

PERCEIVED EDUCATION NEEDS OF THE YOUNG FARMERS IN GAZIPUR DISTRICT

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Abstract

Sound educational planning requires that efforts be made to determine the educational level or knowledge of the people for whom the program is being planned. The omission of this important planning step can result in program which could have ineffective and inefficient use of valuable human and monetary resources. With this end in view this study was designed to identify the perceived educational needs of farmers and the sources from which they can obtain new information.

A selected geographical area in Gazipur district was considered for the study and the population were all the farmers in this area between the age of 20 and 40 years. A multistage sampling procedure was used to select 174 farmers. Valid and reliable instrument was to collect pertinent data from the respondents.

The findings revealed that regardless of the farming situation or demographic characteristics, farmers perceived their level of agricultural knowledge as similar; extension agents were an important source of new agricultural information; farmers viewed educational institution with agricultural courses as places where their successors should learn the skills needed for farming; agricultural mechanics was the area where farmers possessed the least knowledge and where the greatest educational needs existed; farming was still a full time activity for most of the farmers and farmers basically possessed a limited formal education.

Key words: Perceived Education Need, Farmers.

Introduction

Efficient educational planning needs to determine the educational level or knowledge of the people for whom the program is being

planned. The omission of this important planning step can result in programs which could lead to ineffective and inefficient use of valuable human and monetary resources.

Developed countries make regular use of educational need studies to assess current level

of knowledge of those who are engaged in agricultural production. Developing countries are also conducting studies to pinpoint areas of greatest educational needs. Tayler (1987) said that some education was needed for most of the job done by the farmers. Without education/knowledge the farmers are unable to adopt improved farm practices. Hossain and Leagans (1961) and Patil and Kale (1972) also

accentuated the needs of education for the farmers. However, review of literature indicated that neither the educational needs of farmers have been determined nor has there been an instrument developed to assess the educational needs of farmers. The lack of efforts to identify educational needs of farmers in Bangladesh has serious implication for future planning on the part of the extension service with agricultural education institutions as well as for the welfare of agricultural economy and individual farmers. With this end in view the

Therefore, it is necessary to understand the actual educational level of the farmers. With this end in view the present study was designed to 1) determine the demographic characteristics of the farmers; 2) collect and analyze data regarding the perceived educational needs of farmers; 3) determine if correlations exist between the ratings of perceived educational needs and variables such as socio marital status, year of farming, educational level and farming status; and 4) identify the sources that farmers used to obtain new agricultural information.

Methodology

A selected geographical area (Mirzapur union) in Gazipur district was used for the study and the population for the study was all farmers living in this area between the age of 20

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and 40-60 years. There were 29 villages in Mirzapur union and seven villages were randomly selected. The names of the farmers in each village were collected from registers maintained by the Local Union Council Office and Block Supervisors. The total number of farmers selected for the sample was 174. M. Dewar Hossain

The instrument used in the study was developed by the researcher and pilot tested with farmers outside the study area and appropriate revisions were made after the pilot test. Data collection took 44 days from 10 June to 14 July, 1993. Suitable descriptive statistics and correlational analysis were used for the interpretation of data.

Results and Discussion

The respondents were personally interviewed in their own villages. A detailed demographic description have been included in table 1. Regarding the farming status, about two-thirds (66%) of them were full time farmers. Their average age was 32 years and the majority (58%) had an elementary level of education. Data from the respondents was to collect pertinent data from the respondents

The number of years the farmers were engaged in farming was rather evenly distributed between 5 and 24 years. Only a small percentage of farmers had been in farming for over 25 years. Table 2 summarizes the sources from which the farmers received new agricultural information. The three most important sources

all reported by over one-half of the farmers, were the Block Supervisors, model farmers and friends.

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Table 1. Demographic background of young farmers in the study area of Mirzapur Union

Characteristics	Number	Percent
Farming status		
Part time	50	34
Full time	115	66
Age		
20-25 Years	41	23
26-30 Years	25	14
31-35 Years	41	23
36-40 Years	8	5
Educational level of farmers:		
Vocational or Tech. Educ.	35	20
Elementary	101	58
High School	37	21
College degree	7	4
Years engaged in farming		
Under 5	26	14
5-10	87	48
10-15	33	19
15-20	42	24
Over 25	174	100

The study was designed to measure correlations between the ratings of perceived

analyzed, there were no correlations found between these variables and ratings. In other words, these farmers rated their perceived educational needs similarly, regardless of their demographic characteristics. Thus, the remainder of the data reported in this paper is descriptive in nature. Farmers were asked to indicate their knowledge level in various agricultural specialty areas. The individual mean scores were calculated and the knowledge levels were interpreted in the following manners: 1- excellent knowledge, 2- very good knowledge, 3- good knowledge, 4- fair knowledge, and 5- no knowledge. Those areas in which the knowledge was low would indicate areas of educational need. Specialty areas included in the questionnaire were: rice, cotton, sugarcane, wheat, gardening (Lal shak, tomato, brinjal), orchard, and livestock. General agricultural skills that cut across several specialty areas were also included and these were : soil and fertilizers, agricultural machineries, cooperatives, and farm management. For the purpose of this paper, only those specialty areas in which 50 percent (87) farmers carried out farming activities were reported. Table 3 includes five specialty areas where over 50 percent of the farmers had farming activity. Only the specific agricultural skills with the lowest knowledge were reported as a part of Table 3. For the area of cotton and cereals, the specific skills with the lowest knowledge was variety selections. The farmers possessed the least knowledge was variety selections. The farmers possessed the least knowledge skills in the areas of sugarcane, rice and wheat, however, they exposed good knowledge in controlling rice pests. For the area of orchards, fruit variety selection was the specific skill that farmers had the least knowledge. Findings for all these areas indicated that farmers perceived their knowledge as good.

There were five specific agricultural skills in the area of cooperatives that farmers perceived knowledge was fair. The specific skills were: understanding the terms and conditions of crop and livestock management; understanding the length of loans, understanding the current interest rates; determining the amount of money available from different loan sources, and understanding the terms and conditions of loans. Table 4 summarizes these data.

The farmers perceived knowledge in the area of farm management ranged from good to fair for five specific agricultural skills as reported in Table 5. Using farm records was rated the lowest indicating that farmers perceived knowledge was fair and understanding government programs was rated as the next lowest, indicating only a fair knowledge in this program.

Table 6 summarizes a more serious lack of knowledge of agricultural skills in the area of soils and fertilizers. Taking soil samples was the specific agricultural skill rated lowest, indicating at best a fair knowledge. Farmers also perceived their knowledge as fair in observing deficiency symptoms and planning long time fertilizer programs.

The area where farmers indicated the greatest educational need for agricultural skills was in agricultural mechanics (Table 7). The farmers with a 4.0 or higher, depicted approximately a fair knowledge. In repairing and adjusting agricultural equipment, the mean knowledge level was 4.6, indicating almost no knowledge in this specific skill. Other specific skills and levels of knowledge rating fair were selecting and caring for electric motors (tractor, power tiller and pump DTW, STW and LLP), welding skills, carpentry skills making plow, ladder, hoe and weeder), and operating large agricultural engines.

Table 3. Selected technical agricultural areas and agricultural skills where farmer's perceived knowledge was the weakest

Agricultural area and specific skill	Mean
Orchard-fruit variety selection	3.1
Sugarcane-controlling pests	2.9
Cereals (rice and wheat)- variety selection	2.9
Cotton - variety selection	2.8
Rice (aman, aus and boro) - controlling pests	2.6

Table 4. Farmer's weakest agricultural skills in cooperatives

Agricultural skill	Mean
Understanding the terms and conditions of crop and livestock management	3.7
Understanding the length of loans	3.7
Understanding the amount of interest rates	3.7
Determining the amount of money available from different loan sources	3.6
Understanding the terms and conditions of loan	3.5

Table 5: Farmer's weakest agricultural skill in farm management

Agricultural skill	Means
Using and maintaining farm records	3.9
Understanding the government programs	3.5
Selecting the production enterprises	3.0
Securing adequate financing	2.9
Proper planning for sales and purchases	2.9

Table 6. Farmer's weakest agricultural skills in soils and fertilizers

Agricultural skill	Mean
Taking soil samples for testing	4.3
Observing nutrient deficiency symptoms of soil	3.9
Planning long time fertilizer use programs	3.7
Reviewing and evaluating soil fertility and management developments	3.4
Handling and storing manure	3.4

Table 7. Farmer's weakest agricultural skills in agricultural mechanics

Agricultural skill	Mean
Repairing and adjusting agril. equipment	4.6
Selecting and caring for electric motors	4.4
Welding skills (making plow, ladder, hoe)	4.2
Carpentry skills (making plow, ladder, hoe)	4.2
Pump (DTW, STW & LLP)	4.0
Operating large agricultural engines	4.0

Conclusions

1. Regardless of the farming situation or demographic characteristics, farmers perceived their level of agricultural knowledge as similar.

2. Extension agents are an important source of new agricultural information.

3. Agricultural mechanics was the area where farmers possessed the least knowledge and where the greatest educational needs existed.

4. Farming is still a full time activity for most farmers.

5. Farmers basically possess a limited formal education.

Recommendations

1. Efforts must be made to assure that extension agents are kept up-to-date on the latest agricultural technology and the effective means to disseminate this information.

2. The media of television should be studied to assess its effectiveness in reaching farmers with new information.

3. The opinion leaders be identified in local communities to enhance the dissemination of the latest agricultural information.

4. The extension service and agricultural institutions should begin to formulate plans to meet the needs of the farmers in the area of agricultural mechanics.

5. Additional efforts should be made to inform farmers of the value of agricultural instruction in formal school settings.

6. Further analysis be conducted to determine if differences existing between the ratings of perceived educational needs and a) selected educational experiences such as special educational institutes which were not reflected in the educational level of farmers and b) size of the farms by groups.

7. The instruments used in this study should be used in other geographical areas to assess the educational needs of farmers.

Educational Importance

This type of research dealing with perceived educational needs and comparing how various groups of farmers rate their perceived needs has been rarely conducted in Bangladesh. The conclusions and recommendations from this research will be helpful to the Department of Agricultural Extension, agricultural education institutions, and community development programs of Bangladesh as well as to other developing countries. The results will also be helpful to researchers and educators in agricultural educational institutes.

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