People's Attitude Towards Social Forestry: A Case Study in Rajshahi

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Abstract

The purpose of the study was to ascertain the attitude of the peoples towards social forestry and to explore the relationship between the selected characteristics of the respondents and their attitude towards social forestry. Attempt was also made to find out the rank order of attitudinal statements. Local community, local leader and social forestry beneficiaries of Puthia and Charghat Upzila of Rajshahi district constituted the population of the study. A total of 182 respondents were selected as sample. Interview schedule was used for collecting data from the sampled respondents during September, 2011 to December, 2011. The four selected characteristics of the respondents were considered as the independent variables. A 5-point rating scale was used to measure the dependent variable "attitude towards social forestry". The findings revealed that near about three-fifths (59.34%) of the respondents had moderately favourable attitude towards social forestry compared to 32.2 percent highly favourable and 8.24 percent slightly favourable attitude towards social forestry. Correlation were used to explore the relationships among the variables. Out of 4 independent variables, age and occupation of all groups of respondents had a negative relationship with their attitude forwards social forestry, whereas education and annual income did not show significant relationship. The comp uted *t* value indicated that there was no attitudinal significant difference among the three groups. Among the 30 statements "by improving local microclimate, social forestry can contribute significantly for the maintenance of ecological balance", "important way to create capital", "promotion of social forestry can bring improvement in aesthetic view of the area" and "social forestry will provide harbor to insects, pests and diseases which is detrimental for human health and agricultural production" was the 1st, 2nd, 3rd and 4th, respectively.

Key words: Attitude, People's, Social forestry

Introduction

Social Forestry (SF) is those activities such as the purposive growing of trees, certain techniques in crop production, soil conservation, improved use of wild forest products, and others, of a culture bearing and symbol sharing social group, which has at its ultimate effect a movement of that group towards self sufficiency in forest resources while at the same time lessening the pressure which that population is applying to the resources of the natural forest through more efficient and more intensive use of land. SF has become the mainstay of the Forestry sector activities to increase and manage the country's forest cover since the early 1980s in BGD. According to the stated declarations of the Forestry Policy 1994, the government has planned to speedy augmentation of (20%) green cover of the total land of the country within the year 2015 and SF in deemed as one of the means to realize the objectives of the forest policy. Rajshahi is one of the most important districts to implement social forestry programme. In the last three decades, Forest department, NGOs and other government agencies carried out extensive social forestry programme in this Rajshahi region. By this time forest department alone raised about 374.64 hectares of block and 877.4 km of strip plantations in marginal khas land and along roads, railways and embankments in Rajshahi district with this approach.

The principal emphasis of social forestry is on wider participation of local communities in protection and regeneration of forest resources. Government and development agencies policy documents also highlight local participation as one of the prerequisite for successful creation, control and management of forest resources by sharing management responsibility with the local community. It means local people will give full support to what they have approved and if the local people were encouraged to plants protect and nurture forest through some benefit sharing agreement then the level of success would increase substantially. However, public/community attitude have a significant influence on their involvement in policy implementation. Moreover, Forest department and other NGOs developed and implemented a number of projects which are facilitated by training, input and technical support, and promotion of public awareness on environmental degradation through continuous education and motivational campaign through mass media. These programs are generally designed to contribute positively to generate income, increase skill and wise management of forest resources, which aims to develop positive attitude towards social forestry.

Attitude is one of the important components of respondents' behaviour that plays a vital role in their convert or overt behaviour. Some of the studies isolated the factors contributing/related to the attitude of farmers (Pathak *et al.* 1993, Kashem and Islam, 1990 and Karim*, et al.* 1987). Nevertheless, there is

hardly any study in Bangladesh in this connection especially in relation to farmers' attitude towards social forestry. Aforesaid facts call for an empirical study to determine the factors contributing to respondents' attitude in relation to social forestry. Keeping this in view, this study was conducted:

> ➢ To examine the respondents' attitude towards social forestry; and find out significant different between beneficiaries and local community, beneficiaries and local leader, and local community and local leader.
> ➢ To explore the relationships of the selected characteristics of the respondents and their attitude towards IPM practices.
> ➢ To find out the attitudinal statement position opined by respondent.

Methodology

Study area, sampling and collection data

The study was conducted at adjacent villages of different social forestry plantation sites of Puthia and Charghat upazilla under Rajshahi district. Ten villages from Puthia plantation site and another ten from Charghat site were randomly selected. Local community, local leader and social forestry beneficiaries of these areas constituted the population of the study. A total of 182 respondents (local community =80, beneficiaries =80 and local leader =22) were selected as sample (population and sampling design is presented in the Fig. 1). Interview schedule was used for collecting data from the sampled respondents during September, 2011 to December, 2011.
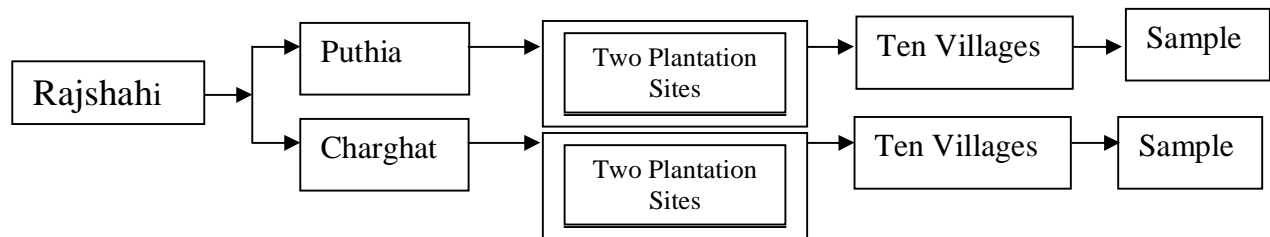

Fig. 1. Flow diagram of population and sampling design

Variables and their measurement

Four selected independent characteristics of the respondent namely age, education, occupation and annual income constituted the independent variables of the study. In all four characteristics of the respondents were measured by direct scoring methods. Attitude of respondents towards social forestry was considered as dependent variable. To measure the dependent variable, 30 statements in different aspects in relation to attitude towards social forestry were selected by Edward (1957) fourteen criteria and judges' rating technique. The respondents were asked to respond to each of the 30 statements (positive and negative statements were randomly arranged) in terms of their own agreement or disagreement on a five point rating method (Five Point Likert Scale), namely 'strongly agree', 'agree', 'neutral', 'disagree' and 'strongly disagree'. For positive statements, the numerical values given were: strongly agree-5, agree-4, undecide-3, disagree-2 and strongly disagree-1. For negative statements, the scoring system was reversed i.e. strongly agree-1, agree-2, undecide-3, disagree-4 and strongly disagree-5. From each respondents' response, a score for each individual item was obtained, while his total item score was obtained by summing all the score for all the individual items. The

attitude score of a respondent about social forestry was computed by adding the scores against each response to all the 30 items. Thus attitude score of a respondent could range from 30-150, where 30 indicated most unfavourable and 150 indicated highly favourable attitude.

Statistical techniques

The statistical methods used in this study were range, mean, rank order, percentage, correlation and t test. Correlation test was used to explore the differences between selected characteristics of the respondents and their attitude towards social forestry. The t test was computed to find out differences between different categories. Throughout the study, five (0.05) level of probability with an accompanying 95 percent confidence level was used as a basis of rejecting the null hypothesis.

Results and Discussion

Attitude of the respondents towards social forestry

Attitude is one of the important factors that direct persons to take part in any activity. Characteristics of

a respondent play an important role for changing his/her attitude towards any innovation. Individual's attitude may also influence to other members of the social system. The attitude towards social forestry scores of the respondents ranged from 84 to 133, the mean being 113.16 and standard deviation 8.41. Based on observed attitude scores, the respondents were classified into three categories like slightly favourable, moderately favourable, and highly favourable as shown Table 1.

Table 1. Distribution of the respondents according to their attitude towards social forestry

Respondents	Mean	Slightly favorable(percent)	Moderately favorable (percent)	Highly favorable (percent)	SD	t-value
Beneficiaries N1=80	113.61	8.75	55	36.25	8.53065	B Vs LC 0.3838
Local community N2=80	113.02	6.25	63.75	30	8.49419	B Vs LL 0.802
Local Leader N3=22	112.0	13.63	59.09	27.27	7.94625	LC Vs LL 0.4256
Total n=182	113.16	8.24	59.34	32.42	8.41676	

Data presented in Table 1 reveals that the mean attitude score (113.16) of three groups of respondents were almost similar though beneficiaries showed slightly higher mean attitude scores of 113.61, followed by local community, 113.02 and local leader 112.0. A good number of beneficiaries 55% had expressed a moderate attitude towards social forestry. Only 36.25 % have shown a highly favourable attitude and 8.75 % slightly favourable towards social forestry. Most of the local community 63.75% also had moderate stance. One third of the local communities surveyed were highly supportive, while 13.63% showed less favourable attitude. Among local leaders, 59.09% showed a moderate attitudinal measure, 27.27% asserted high favour and 13.63% have less favour towards social forestry. Among the three groups the 36.25% beneficiaries showed highly favourable attitude towards social forestry, followed by local community 30% and local leader 27.27%. It was noted that the lowest 6.25% local community were found having slightly favourable attitude towards social forestry.

To find out the significant differ between the beneficiaries and local community, beneficiaries and local leader, local community and local leader the t test was computed. The computed t value among the three samples clearly indicates that attitude of beneficiaries, local community and local leaders did not differ significantly. Some explanations should be given to interpret the outcome. Social forestry has been working in Puthia and Charghat upazila for the last three decades, while implementing social forestry a number of awareness training program is evident. Besides, several government and NGOs are working to form attitude toward social forestry. Mass media is also helping in building awareness, It might be helped

them forming a relatively favourable attitude towards social forestry. However, it is evident that there is no significant attitudinal difference among the 3 stakeholders. This may be for the faulty policy, implementation of the government agencies' or for their insincerity in building attitude.

Selected characteristics of the respondents

The information regarding the selected characteristics of the farmers are presented in Table 2. The survey population ranged in age from 16 to 98 years; the average age was 40.17 years and standard deviation 1.173. The information revealed that 39.56 percent of the farmers fell under the young aged category while 35.71 percent of them fell under the middle aged category and 24.72 percent fell under the old aged category. Education score of the respondents was ranged from zero (0) to sixteen (16), the mean being 9.66 with a standard deviation of 3.84. The participants were classified into four categories namely illiterate (0), primary (5), secondary (10) and above secondary (>10) based on their level of education. More than two-fifths (42.86%) of the respondents had secondary level of education compared to 18.14% having primary level education and 35.71% was above secondary level. Only 3.29% of the respondents had illiterate. Occupation scores of the respondents ranged from 1 to 5 with an average of 2.21 and standard deviation 1.30. Based on occupation, respondents were classified into five categories such as housewife (1), agriculture (2), business (3), service (4) and high official (5). Data indicates that maximum 37.40% respondents are engaged in small business, followed by 34.60% agriculture, 13.20% service and only 1.60% housewife. Annual income of the respondents was

found to be range from TK 2 thousands to 300 thousands with an average of 93.49 and standard deviation of 4.84. On the basis of annual income. scores respondents were classified into three categories like low medium and high as shown in

Table 2. The majority of respondents 70.9 percent were in low income category and it is followed by 26.92 percent medium and only 2.19 percent high income category.

Table 2. Salient features of the respondents

Characteristics	Scoring system	Range		Categories	Respondents		Mean	SD
		Possible	Observed		Number	Percent		
Age	Year	'	16-98	Young (up to 35)	72	39.56	40.17	11.73
				Middle (36-49)	65	35.71		
				Old (above 49)	30	24.72		
Education	Year	'	0-16	Illiterate	6	3.29	9.66	3.84
				Primary	33	18.14		
				Secondary	78	42.86		
				> Secondary	65	35.71		
Occupation		'	1-5	Housewife	3	1.60	2.21	1.30
				Agriculture	63	34.60		
				Business	68	37.40		
				Service	24	13.20		
				High official	24	13.20		
Annual income	Tk ('000)	'	2-300	Low (2-100)	129	70.9	93.49	4.84
				Medium (101-200)	49	26.9		
				High (>200)	4	2.2		

Relationship between the selected characteristics of the respondents and their attitude towards social forestry
The summary of the results as correlation co-efficient between the selected characteristic of the respondent and their attitude social forestry is shown in the Table 3.

Table 3. Relationship between the selected characteristics of respondents and their attitude towards social forestry

Dependent variable	Independent variables	Computed 'r' values	Table of 'r' at 180 df	
		Total (N=182)	0.05	0.01
Attitude towards Social Forestry	Age	-0.154*		
	Education	-0.036NS		
	Occupation	-0.160*		
	Annual Income	0.069NS		

Out of 4 independent variables, age and occupation of all groups of respondents had a negative relationship with their attitude forwards social forestry, whereas education and annual income did not show significant relationship.

Rank order of attitudinal statements

The purpose of this section was to understand the position of the respondents' attitude

towards attributes of social forestry. The respondent gave their opinion on individual statements. These opinions were quantified by assigning weights for their responses on a 5 point Likert scale. Attitude score could range from 182 to 910. The rank order as opined by the respondents are presented in Table 4.

Table 4. Rank order of attitude statements toward social forestry

Attribute/Statement	Opinion index	Ranked
By improving local microclimate, social forestry can contribute significantly for the maintenance of ecological balance.	842	1
The growing demand of food, fodder, fuel etc of the local community can be met by social forestry plantations	748	10
Recruitment of Plants in the area would be act as habitat and shelter for wildlife.	773	7
Promotion of Social forestry can bring improvement in aesthetic view of the area.	808	3
Promotion of SF cannot enrich bio-diversity	797	5
Social forestry will provide harbor to insects, pests and diseases which is detrimental for human health and agricultural production	804	4
Role of Social forestry is not significant in poverty alleviation and livelihood upliftment.	737	12
Soil fertility and land productivity has been improved by adoption of social forestry.	699	16
Social forestry plantation should be done for commercial purposes.	693	17
Local community involvement in decision making is not significant.	596	26
Traditional FM system has fallen short in enabling of the public into forestry mgt practices and this lead to the rise of conflicts between SFO and Forest villagers	616	24
Long term return of forests is more than agriculture.	748	11
Promotion of SF can create employment opportunities for the rural youths and women.	711	14
Participants selection procedure is not fair and easy.	688	18
An important way to create capital	811	2
Shade, rain drops and roots of trees decrease road stability	658	21
Proper training in Nursery and plantation raising for SF plantations can be helpful in adoption of this progamme	765	8
By reducing the vision, social forestry increase the risk of accident.	717	13
Technology used in social forest development is not modern, sustainable and appropriate.	624	22
Local leaders involvement is very poor.	490	29
Existing laws and policies are not adequate to support social forestry.	614	25
Affluent people should not be allowed to participate in social forestry programme.	621	23
Social forestry ensures maximum utilization of marginal land.	752	9
By obstructing use rights, it creates conflicts among adjacent land owners, beneficiaries and administrations.	516	28
In general, the timber traders and sawmill owners are threat to the forests	522	27
Use rights of communal marginal land is hampered.	667	20
Marginal land should be used for agriculture and other productive purposes.	671	19
Forestry extension staffs are not adequately skilled to provide training	707	15
Role of mass media are not supportive for Social Forestry extension.	486	30
Local Forestry Extension staffs are not responsive to the public opinion.	789	6

The position of the statement "by improving local microclimate, social forestry can contribute significantly for the maintenance of ecological balance" was the first. Now a days people are very conscious about the environment. Due to increase of literacy, close contact with mass communication, introducing of government policy and activities of forest department, farmer's knowledge about the environment are going to be increased. These is why, the farmers of the study area opined maximum in that statement. Social forestry is not only to increase friendly environment but also provide the capital. Any

parts of the tree are not ignored. Living organism of the world get food, fuel, furniture etc. from the tree. . So, the 2nd position of the statement is "important way to create capital". Any forest has aesthetic view. People like it. By increasing social forestry we can get aesthetic view beside its major role. This is why its position is 3rd in the study area. Plant has medicinal view. Those plant species which have not large canopy area and uptake more water from soil are not popular in the study area. Moreover they act as a host of pest and diseases. For this reasons, people are not interested. So, the position of the statement of "social forestry will provide harbor to insects, pests and

diseases which is detrimental for human health and agricultural production" was 4th.

Conclusions

1. Agriculture and business profession group weae the highest among the respondents. The major proportion of beneficiaries and local community had low income category.

2. Among the three groups, moderately favourable to highly favourable group were found in highest proportion. The above facts lead to the conclusion that overall situation of the respondents' attitude towards social forestry was favourable in the study area.

3. Age and occupation of the respondents was the negative correlated with their attitude towards social forestry. This findings lead to the conclusion that young and agriculture occupation

respondents were more favourable for showing positive attitude towards social forestry.

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