

A Comparison between Organic and Inorganic Farmers' Attitude towards Organic Farming

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Abstract

The main objectives of this research were to compare the attitude of organic and conventional farmers towards organic farming and to relate selected characteristics of the farmers with their attitude towards organic farming. Data were collected from 50 conventional and 50 organic farmers in Delduar upazila under Tangail district during July to October 2006. Nine selected characteristics of the farmers, namely age, educational qualification, family size, farm size, farming experience, annual household income, organizational participation, knowledge on organic farming and extension media contact were the independent variables while attitude of the farmers towards organic farming was the dependent variable. Study revealed 72 percent of the organic farmers possessed highly favourable and 56 percent of the conventional farmers had moderately favourable attitude towards organic farming. Among nine characteristics of the organic farmers, four *viz.* educational qualification, organizational participation, knowledge on organic farming, and extension media contact showed positively significant relationships with their attitude towards organic farming. In case of conventional farmers, educational qualification and knowledge on organic farming had significant positive relationship with their attitude towards organic farming, while age and total farming experience had significant negative relationship with their attitude towards organic farming.

Keywords: Attitude, organic farmers, conventional farmers

Introduction

Organic farming became recognized by farmers, policy makers and consumers as one of the possibilities for the farming in a more sustainable way (Cock, 2005). In such a situation organic farming may be considered as a timely solution for overcoming the impact of conventional agriculture. The concept of organic farming was introduced in

Bangladesh during early 80s. Yet it appears to receive significant level of acceptance to the farmers mainly due to lack of proper policy and cooperation of government functionaries. In the changing context, a number of Non Government Organizations (NGOs) have proceeded towards organic farming. Unnayan Bikalper Nitinirdharani

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Gabeshona (UBINIG) is one of the pioneers in Bangladesh to promote organic farming from the liability to the soil and its people. “Nayakrishi Andolon”, a radical approach of organic farming, initiated by the UBINIG is a giant footstep in the land of organic farming movement in Bangladesh.

To bring about desirable changes among the farmers regarding a practice like organic farming, attitude is a crucial factor. To know much about attitude of the farmers and other related variables no such effort has been taken yet especially to compare the attitude of the farmers involved in organic farming

and conventional farming. Thus, it has become a prime focus of the study to find out the attitude of farmers towards organic farming in two different situations.

Considering the above factors the study has been carried out to fulfil the following objectives:

- To ascertain and compare the attitude towards organic farming between the organic and conventional farmers.
- To explore the relationships between the selected characteristics of the farmers and their attitude towards organic farming.

Methodology

The research work has been conducted in two unions of Delduar Upazila under Tangail district. The village Nallapara was purposively selected as for organic farming village as per the suggestion made by the UBINIG staff, while Jalalia village was selected for getting sample for conventional farmers. Jalalia village is located about eight kilometers from Nallapara village. This distance was maintained to exclude the practice effect illuminating the view of comparison between the attitude towards organic farming by the farmers of two villages. From 128 households, 50 households were randomly selected in Jalalia for conventional farmers and 50 households were selected from 350 households in Nallapara for organic farmers.

In the present study, nine selected characteristics were selected as the independent variables. These were: age, education, family size, farm size, farming experience, annual household income,

organizational participation, farmers' knowledge on organic farming, extension media contact.

Attitude towards organic farming was undertaken as the dependent variable. To assess farmers' attitude towards organic farming, 16 attitudinal statements were considered of which eight were positive and the rest were negative. A five-point scale was used following the Likert (1932) method of summated ratings to measure attitude of the farmers that ranked as “strongly agree”, “agree”, “no opinion”, “disagree” and “strongly disagree”. In case of a positive statement a score of five (5) was assigned if the answer was “strongly agree”, four (4) for “agree”, three (3) for “no opinion”, two (2) for “disagree” and one (1) for “strongly disagree”. It was reverse in order in case of a negative statement i.e. one for “strongly agree” and five for “strongly disagree”. The respondents were asked to answer each statement with reference to the five-point

scale. The score for attitude towards organic farming was computed by summing the scores obtained from each statement. The highest possible score could be 80 and the lowest 16. The highest score would indicate the most favorable attitude towards organic farming, while the lowest would indicate the most unfavorable attitude.

Data were collected during July to October 2006. Descriptive statistics were used to

describe the data. Pearson's Product Moment Correlation Co-efficient (r) was computed to explore the relationships between the selected characteristics of the farmers and their attitude towards organic farming. To determine the difference between two farming groups i.e. organic farmers and conventional farmers regarding the selected characteristics and attitude towards organic farming, t-test was done.

Findings and Discussion

Farmers' Attitude towards organic farming

Attitude score of the organic farmers ranged from 67 to 80 with an average of 73.50 and a standard deviation of 3.75. On the contrary,

the attitude score of conventional farmers ranged from 49 to 74 with a mean of 60 and a standard deviation of 6.06. The distribution of the farmers according to their attitude is shown in Table 1.

Table 1. Distribution of respondents according to attitude towards organic farming

Farming group	Range		Categories	Respondents (%)	Mean (St. Dev.)	t value
	Possible	Observed				
Organic farmers	16-80	67-80	Highly unfavourable (≤ 23)	0	73.50 (3.748)	13.395 ($p < 0.01$)
			Unfavourable (24-39)	0		
			Neutral (40-55)	0		
			Favourable (56-71)	38		
			Highly favourable (> 71)	62		
Conventional farmers	16-80	49-74	Highly unfavourable (≤ 23)	0	60.00 (6.06)	
			Unfavourable (24-39)	0		
			Neutral (40-55)	26		
			Favourable (56-71)	70		
			Highly favourable (> 71)	4		

Majority of the organic farmers (62 percent) possessed highly favourable attitude where the majority of conventional farmers (70 percent) possessed favourable attitude towards organic farming. The standard deviation in conventional farming is higher than the organic farming group, which means that conventional farmers vary more among themselves regarding attitude towards

organic farming than that of organic farmers. The difference in attitude between two farming groups was statistically significant as indicated by the t-test. The organic farmers attended several training programs on organic farming. Their skills and knowledge of organic farming had been improved. Besides, they had been performing organic farming for several years and harvesting

better yields. Thus, their attitude towards organic farming had been gradually tended to be more favourable than the conventional farmers who merely knew something about organic farming. The conventional farmers were used to apply cowdung, ash and some other organic means of fertilization and pest control, but they did not exactly know these are the elements of organic farming. They

wondered whether it is possible to grow crops with carefully excluding chemical fertilizers and pesticides i.e. through organic farming. As they did not have the clear idea about organic farming and were familiar to the traditional farm practices, they had less favourable attitude towards organic farming than that of the organic farmers.

Characteristic profile of the farmers

An outline of the nine selected characteristics of the farmers has been presented in the

Table 2. To avoid jumbling the table has been provided with only the mean, standard deviation and concerned 't' values.

Table 2. Characteristic profile of the farmers

Characteristics (Measuring unit)	Observed score range		Mean (Standard Deviation ¹)		t value
	Organic farmers	Conventional farmers	Organic farmers	Conventional farmers	
Age (Years)	17-70	16-80	42.56 (13.17)	47.90 (14.16)	-1.953
Education (Years of schooling)	0-11	0-12	3.80 (4.30)	3.84 (3.69)	-0.050
Family size (No. of members)	2-14	3-14	5.12 (2.55)	5.88 (2.42)	-1.530
Farm size (Hectares)	0.12-1.68	0.11-3.67	0.48 (0.37)	0.62 (0.59)	-1.387
Farming experience (Years)	5-55	5-60	29.56 (13.12)	32.96 (14.57)	-1.226
Annual household income (In Tk.'000)	25-528.5	11.1-353.10	111.28 (110.72)	95.16 (64.71)	0.889
Organizational participation (Years)	3-22	0-26	9.10 (4.17)	5.54 (7.35)	2.976**
Knowledge on organic farming (Scores)	30-45	22-40	38.44 (3.20)	27.58 (3.52)	15.399**
Extension media contact (Scores)	10-23	3-20	15.70 (3.18)	9.34 (2.89)	10.460**

¹Figures in the parentheses indicate standard deviation, **Significant at .01 level of probability

Table 2 shows that organic farmers had higher level of knowledge, more organizational participation and extension media contact which were statistically significant. This variation perhaps led the organic farmers to form a favourable attitude towards organic farming. Organic farmers

were found to have greater organizational participation especially with the UBINIG wherefrom they were motivated towards organic farming and practiced it which left positive consequences and formed favourable attitude towards organic farming. On the other hand, the conventional farmers had low

organizational participation. Moreover, the organizations, they were involved with were mainly the credit providing and cooperatives, wherefrom they have had no such orientation on organic farming. Consequently, the conventional farmers were found to have moderately favourable to favourable attitude

towards organic farming. Organic farmers had more contact with extension media which might have enriched their knowledge on organic farming which hopefully helped to form a favourable attitude towards organic farming.

Relationship between Farmers' Selected Characteristics and their Attitude

To explore the relationship between the farmers' selected characteristics and their

attitude towards organic farming, Pearsons's Product Moment Correlation Co-efficient (r) was used. Summarized results of the correlation test are shown in Table 3.

Table 3. Relationship between dependent and independent variables

Selected characteristics of the farmers (independent variables)	Correlation Co-efficient (r) with 48 df	
	Organic farmers	Conventional farmers
Age	-0.037	-0.391 **
Education	0.517 **	0.865**
Family size	-0.024	0.085
Farm size	0.147	0.132
Farming experience	-0.068	-0.373**
Annual household income	0.122	0.080
Organizational participation	0.390 **	-0.033
Knowledge on organic farming	0.343*	0.697**
Extension media contact	0.418**	0.275

* Significant at 0.05 level of probability, ** Significant at 0.01 level of probability

The Table shows that farmers' education, organizational participation, knowledge on organic farming, and extension media contact had significant and positive relationship with their attitude towards organic farming in case of organic farmers while education and knowledge on organic farming had

significant and positive relationship with their attitude towards organic farming in case of the conventional farmers. On the other hand, age and farming experience of the conventional farmers had significant negative relationship with their attitude towards organic farming.

Conclusions

Findings of the study indicate that organizational participation, knowledge on organic farming and extension media contact of the organic farmers were helpful for them

to form highly favourable attitude towards organic farming. Most of the conventional farmers were old aged and having more farming experience which influenced them to

form moderately favourable attitude towards organic farming. Extension media contact played an important role on formation of favourable attitude towards organic farming. GO and NGOs should encourage the farmers through motivational campaign to increase organizational participation of the farmers

with relevant organization so that their knowledge, attitude, skill and abilities are further sharpened. Programs related to organic farming should be launched by the concerned agents aiming the educated farmers.

References

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