samples are discarded from the sample and thus 100 trainees constituted as the sample of the study.

2.1 Measurement of socio-economic and demographic characteristic of respondents

Age of the respondents

Age means the tenure of life from the date of birth to the date of interview. It was measured in terms of actual years. According to their age they are categorized into three groups, young (<30 years), Middle aged (30-45 years), old (>45 years).

Level of Education

The level of education was measured in terms of years of schooling. For example a person could score of five if he passed class five. Those who do not read and write they could score of '0'. But there were no illiterate trainees. Based on educational score, the respondents were classified into following categories such as Primary education (I-V), Secondary education (VI-X), Higher secondary (XI-XII) and Above Higher Secondary education (>XII).

Family Education of the respondents

The family of the respondents means the average education of all his family members who live under same roof and share same kitchen. The family education of the trainees was determined by using the following formula

$$\text{Family Education} = \frac{\text{Total education score}}{\text{No. of family members}} \quad (1)$$

It should be notable that the individual education score was determined by the same way as defined in section 3.2. By summing up the educational score of all the members of trainee's family, the total educational score of the family was determined. Based on the average score of family education the respondents were also classified into different categories as described in section 3.2.

Cosmopolitanism of the respondents

Cosmopolitanism refers to the external orientation of the respondents other than social system. To determine the cosmopolitanism of a respondent a 4–points scale such as often, sometimes, occasionally and not at all was employed against each of the places of visit and a score 3, 2, 1 and 0 were assigned against the scales respectively. By summing up scores against all of the places of visit, the cosmopolitanism score of the respondent were classified into different categories No cosmopolitanism (0), Low cosmopolitanism (1-5), Medium cosmopolitanism (6-10) and High cosmopolites (>10).

Contact with others

Contact means the communication of respondent with persons of different levels. To determine the contact with other persons a 4–points scale such as often, sometimes, occasionally and not at all also was employed against each of the persons of different level. A score of 3, 2, 1 and 0 were assigned against each of the scales. By summing up all the scores obtained against each of persons of different level, the contact score of the respondent was determined. Based on the contact score of the respondents were classified

into four categories No contact (0), Low contact (1-23), Medium contact (24-46), High contact (47-69).

Annual income of the respondents

The annual income of the respondents referred to the annual earnings of the respondents through farming, services, business and others. The annual income of the respondents was determined in taka by summing all the income from the different sources. A score of 1 was assigned for 1 thousand taka. For example a person earned 25 thousand taka from different sources in a year his annual income is 25. Based on the income score the respondents were classified into different categories such as Low income (25 thousand), Medium income (25-50 thousand) and High income (>51 thousand).

Achievement of the training

Training achievement means the improvement of the respondents' knowledge and skills in different areas of agriculture. To determine the achievement of training 49 questions were asked to the respondents before and after training. The achievement of the training was determined by the following formula:

$$\text{TA} = \text{SAT} - \text{SBT} \quad (2)$$

where, TA=Training Achievement, SAT=Score after Training, SBT=Score Before Training.

Problems faced by the respondents

The problems of the respondents ascribed in the questionnaire schedules that were faced at the training period. Twenty pre-selected problems were asked to the respondents and the respondents indicated the severity of the problems. The Problems Confrontation (PC) scores were determined by three categories - Low PC (0-20), Medium PC (21-40) and High PC (41-60).

Probable solutions collected from the respondents

The trainees were expressed their personal opinion for solving the faced problems during the training. Their expressions were categorized as response and non-response scores and their suggestions were determined through percentage.

2.2 Data processing and analysis

The collected information was compiled systematically and sequentially for explanation of result.

3 Results and Discussion

The findings of the study are described in three major sections:

- Socio-economic and demographic characteristics of the respondents
- Effectiveness of the training
- Barriers to effectiveness

3.1 Socio-economic and demographic characteristics of the respondents

Age, level of education and family education

The age of the respondents varied from 25-50 years with an average of 23.85 and standard deviation 0.051 age. The educational score of the respondents ranged from 0 to 13 with an average score of 10.34 and a standard deviation of 0.028. The family education includes the family members of the respondents and categorized as like as respondents education as illiterate (0), primary education (1-5), secondary education (6-10), higher education (11-12), and above higher education (13 and above) with an average 7.42 and standard deviation 0.009 were shown in Table 1.

From the Table 1 it was found that most of the respondents (85%) were young while only 14 percent of the respondents were middle aged. [Frio \(1976\)](#) found that age was associated with knowledge and perception. Only one respondent was old. Data represented indicate that most of the respondents (88%) had Secondary to Higher Secondary level of education while only 12 percent had higher education. It was very likely that a person with higher level of educational attainment might have acquired higher knowledge and perception of any matter ([Bhuiyan, 1987](#)). None of the respondents were illiterate and possessed primary education. These data represented that 56% had Secondary education and minimum education of the family members had 12%. The findings indicate that the training was mostly arranged for young people and the authority that imparted training considered educational level in selecting trainees.

Cosmopolitanism, contact with others and income

The cosmopolitanism score of the respondents varied from 0 to 10. The mean cosmopolitanism score and standard deviation were 6.04 and 0.005 respectively. The score of the respondents ranged from 0 to 69 with an average of 19.18 and standard deviation was 0.038. The annual income of the respondents ranged from Taka 10 to 150 (thousands). The respondents belong to the income score (thousands) with the average of 37.98 and the standard deviation was 0.120. The distribution of respondents based on organizational participation score, cosmopolitanism of the respondents and

contact with others of the respondents were shown in Table 2.

The data represented in Table 2 indicates that most of the respondents (90) were in medium to low cosmopolitanism category. This finding reveal most of the respondents had cosmopolite behavior with a good external orientation to other than own social system. In case of contact with others, the most (94%) of respondents had low to medium contact with various person. It means that most of the respondents try to maintain a relation with persons of different categories. Data presented in Table 2 shows that majority of the respondents (44%) had medium to high and only one-third of the respondents had low income. It means that majority of the respondents were solvent and the solvency would help them to utilize the knowledge and skills gained through training.

3.2 Effectiveness of the training

As training is a teaching-learning process, the trainees must acquire new knowledge and skills from it. This is the first condition of a training program to be effective. So, effectiveness of a training program depends on training achievement. Training achievement has been operationally defined as improvement in the knowledge and skill level of the participants as result of the training. [Reiss \(1971\)](#) pointed out that educational attainment greatly influences both knowledge and perception. The knowledge score of the respondents varied from 4 to 56 with an average of 21.2 and standard deviations was 0.015 before training while it was 56 to 92 with an average of 71.6 and standard deviation was 0.272 after training.

[Islam \(1992\)](#) conducted a study to evaluate the efficiency of the training course, which was assessed by the participants to perform their duty efficiently. Evaluation of pre- and post-training was done to find out effectiveness of the training and the result indicated a highly significant difference. From the Table 3 it was found that all the respondents (100%) had low to medium knowledge before training. Before training none of the respondents possessed high knowledge but after training majority (75%) of the respondents secured high knowledge (78.95). The difference between the pre- and post-training respondents' knowledge score was 50.4% that indicate remarkable achievement of training. The results from the quantitative evaluation suggest the training programme was highly successful and well-received by participants. Results of the qualitative evaluation components will be presented elsewhere. It has enriched knowledge, social bond and cosmopolitanism of the respondents that will ensure better socio-economic life.

Table 1. Distribution of respondents according to their age score, level of education and their family education scores

| | Categories | Respondents (%) | Total |
|--------------------|---------------------------------------|-----------------|-------|
| Age score | Young (<30) | 85 | 100 |
| | Middle aged (30-45) | 14 | |
| | Old (>45) | 1 | |
| Level of education | Primary education (1-5) | - | 100 |
| | Secondary education (6-10) | 73 | |
| | Higher education (11-12) | 15 | |
| | Above higher education (13 and above) | 12 | |
| Family education | Illiterate (0) | - | 100 |
| | Primary education (1-5) | 26 | |
| | Secondary education (6-10) | 56 | |
| | Higher education (11-12) | 13 | |
| | Above higher education (13 and above) | 5 | |

Table 2. Distribution of participants based on cosmopolitanism, contact with others and income (thousand)

| Head | Categories | Respondents (%) | Total |
|---------------------|-------------------------------|-----------------|-------|
| Cosmopolitanism | No cosmopolitanism (0) | 4 | 100 |
| | Low cosmopolitanism (1-5) | 37 | |
| | Medium cosmopolitanism (6-10) | 53 | |
| | High cosmopolitanism (>10) | 6 | |
| Contact with others | No contact (0) | 6 | 100 |
| | Low contact (1-23) | 56 | |
| | Medium contact (24-46) | 38 | |
| | High contact (47-69) | - | |
| Respondents' income | Low income (<25) | 34 | 100 |
| | Medium income (25-50) | 44 | |
| | High income (>51) | 22 | |

Table 3. Distribution of respondents according to their knowledge scores

| Categories | Pre-training | | | Post-training | | | Achievements |
|--------------------------|--------------|-------|------|---------------|-------|------|--------------|
| | Number | Score | Mean | Number | Score | Mean | |
| Low knowledge (<40) | 96 | 20.27 | | 3 | 32.16 | | |
| Medium knowledge (40-59) | 4 | 43.43 | 21.2 | 22 | 51.93 | 71.6 | 50.4 |
| High knowledge (>60) | 0 | 0 | | 75 | 78.95 | | |
| Total | 100 | | | 100 | | | |

Table 4. Rank order of problem based on their severity from respondents’ perception

| Sl. no. | Name of problems | Severity score | Rank order |
|---------|---|----------------|------------|
| 1 | Budget comes after training | 270 | 3 |
| 2 | 100 students in the single classroom | 151 | 20 |
| 3 | More number of students in each room | 249 | 6 |
| 4 | Food condition of the hostel | 253 | 5 |
| 5 | Lack of modern laboratory | 273 | 2 |
| 6 | Duration of training for three months | 226 | 9 |
| 7 | Lack of necessary field inspection | 201 | 12 |
| 8 | Lack of sufficient credit facilities for the establishing dairy farm, poultry farm and fish culture | 190 | 15 |
| 9 | Teacher’s Insufficiency | 177 | 17 |
| 10 | Lack of vehicles and systems of communication | 220 | 11 |
| 11 | Lack of sufficient credit facilities after training | 282 | 1 |
| 12 | Monthly allowance 500 Taka per trainee/month | 247 | 7 |
| 13 | Increasing the area of YTC | 167 | 19 |
| 14 | Advertisement for training | 179 | 16 |
| 15 | Lack of permanent library | 263 | 4 |
| 16 | Lack of training manual | 198 | 14 |
| 17 | Lack of modern teaching aid and furniture | 223 | 10 |
| 18 | Lack of security | 200 | 13 |
| 19 | Lack of recreation and sports | 235 | 8 |
| 20 | Lack of journals and newspapers | 168 | 18 |

3.3 Barriers to effectiveness

Huda (1992) found that the course contents were of high standard and academic in nature during evaluation of a training, that reflected more on the academic proficiency rather than problem solving capability of the trainees. Some of the lecture notes were of academic values but they were hardly adequate to enable the trainees to address their own problems. During the training program, the respondents faced various problems that are shown in Table 4. Major problems were – lack of credit facility after training, lack of modern library, budget comes after training, lack of permanent library, food condition of the hostel, accommodation problems, monthly allowance 500 Taka per trainee. It was evident that most of the problems mentioned were not directly related to the knowledge gathering process (lack of credit facility after training, lack of modern library, budget comes after training, lack of permanent library, monthly allowance 500 Taka per respondent). But, these problems might have affected the program. These problems could be avoided if these were identified on-going evaluation and proper efforts were given to solve them by YTC. However, these were only the feelings of the respondents (i.e. trainees) and thus require further investigation. The other problems mentioned by the respondents and their severity score mentioned the problems were – lack of recreation and sports (235), duration of three months (226), lack of modern teaching aid and furniture (223), lack of vehicles and

systems of communications (220), lack of necessary field inspection (201), lack of security(200), lack of training manual (198), lack of credit facility for establishing dairy farm poultry farm and fish culture (190), advertisement for training (179), insufficiency of teachers (177), increasing area of YTC (167), and 100 students in the single classroom (151). Rank order of problem based on their severity from respondents’ perception shown in Table 4.

The respondents faced different problems in various severities ranged from 0-60 and categorized the problems into three groups as Low PC (0-20), Medium PC (21-40) and High PC (41-60) with the average 42.24 standard deviation 0.017. Distribution of trainees according to their problem confrontation score shown in Table 5. These data represent that maximum (66%) respondents faced high problem and 34% faced medium problem.

Table 5. Distribution of respondents according to their problem confrontation (PC) scores

| Categories | Respondent no. | Percentage |
|-------------------|----------------|------------|
| Low PC (0-20) | - | - |
| Medium PC (21-40) | 34 | 34 |
| High PC (41-60) | 66 | 66 |

Probable solutions from the trainees

Due to the economic insolvency of the country, it was not always possible to solve the monetary problems.

Table 6. Distribution of respondents according to their response to the problems and the suggestions score

| Sl. No. | Non-response | Response | Suggestions | Percentage |
|---------|--------------|----------|--|------------|
| 1 | 19 | 81 | Coming out the budget within a short period | 51 |
| 2 | 36 | 64 | Increase the spacing of the classroom | 38 |
| 3 | 17 | 83 | Reducing the number of students | 39 |
| 4 | 23 | 77 | Increases the allowances | 35 |
| 5 | 19 | 81 | Establishment of more number of laboratories | 20 |
| 6 | 30 | 70 | Increasing the duration of training | 44 |
| 7 | 35 | 65 | Field observation area may be increased | 25 |
| 8 | 34 | 66 | Budget may be increased | 15 |
| 9 | 37 | 63 | Number of efficient teachers required / Assistant teachers may be appointed | 40 5 |
| 10 | 27 | 73 | Transportation facilities is necessary for the trainees | 7 |
| 11 | 4 | 96 | Providing sufficient amount of loan rapidly | 41 |
| 12 | 9 | 91 | Increase the allowances / trainee | 40 |
| 13 | 33 | 67 | Increase the area of YTC's in every district | 22 |
| 14 | 41 | 59 | Publishing in Daily Newspapers / Miking in every district town | 23 4 |
| 15 | 26 | 74 | Establishment of library with more number of books | 34 |
| 16 | 43 | 57 | Providing improved training manuals according to the demand | 18 |
| 17 | 32 | 68 | Providing modern teaching aid and furniture with expert personnel | 19 |
| 18 | 28 | 72 | Security guard may be provided / Night guard may be appointed | 15 8 |
| 19 | 19 | 81 | Area for play ground should be provided | 19 |
| 20 | 47 | 53 | Providing more numbers of newspapers and journals | 11 |

But obviously there were other problems that could be solved without much difficulty. The participants attended to express their opinion on the basis of the problems though the questionnaire categorized as response and non-response. The suggestions that were collected from the trainees kept records for further training program to reduce the problems. Distribution of respondents according to their response to the problems and the suggestions were shown in Table 6. The data represent that higher number of participants' (96) had response to the problem against lack of sufficient credit facilities after training, the participants' (91) had response to the monthly allowance 500 Taka per trainee/month. More number of students in each room was another severe problem where the participants had expressed their opinion in a higher score of 83. However, the higher non-response score was (47) against the problem of the lack of journals and newspapers. All the participants did not attend to give the suggestions for further training program. The participants were given to their opinion against the problems and the higher number of respondents (51%) was suggested for coming out the budget within a short period, 44% of the respondents were suggested for increasing the duration of training and 41% of the respondents were suggested for providing sufficient amount of loan rapidly. The respondents were desired to solve the problems for creation of suitable

environment for future trainees who were able to take necessary knowledge from the training.

4 Conclusion

From the study it is concluded that the training is very essentials for the development of manpower especially youth development and it was found effective in terms of training achievement based on difference between the score of pre and post evaluation score. In various demographic parameters of the respondents obtained through research survey by questionnaire. The respondents demand the suitable environment for future trainees to solve their problems obtaining necessary knowledge from the training. So, sufficient need based training should be arranged in future for creating efficient manpower that ensure sustainable development of agriculture in Bangladesh.

Conflicts of Interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

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