

FARMER'S LEVEL MOTIVATION OF SUNFLOWER CULTIVATION IN A RICE BASED CROPPING PATTERN OF PATUAKHALI DISTRICT

ABSTRACT

Aims: The aim of the study was mainly to determine and describe the extent of the motivation of sunflower cultivation and also explore relationship between the 12 selected characteristics of the farmers with motivation of sunflower cultivation.

Study Design: The study was designed with mixed method approach where, both qualitative and quantitative analyses are blended in a rational way to have a deeper understanding about research problems.

Place and Duration of the Study: The study was conducted in Dumki and Patuakhali Sadar Upazilla of Patuakhali district, Bangladesh. The whole period of the study was six months from 01 January to 30 June 2016.

Methodology: Simple random sampling technique was used to select 110 farmers engaged in sunflower cultivation. In addition case study, focus group discussions, Key informant interviews were used to collect data. Data was collected by face to face interviews. Data was analyzed using descriptive statistical measures and computer software like SPSS.

Results: Pearson's Product Moment coefficient of correlation results showed that out of 12 independent variables, the correlation coefficients of 7 variables had positive and significant relationship with their motivation of sunflower cultivation. Multiple regression analysis showed that training experience, innovativeness, and sunflower cultivation knowledge had significant contribution towards motivation of sunflower cultivation.

Conclusion: Training, Contact with various sources of information, Organizational participation of the farmers was vital predictors. These predictors need further investigations.

Keywords: Motivation, Sunflower cultivation, Cropping pattern, Food security.

1. INTRODUCTION

Motivation refers to "the reasons underlying behavior" (Guay et al., 2010, p. 712). Broussard and Garrison (2004) broadly define motivation as "the attribute that moves us to do or not to do something". According to Luthan (1998), motivation can be defined as, "a process that starts with a physiological deficiency or need that activates a behavior or a drive that is aimed at a goal incentive. Olatidoye (2008) asserted that it is motivations that make farmers to contribute effectively to the progress of agriculture, thereby enhancing food security. Akintoye (2000) asserted that money remains the most significant motivational strategy. According to him, money possesses significant motivating power in accomplishing a task.

In view of the importance of motivation the present study had been undertaken. Now a great number of people in Patuakhali district are involved in sunflower cultivation. But its benefit had remained unknown for many farmers. So it is important to motivate the unmotivated farmers. Moreover the research related to motivation of sunflower cultivation at coastal region is rare in Bangladesh. By considering all this reasons this study had been conducted. The objectives of this study were as follows:

1. To determine and describe the extent of farmers' level motivation of sunflower cultivation;
2. To determine and describe some selected characteristics of the farmers as follows:
(age, education, sunflower cultivation experience, area under sunflower cultivation, training experience, farm size, annual income, communication exposure, cosmopolitaness, organizational participation, innovativeness, knowledge on sunflower cultivation) etc.;
3. To identify the contribution of the factors responsible for forming motivation on sunflower cultivation.
4. To identify some constraints faced by sunflower farmers.

48 2. LITERATURE REVIEW

49 2.1. THE IMPORTANCE OF SUNFLOWER CULTIVATION IN BANGLADESH

50 The climate and soil condition of Bangladesh is favorable for growing a variety of crops all the year round. Here
 51 large amount of human resources are available. So in Bangladesh there are great opportunities for crop
 52 diversification balancing the production of major crops with that of minor crops. Edible oil or fat is one of the
 53 most important nutrients of human foods. It plays a vital role in human nutrition as well as in our national
 54 economy. But, in Bangladesh, the per capita oil and fat consumption remained far below than its recommended
 55 intake. The present annual production of oilseed is about 764 thousand metric tons (BBS, 2012) which can't
 56 satisfy the present demand of consumption. For this reason the government has to import oil. The values of
 57 imported oilseeds and edible oils were Tk 14,200 million and Tk 130,510 million in 2012, which were 285 per
 58 cent and 519 per cent higher compared to the values of 2003 (Bangladesh Bank, 2012). In order to minimize the
 59 import cost of oilseed crops it is essential to increase oilseed production. The oilseed crops grown in Bangladesh
 60 are mustard, sesame, groundnut, linseed, niger, soybean, sunflower, safflower and castor. Among them sunflower
 61 is a newly introduced oilseed crop in Bangladesh. It is an important oil crop grown all over the world for its good
 62 quality edible oil source extracting from its seed. Now it is being grown in 16 districts in Bangladesh and the
 63 average production is about 1.2 ton/ha. In some central and northern districts this plant is now being cultivated as
 64 Kharif and Rabi crop. The yield is about 760 kg per hectare. It takes about 90-110 days for harvesting. It seeds
 65 contain 44-45% of edible oil. Unlike erucic acid in rapeseed, it has linolenic acid as an important constituent of
 66 sunflower oil. Its containing linolenic acid is beneficial for human health.

67 2.2. THE IMPORTANCE OF SUNFLOWER CULTIVATION IN BARISAL REGION

68 The land area of Bangladesh is about 130,168km². From this total area coastal region covers 29,000
 69 km which is about 20% of the country. The most important features of coastal region of Bangladesh
 70 are many islands between the channels, strong tidal, wind action etc. The main transportation modes in
 71 coastal region are the waterways (sarwar, 2013). The economy of Bangladesh is dependent on
 72 agriculture and it is also true for coastal region. Soil salinity has an adverse impact on agriculture.
 73 Coastal area covers more than 30% of the cultivable land and about 1.0 million ha which is affected
 74 severely by varying degree of salinity problem during the dry season and flooding during the wet
 75 season each year (karim et al, 1990). All local farmers in coastal region believe that salinity in soil and
 76 water is their great challenge in agriculture. Although Bangladesh government is trying for
 77 maintaining food security but food security can not be maintained for people living in coastal region.
 78 Maximum lands in this region remain fallow in the dry(Rabi/Boro) and pre monsoon season because
 79 of high soil and water salinity and due to lack of good quality irrigation water(Karim et
 80 al,1990,Mondal et al.2004).

81 Patuakhali district falls under coastal region. In this reason it is possible to grow three crops per year
 82 by utilizing residual soil moisture and rainfall that might lead to increased food production. Rice is
 83 dominant crop here. There is ample scope for crop diversification as it is possible to grow three crops
 84 per year in this region. Most of the lands remain fallow here. So for utilizing fallow lands crop
 85 diversification is essential. The coastal regions are the water scarce area. Sunflower can be grown as
 86 rabi crop in the water scarce coastal regions of Bangladesh as it is low to medium drought sensitive
 87 crop. Sunflower is a good adaptive crop in coastal region. Sunflower can be cultivated coastal region
 88 for not only meet up edible oil requirement, but also for higher farm income, to save foreign currency
 89 by reducing import edible oil and for utilizing fallow lands. Sunflower cultivation is very suitable in
 90 coastal regions as it is a short duration crop, has high yield and because of its extensive adaptability in
 91 16 districts of Bangladesh.

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93 2.3 THE FARMERS MOTIVATION TOWARDS ADOPTING A NEW CROP

94 Meena S.R.et.al (2010) in their study motivational factors and constraint analysis regarding
 95 commercial production of mateera (*Citrus lanatus*) in hot arid ecosystem found that main
 96 motivational factors were economic, production and technological, Socio-religious, storage and
 97 marketing, health and medicinal value, agro-ecological factors etc.Obaniyi K.S et al (2014) conducted
 98 a study on factors motivating incentives of farmers in rice production training programmes (a case
 99 study of olam/usaid/adp/first bank programme). Among the motivational factors friendship was
 100 ranked first with mean of (2.711) and standard deviation of (1.351), self-recognition was ranked
 101 second. Other motivational factors were market availability, equipment acquisition, profitability,
 102 personal needs, loan, gaining knowledge, household need etc.Hussin M. R. M. et al (2012) in their
 103 study Small farmers and factors that motivate them towards agricultural entrepreneurship
 104 activitiesfound that there were seven factors that encouraged the small farmer's involvement in the
 105 field of entrepreneurship. These factors were environment, capital, training, customer focus,
 106 management knowledge, marketing knowledge and cooperation

107 "The Motivation for Organic Grain Farming in the United States: Profits, Lifestyle, or the
 108 Environment" this study was conducted by Peterson HH et al (2012).This study objective was to
 109 identify and quantify the motivations for organic grain farming in the United States. Results provide
 110 evidence that many organic grain producers had more than a single motivation and that younger
 111 farmers are more likely to be motivated by environmental and lifestyle goals than older farmers. The
 112 Influence of Selected Factors of Motivation on Women's Participation in Contract Sugar Cane
 113 Farming in Mumias Division, Kakamega County, Kenya was conducted by Ambani et al (2015).
 114 Results of the study indicated that most of the women were highly influenced by property ownership,
 115 membership in advocacy bodies, and representation in investment institutions with a significance of
 116 0.000, 0.000 and 0.000 respectively.

117 3. MATERIALS AND METHODS

118 3.1 RESEARCH AREA AND DATA COLLECTION

119 The study was conducted in Dumki and Patuakhali Sadar upazilla of Patuakhali district. Only
 120 sunflower cultivating farmers constituted the population of this study. For this purpose an up-to-date
 121 list of the farmers was prepared with the help of respective Union parishad personnel, Sub-assistant
 122 agricultural officer, NGO personal and local leaders. The list comprised of 1100 farmers and these
 123 farmers constituted the population of this study. Out of them 10% of the population that is 110
 124 sunflower farmers were considered as the representative of the six unions namely Badarpur which are
 125 under Patuakhali Sadar upazilla and Sreerampur, Angaria, Pangashia, Labukhali, Muradia under
 126 Dumki upazilla. Besides, a reserve list of 10 percent of the sample size was also prepared to replace
 127 any respondent who could not be made available during data collection despite all attempts.

128 3.2 VARIABLES AND MEASUREMENTS

129 Socio-economic characteristics: These include variables age, education, sunflower cultivation
 130 experience, sunflower cultivation area, training experience, farm size, annual income, communication
 131 exposure, cosmopolitaness, organizational participation, innovativeness and sunflower cultivation
 132 knowledge. Motivation on sunflower cultivation was the dependent variable was used to measure
 133 farmer's motivation on 19 statements related to motivation on sunflower cultivation.

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Table 3.2 Description of variables used in the regression model	
Variable Name	Variables description and Unit of Measurement
(i) Dependent Variable	
Motivation	Motivation on sunflower, 5 point Likert type scale
(ii) Independent Variable	
1. Age	Age of the farmers in years
2. Education	year of schooling
3. Sunflower cultivation experience	completed years of sunflower cultivation
4. Area under sunflower cultivation	Total area under sunflower cultivation in decimal
5. Training experience	number of days training received
6. Farm size	Total farm size of household in hectare
7. Annual income	Sunflower farmer's total income in taka in "ooo" taka/year
8. Communication exposure	no. of contact to selected information source
9. Cosmopolitaness	no. of visits person made to selected places
10. Organizational participation	organizational participation nature and duration
11. Innovativeness	time duration of adoption of an innovation
12. Knowledge on sunflower cultivation	scores obtained when asked related questions

3.3 ANALYTICAL PROCEDURE

Statistical software SPSS 16 was used for data analyses. Descriptive statistical measures such as (frequency, range, mean, percentage distribution, standard deviation, rank order, categories etc.) were used to describe and interpret the data. Effect of selected factors on motivation of these farmers in sunflower cultivation was determined by using regression co-efficient.

To find out the relationships between motivation and selected characteristics of the farmers Pearson's product Moment Correlation (r) was used. Five percent level of probability was used to accept or reject any null hypothesis.

4. RESULTS AND DISCUSSIONS

4.1. GENERAL CHARACTERISTICS OF RESPONDENTS

Majority, 61.00 percent and 34.50 percent of the farmers were middle and young aged .This might be an indication that motivation of sunflower cultivation does not depend on special aged groups. It was found that a high proportion of sunflower growers 44.60 percent of the farmers had primary level of education. This might be due to as highly educated person in those villages are involved in diversified activities. Among sunflower farmers 81.8 percent had short term sunflower cultivation experience.

150 This might be an indication that after observing the benefits of sunflower cultivation the newly
151 motivated sunflower farmers had been increased. Approximately 58.2 percent farmers had medium

Table 4.1 Socio economic characteristics of farmers						
Characteristics of the farmers	Range	Categories	Respondents		Mean	Standard deviation
	Observed		Number	Percent		
Age	25-70	Young aged (up to 35years)	38	34.50	44.93	9.49
		Middle aged (36-50 years)	67	61.00		
		Old aged (above 50 years)	5	4.50		
Education	0-18	Illiterate 0	25	22.70	4.77	3.70
		Primary education(1-5)	49	44.60		
		Secondary education(6-10)	33	30.00		
		Above secondary education (above 10)	3	2.70		
Sunflower Cultivation experience	3 to 8	Short term experience (3-5)	90	81.80	4.18	1.22
		Long term experience (6-8)	20	18.20		
Area under Sunflower cultivation	6 to 44	Low (up to 13)	24	21.80	23.52	9.98
		Medium (14-33)	64	58.20		
		High (above 33)	22	20.00		
Training experience	0 to 8	No experience (0)	6	5.45	2.85	1.43
		Short experience (1-3)	47	42.70		
		Medium experience (4-6)	53	48.18		
		Long experience (above 6)	4	3.60		
Farm size	0.13 to 3.00	Marginal (above .02-below 0.2)	4	3.60	0.88	0.56
		Small (0.21-1.00)	84	76.40		
		Medium (1.01-3.00)	18	16.40		
		Large (above 3.00)	4	3.60		
Annual income	80-120	Low income (80-93)	37	33.60	98.26	9.98
		Medium income (94-107)	52	47.30		
		High income(above 107)	21	19.10		
Communication exposure	28-52	Low exposure (28-36)	32	29.10	39.20	6.27
		Medium exposure (37-45)	54	49.10		
		High exposure (above 45)	24	21.80		
Cosmopoliteness	6-22	Low cosmopoliteness (up to 7)	50	45.50	10.00	3.77
		Medium cosmopoliteness (8-14)	54	49.00		
		High cosmopoliteness (above 14)	6	5.50		
Organizational participation	0-8	No participation (0)	10	9.10	2.46	1.66
		Low participation (1-3)	80	72.70		
		Medium participation (4-6)	15	13.70		
		High participation (above 6)				
Innovativeness	11-24	Low innovativeness (11-15)	11	10.00	18.12	3.34
		Medium innovativeness (16-20)	85	77.30		
		High innovativeness (above 20)	14	12.70		
Sunflower cultivation knowledge	27-40	Low (27-31)	6	5.50	35.48	2.67
		Medium (32-36)	60	54.50		
		High (above 36)	44	40.00		

152 sunflower cultivation area. The probable reason is that as they have a few land of their own. Majority
153 of the farmers, 48.18 percent farmers had medium training experience. Training experience had
154 contributed much for their motivation. This may be due to training helps farmer to conceptualize,
155 understand and diagnose the gravity and application of useful information about sunflower
156 production. Among cultivars 76.4 percent farmers had small and 16.40 percent farmers had medium
157 farm size. The reason behind this as they had low land and had to lease land for agricultural
158 cultivation. Among sunflower farmers 47.3 percent had medium income. This may be due to as they
159 have a few land of their own.

Majority 49.1 percent had medium communication exposure. The probable reason behind this may be to gather information about sunflower cultivation. 49.00 percent respondents had medium cosmopolitaness. The probable reason may be the newly introduction of sunflower cultivation and they had to go other upazillas for training. 72.7 percent respondents had low Organizational participation. This may be due to though some of them had direct contact with various organizations such as BRAC, FFS club etc. But most of them haven't held the position of executive member. 77.3 percent respondents had medium innovativeness and it is an important factor for their motivation. This may be due to most innovative person has the ability to understand and apply complex technical knowledge and he/she can cope with a high degree of uncertainty. Majority 54.5 percent respondents had medium sunflower cultivation knowledge. The probable reason behind their knowledge is training experience. Sunflower cultivation knowledge had an important role on motivation. This may be due to having more knowledge of sunflower cultivation, farmers becomes aware of the recent information on the various aspects of sunflower production which reduce uncertainty and ensure better production of sunflower.

4.2 OVERALL MOTIVATION OF FARMERS TOWARDS SUNFLOWER CULTIVATION

Motivational score of the farmers ranged from 47 to 72 with the mean of 64.64 and Standard deviation of 4.10. On the basis of their Motivational score, the farmers were classified into three categories as "low motivation" (47-55), "medium motivation" (56-64) and "high motivation" (above 64). The distribution of farmers according to their motivation is shown in Table 4.2.

Table 4.2 Classification of farmers according to their motivation

Categories	Farmers		Mean	Standard deviation
	Number	Percent		
Low motivation	2	1.8	64.64	4.10
Medium motivation	56	50.9		
High motivation	52	47.3		
Total	110	100.0		

Majority 50.9 percent respondents had medium motivation, 47.3 percent respondents had high motivation and 1.8 percent respondents had low motivation. So, maximum respondents had medium to high motivation.

4.3 FACTORS AFFECTING FARMER'S MOTIVATION TOWARDS SUNFLOWER CULTIVATION

Table 4.3. Rank order of the motivational factors towards sunflower cultivation

SL. No.	Factors affecting farmers motivation/Statements	Motivation index	Rank
1	As NGO (BRAC) helps in growing sunflower	392	1
2	To earn quality food and cloth for family	387	2
3	After noticing the demonstration plot	385	3
4	For the hope of getting free fertilizer, seed etc.	370	4

5	For increasing own efficiency	340	5
6	For achieving knowledge about new technology	330	6
7	To get training allowance	310	7
8	To lead a secured life at oldage	294	8
9	Inspiration from the friends and relatives	290	9
10	To prove personal ability	270	10
11	With hope to be the best farmer of the village	260	11
12	To achieve profitability	257	12
13	For getting good price	250	13
14	For using land rather keeping fallow	230	14
15	For the advise of sub-assistant agriculture officer	220	15
16	For the leadership	200	16
17	With a hope of getting prize	130	17
18	For the hope of more social status	100	18
19	Strong recommendation by the SAAO	90	19
Source: Author's own calculation from field survey data, 2016			

186 Data contained in Table 4.3 indicated that the motivational factors of the farmers that is “As NGO (BRAC)
187 helps in growing sunflower “ranked first as its MI 392, followed by “To earn quality food and cloth for
188 family”(387) as 2nd, “After noticing the demonstration plot”(385) as 3rd, “For the hope of getting free fertilizer,
189 seed etc.” (370) as 4th, “For increasing own efficiency” as (340) 5th.The other motivational factors are for
190 achieving knowledge about new technology, to get training allowance, to lead a secured life at oldage,
191 inspiration from the friends and relatives, to prove personal ability etc.

192 4.4 PROBLEMS FACED BY THE SUNFLOWER FARMERS

193 Through interview schedule researcher enlisted and ranked five main problems which were faced by the farmers
194 during sunflower cultivation. The problems were given below:

195 Table 4.4 Distribution of problems faced by the farmers in a rank order

SL	Problem	Frequency	Rank
01	Stem rot	100	1
02	Less irrigation facility	90	2
03	High input cost (seed)	80	3
04	Damage caused by the birds	60	4
05	Damage caused by the Humans	50	5

Data contained in Table 4.4 indicated that “Stem rot (100)” ranked first as problem faced by farmers when cultivating sunflower, followed by “less irrigation facility (90)” as 2nd, “high input cost (seed) (80)” as 3rd, “damage caused by the birds (60)” as 4th, “Damage caused by the humans (50)” as 5th.

4.5 CORRELATION ANALYSIS AMONG MOTIVATION OF SUNFLOWER CULTIVATION AND SELECTED VARIABLES

Table 4.5. Correlation analysis among motivation of sunflower cultivation and selected Variables

Dependent variable	Independent variable (Farmers characteristics)	Coefficient of correlation (r)
Motivation on sunflower cultivation	1.Age	.069 ^{NS}
	2.Education	.000 ^{NS}
	3.Sunflower cultivation experience	.524**
	4.Sunflower cultivation area	.090 ^{NS}
	5.Training experience	.778**
	6.Farm size	-.076 ^{NS}
	7.Annual income	.019 ^{NS}
	8.Communication exposure	.724**
	9.Cosmopolitaness	.565**
	10.Organizational participation	.381**
	11.Innovativeness	.654**
	12..Knowledge on sunflower cultivation	.673**
**=Significant at .01 level, NS=Not significant, *=Significant at .05 level		
Source: Author’s own calculation using SPSS from field survey data, 2016		

The findings of Table 4.5 reveal that variables such as sunflower cultivation experience, training experience, communication exposure, cosmopolitaness, organizational participation, innovativeness and sunflower cultivation knowledge had positive and significant relationship with motivation on sunflower cultivation. This indicates that with the increase of sunflower cultivation experience, training experience, communication exposure, cosmopolitaness, organizational participation, innovativeness and sunflower cultivation knowledge the motivation on sunflower cultivation was also be increased. Among them only one variable farm size had negative and non significant relationship towards motivation on sunflower cultivation which indicates that with the increase of farm size the motivation of sunflower cultivation had been decreased. However, other four variables namely age, Education, Sunflower cultivation area, annual income had positive and non significant relationship with motivation of sunflower cultivation which indicates that these variables are not an important factor towards motivation of sunflower cultivation.

4.6 STEPWISE MULTIPLE REGRESSION ANALYSIS EXPLAINING CONTRIBUTION OF VARIABLES TO THE FARMER'S MOTIVATION OF SUNFLOWER CULTIVATION

To determine the factors influencing farmer's motivation on sunflower cultivation a multiple regression analysis with step wise method was carried out. The regression model includes all of the independent variables which had significant correlations with the motivation. The dependent variable was the respondent's motivation on sunflower cultivation which was defined as their scores obtained from the statements associated with 19 selected motivational factors.

There were 12 independent variables entered in the model, out of which only 4 variables had a significant influence at the 5% level on farmer's motivation on sunflower cultivation. As shown in Table 4.6, training experience, sunflower cultivation knowledge, innovativeness, sunflower cultivation experience were found to have a positive influence on respondents 'motivation on sunflower cultivation. The R^2 value was 0.703 and F value was 62.094, which were significant at 0.000 levels. The R^2 value indicated that 70.3 percent of the total variation in the motivation of the farmers could be explained by these 4 variables.

Table 4.6. Results of multiple regression analysis

Predictor variables	B	Standard Error	β	t	p
Constant	41.662	3.490		11.937	.000
Training experience	1.263	0.227	0.441	5.575	.000
Sunflower cultivation knowledge	0.374	0.108	0.243	3.447	.001
Innovativeness	0.220	0.089	0.179	2.472	.015
Sunflower cultivation experience	0.509	0.208	0.151	2.447	.016
$R^2=0.703$, $F=62.094$ and $P=0.000$					

The variable that had the greatest influence on farmers' motivation on sunflower cultivation was training experience with the $\beta_1=1.263$, implies that when training experience of the farmer increases by a unit then their motivation towards sunflower cultivation increases by 1.263 units. Similarly, Sunflower cultivation knowledge, $\beta_2=.374$, implies that when sunflower cultivation knowledge of the farmer increases by a unit then their motivation towards sunflower cultivation increases by .374 units. Similarly, innovativeness $\beta_3=.220$, implies that when innovativeness of the farmer increases by a unit then their motivation towards sunflower cultivation increases by 0.220 units. However, Sunflower cultivation experience $\beta_4=.509$, implies that when Sunflower cultivation experience of the farmer increases by a unit then their motivation towards sunflower cultivation increases by 0.509 units.

Table 4.7 Change in multiple R^2 for entry of the said variable into the stepwise multiple regression models

Model	Variables	R^2	Adjusted R^2	Std. Error of the estimate	R^2 change	Variance explaining (percent)	Sig-level
1	Training experience	.605	.601	2.590	.605	60.5	.000
2	Sunflower cultivation knowledge	.658	.651	2.423	.053	5.3	.000
3	Innovativeness	.686	.677	2.331	.028	2.8	.003
4	Sunflower cultivation experience	.703	.692	2.278	.017	1.7	.016

The unique contribution of the variables was also determined by taking the changes in R^2 value occurred for entry of a particular variable in the stepwise regression model. The results of Table 4.7 shows that training experience along could explain 60.5 percent of the total variation in the farmer's motivation on sunflower cultivation and other three variables namely sunflower cultivation knowledge, innovativeness, sunflower cultivation experience could explain 5.3, 2.8 and 1.7 percent variation respectively in case of motivation.

5. CONCLUSIONS AND RECOMMENDATIONS

The study showed that main motivational factors were NGO (BRAC) help in growing sunflower, earning quality food and cloth for family, noticing demonstration plot. hope of getting free fertilizer, seed, increasing own efficiency etc. The result showed that sunflower cultivation experience, training experience, communication exposure, cosmopolitaness, organizational participation, innovativeness and sunflower cultivation knowledge had positive and significant relationship with motivation on sunflower cultivation. In addition multiple regression analysis showed that training experience, agricultural knowledge, innovativeness, sunflower cultivation experience had significant contribution on respondent's motivation on sunflower cultivation.

Sunflower is a newly introduced oilseed crop in Bangladesh. Therefore, the implementing agencies need to keep this in view for its dissemination. Though a majority of the farmers are motivated for sunflower cultivation but its benefit had remained unknown for many farmers. Hence, there is a need for extension activities to motivate the unmotivated one.

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