

Farmers' Preference of the Farm Broadcasting in Receiving Agricultural Information

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Abstract

The purpose of the study was to investigate the extent of farmers' preference of the farm broadcasting programme of Bangladesh Betar Sylhet in receiving agricultural information. The relationship between the selected characteristics of the respondents and their preferences was also explored. From 699 radio owners of thirty villages under the Sylhet division, data were collected from 148 radio owners during January to November 2007 through interview schedule. The findings revealed that 15.77% farm family of the selected villages possessed a radio and most of them (89.86%) were not aware about the farm broadcasting programme (FBP). Among the respondents 15.54% tuned their radio in varying interval to listen the FBP, 38.51% tuned to listen other programmes and 45.95% never tuned their radio at least once in last one year. Only 9.46% of the respondents had low preference, 5.41% had very low preference and the highest portion (83.78%) of the respondents had no preference to the FBP. About usefulness, 10.81% opined that the programme was low useful, 4.06% opined moderately useful and 1.35% opined not useful. Correlation study indicated that among the respondents' selected characteristics, level of education, farm size and agricultural knowledge showed significant positive relationships and having additional recreation equipment showed significant negative relationship with their preference of the FBP.

Keywords: *Radio, farm broadcasting, farmers' preference, agricultural information*

Introduction

Sylhet division is situated to the northeast corner of Bangladesh. It comprises four districts namely Sylhet, Sunamganj, Habiganj and Moulavi Bazar. About 1075 thousand farm family live in the rural areas of Sylhet division. Total cultivated land of four districts is 756 thousand hectare. Cropping intensity of Sylhet division ranges from 134% to 170% with an average of 156% (DAE, 2008) which is low in comparison to national average (180%) of the country. On the other hand, a vast area of

land remains uncultivated in Sylhet division (BBS, 2008). So, to meet up the food demand of rapid growing population of the country it is necessary to bring uncultivated land under cultivation and also to increase cropping intensity of that region. For this, improved agricultural technologies have to be used by the farmers. But it is evident from different findings that the technologies which are being developed do not reach to the bonafied users effectively for their application (Halim and Miah, 1996).

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Adoption of modern agricultural technologies is the pre-condition of agricultural development. However, contact with information sources is a pre-condition to adopt and use a technology (Kashem and Hossain, 1992). Agriculture is a dynamic science. New technologies are being developed continuously from different research organizations of the country. A number of government and non-government organizations are engaged in disseminating agricultural technologies to the farmers in the country. Among them the Department of Agricultural Extension (DAE) is the largest one. However, all of these organizations mainly follow the interpersonal contact approach in disseminating technology. From different studies, it was suggested that for effective functioning the number of farm family per extension worker should be 600 to a maximum of 1200 depending on the cropping intensity (DAE, 1985). On that basis 657 posts of the field level extension worker were created in Sylhet division under DAE at the time of its formation in 1982. By last 26 years the number of farm family increased about 82% but the number of posts

of the field level extension workers were remained the same (DAE, 2008). On the other hand, internal communication system of rural areas of Sylhet division, especially Sunamganj district and most areas of Habiganj district, is very poor. Therefore, due to poor communication system and limited man power, it is very difficult to disseminate agricultural technologies timely and effectively to the large number of farmers of Sylhet division through interpersonal contact approach. To overcome these limitations radio can play an important role in disseminating agricultural information timely, quickly and inexpensively to a large number of people. It makes things exciting, alive and believable. Furthermore, it can motivate, stimulate, induce belief and change basic attitudes of the people (Rahman, 2002).

Regional station of Bangladesh Betar (radio), Sylhet is established in 1967. People of the four districts of Sylhet division are the target listeners of this station. From this station, two agricultural programmes (Table 1) have been broadcasting daily for about 20 years.

Table 1. Schedule of the farm broadcasting programmes of Bangladesh Betar, Sylhet

Name of programme	Broadcasting Time (daily)		Duration
	Summer	Winter	
<i>Ajker Chashabad</i>	6.25 am to 6.30 am	6.55 am to 7.00 am	5 minutes
<i>Shyamal Sylhet</i>	6.05pm to 6.45pm	6.05pm to 6.45pm	40 minutes

Through these programmes, information on daily agricultural activities, articles on modern agriculture technologies, advice and comments of agricultural specialists, interview of successful farmers etc. are broadcasted in a view to enrich the farmers' knowledge about modern agricultural technologies so that by adopting those they can increase their farm production and improve their livelihood. Broadcasting is

done in an entertaining way preferably in regional language so that the listener can easily understand. However, no study has so far been conducted to ascertain the impact and usefulness of farm broadcasting programmes of Bangladesh Betar Sylhet in disseminating agricultural information. Hence, the present study was undertaken with following objectives:

- To ascertain the extent of radio listening by the farmers.
- To ascertain farmers' preference of the farm broadcasting programme of Bangladesh Betar, Sylhet in receiving agricultural information.
- To explore the relationship of farmers' preference of the farm broadcasting programme with their selected characteristics.

Methodology

The study was a descriptive survey research. Thirty villages were selected for the study from fifteen Upazilas as two villages from each Upazila from four districts of Sylhet division (Table 2). Upazilas were selected from various distant zones from the radio station and the selected villages were situated

1 to 21 km away from the Upazila head quarter. Number of total farm family and list of radio owners of the selected villages were collected first, then from total 699 radio owners (population) 148 owners were selected randomly and proportionately to constitute the sample.

Table 2. Name of selected Upazila and villages

Distance (aerial) from radio station (km)	Name of Upazila	Name of selected villages
up to 30 (Near Zone)	Goainghat (Sylhet) Golapganj (Sylhet) Balaganj (Sylhet) Biswanath (Sylhet) Chhatak (Sunamganj)	Gahara, Chhatargram Maskapur, Mollagram Bharera, East Rokanpur Noagaon, Jahargaon Kalaruka, Madhabpur
31-60 (Middle Zone)	Sunamganj Sadar Nabiganj (Habiganj) Kulaura (Moulavibazar) Jakiganj (Sylhet) Jaintapur (Sylhet)	Bahadurpur, Fakirnagar Bausha, West Timirpur Mukundapur, Prithimpasha Kechhari, Khalachhara Sarukhel, Shikargaon
61 & above (Distant Zone)	Tahirpur (Sunamganj) Dharampasha (Sunamganj) Salla (Sunamganj) Chunarughat (Habiganj) Kamalganj (Moulavibazar)	Alipur, Mollapara Paikurati, Naodhar Veradahar, Meghnapura Maminpur, Gogaura Konagaon, Mirzanagar

Data were collected from the respondents by the researcher through direct interviewing method during January to November 2007. A pre-tested structured interview schedule was used to collect data.

The independent variables of the study were age, level of education, family size, farm size, occupation, mode of cultivation, annual income, having additional recreation

equipment e.g., television (TV), video-cassette player, compact disk player, digital video disk player, computer etc., agricultural knowledge and cosmopoliteness. Data on related socio-economic characteristics of the respondents were also collected. Appropriate methods were used to operationalize the independent variables by developing suitable scales.

Farmers' preference of the farm-broadcasting programme was the dependent variable of the study. A five point numerical rating scale was developed on the basis of listening frequency of the two farm broadcasting programmes (Table 1) to measure the preference score. The weights were assigned to each of the responses in the following ways. Weight for listening farm broadcasting programme never in the last one year was 0, listening farm broadcasting programme at least once in last one year was 1, listening farm broadcasting programme at least once in

a month during last one year was 2, listening farm broadcasting programme 1-2 days in a week during last one year was 3 and listening farm broadcasting programme 3 or more days in a week during last one year was 4. Preference score of the respondents could be 0-8, 0 indicating no preference and 8 indicating high preference. Respondents' having additional recreation equipment was weighted on the basis of the number of additional equipment they owned to explore the relationship with farmers' preference of the farm broadcasting programme.

Findings and Discussion

Radio owners and owning period

Data presented in Table 3 show that total number of farm family of the selected villages ranged from 44 to 306 with average of 145.43. Among them average 15.77% farm families had a radio, which ranged from 2.16% to 41.06%. Data in Table 4 show that only 8.78% respondent owned their radio during last one year, 37.17% during last 2-5

years and most of the respondents (54.05%) owned their radio before last 6 years or more. It indicates that the trend of having radio is decreased in recent times. Regarding type of radio, 43.92% respondents have only radio and the rests (56.08%) had radio with cassette player. Among the respondents, 90.54% owned their radio by purchase and 9.46% as a gift.

Table 3. Number of farm family and radio owners of the selected villages

Category		Minimum	Maximum	Mean	sd
Farm family of the of the selected villages	Number	44	306	145.43	92.43
	Percent	-	-	-	-
Radio owners of the selected villages	Number	3	85	22.93	20.75
	Percent	2.16%	41.06%	15.77%	-

Table 4. Distribution of respondents on the basis of period of radio owning, radio type and nature of owning

Period of owning	Type of radio (percent)			Nature of owning (percent)		
	Only radio	Radio with cassette player	Total	By purchase	As a gift	Total
During last 1 year	5.41	3.37	8.78	8.1	0.68	8.78
During last 2-5 years	16.22	20.95	37.17	32.44	4.73	37.17
During last 6-10 years	10.13	20.27	30.40	27.03	3.37	30.40
Before > last 10 years	12.16	11.49	23.65	22.97	0.68	23.65
Total	43.92	56.08	100	90.54	9.46	100

Individual characteristics of the radio owners

Data in Table 5 reveal that highest proportion (48.65%) of the respondents were in middle aged followed by young (32.43%) and old aged (18.92%) with an average of 41.16 years. Most (41.22%) of the respondents had secondary level education followed by primary level (38.51%) and above secondary level (16.22%), while 4.05% respondents were illiterate. Highest proportion (33.11%) of the respondents had medium family followed by small family (25.67%) and 17.57% respondents had very large family. The average family size was 7.39. The farm size of the respondents ranged from 0.03 to 12.15 ha with an average of 2.09 ha. The highest proportion (32.43%) of the respondents had medium farm size followed by large (24.32%), small (22.30%) and marginal (20.95%) farm size, respectively. Highest

proportion (56.76%) of the respondents of the study had an income category of Tk 90 thousand and above with an average annual income of Tk 127 thousand. Foreign remittance by the family members might be the probable cause of such high income. Because, among the total of 564 thousand expatriate Bangladeshi a considerable number from four districts of Sylhet division and the total expatriate remittance during 2006-07 was Tk 41304 crore (BER, 2007). Agricultural knowledge score of the respondents ranged from 2 to 30 with an average of 13.73. Most of the respondents (52.71%) had medium agricultural knowledge followed by low (33.78%) and high (13.51%) agricultural knowledge. Most of the respondents (54.73%) had medium cosmopolitaness followed by low (33.78%) and high (11.49%) cosmopolitaness. The average cosmopoliten-ess score was 8.39.

Table 5. Distribution of the respondents according to their selected characteristics (N = 148)

Characteristics	Scoring method	Possible score	Observed score	Categories	Respondents		Mean	SD
					Nr.	%		
Age	No. of years	-	15-80	Young age (up to 35)	48	32.43	41.16	13.63
				Middle age (36-55)	72	48.65		
				Old age (56 & above)	28	18.92		
Level of education	Years of schooling	-	0-16	Illiterate (0)	6	4.05	7.10	3.75
				Primary level (1-5)	57	38.51		
				Secondary level (6-10)	61	41.22		
				Higher secondary level and above (11 & above 10)	24	16.22		
Family size	No of members	-	3-23	Small (up to 4)	38	25.67	7.39	3.70
				Medium (5-7)	49	33.11		
				Large (8-10)	35	23.65		
				Very Large (11 & above)	26	17.57		
Farm size	Size in hectares	-	0.03-12.15	Marginal (0.021-0.2)	31	20.95	2.09	2.47
				Small (0.21-1.0)	33	22.30		
				Medium (1.01-3.0)	48	32.43		
				Large (above 3.0)	36	24.32		
Annual income	'000' Tk	-	24-600	Low income (up to 45)	18	12.16	127.42	7.78
				Medium income (45.1-90)	46	31.08		
				High income (above 90)	84	56.76		
Agricultural knowledge	Score	0-40	2-30	Low (up to 10)	50	33.78	13.73	5.79
				Medium (11-20)	78	52.71		
				High (21 & above)	20	13.51		
Cosmo-politeness	Score	0-18	2.17	Low (up to 7)	50	33.78	8.39	3.45
				Medium (8-15)	81	54.73		
				High (16 & above)	17	11.49		

Lifestyle of the radio owners

Occupation of 52.70% respondents was agriculture and of 25.00% was agriculture plus non-agriculture. However, occupation of 22.30% respondents was non-agriculture. Among the respondents, most of them (69.59%) were found self-involved in cultivation. On the other hand, 14.19% respondents done their cultivation by hired labourers and 12.84% by crop sharing basis (*borga*), while 3.38% respondents had no cropland.

Regarding electric facility, 23.65% respondents had no electric supply in their houses but most (76.35%) of the respondents had electric supply facility in their houses (Table 6). It might be due to the expansion of electricity supply in rural areas. In respect of having additional recreation equipment, in addition to radio 47.30% respondents had a TV and 24.32% had a TV plus one or more other recreation equipment as compared to 28.38% respondents had only a radio.

Table 6. Distribution of respondents on the basis of having electric facility and additional recreation equipment

Category	Having electric facility (%)	No electric facility (%)	Total (%)
Having radio only	10.14	18.24	28.38
Having radio + TV	41.89	5.41	47.30
Having radio +TV + other recreation equipment	24.32	0.0	24.32
Total	76.35	23.65	100

Listening and preference of the FBP

Among the respondents, only a few (15.54%) tuned their radio at varying interval to listen the farm broadcasting programme (FBP) and 38.51% tuned occasionally to listen other programmes, e.g., music, news (especially from British Broadcasting Corporation on

important national issues), drama etc. in the last one year (Table 7). However, most of the respondents (45.95%) never tuned their radio at least once in the last one year. The respondents who did not tuned their radio might be due to watching TV and enjoying other recreation equipment.

Table 7. Distribution of respondents on the basis of awareness about FBP and purpose of tuning

Category	Aware about FBP (%)	Not aware (%)	Total (%)
To listen the FBP	6.08	9.46	15.54
To listen other programmes	2.03	36.48	38.51
Never tuned	2.03	43.92	45.95
Total	10.14	89.86	100

A major portion (89.86%) of the respondents was not aware about the FBP though a few of them listen to FBP due to coincidence by aimless tuning. So, it can be assumed that lack of awareness about the programme might be one of the vital causes for not listening FBP by most of the respondents.

Highest portion of the respondents (93.24%) opined that no neighbour came to their houses to listen FBP in last one year. Only a few respondents opined that their neighbours rarely (4.05%) or moderately (2.71%) came to listen the FBP. The extent of preference of the FBP score of the respondents ranged from 0 to 5, against the possible range 0 to 8.

The mean preference score was very low (0.48). Data in Table 8 indicate that the highest proportion (83.78%) of the respondents did not prefer FBP. Only 9.46% respondents had low preference as compared to 5.41% had very low preference and a few respondents (1.35%) had moderate

preference. It was reported that farmers tend to depend more upon their neighbours, friends, relatives and farmer to farmer contact for agricultural information (Solomon, 1981). That might be the probable cause of such low preference of the FBP by the respondents.

Table 8. Distribution of respondents on the basis of their preference score

Characteristics	Possible score	Observed score	Category	Respondents		Mean	SD
				Number	Percent		
Farmers' preference of the FBP	0-8	0-5	No (0)	124	83.78	0.48	1.15
			Very low (1-2)	8	5.41		
			Low (3-4)	14	9.46		
			Medium (5-6)	2	1.35		
			High (7-8)	0	0.0		

Data on respondents' opinion on usefulness of the FBP have been presented in Table 9. Data reveal that 10.81% respondents opined that the programme was low useful, 4.06% opined moderately useful but 1.35% opined that the programme was not useful at all. However, most of the respondents (83.78%) had no comment about the programme because they did not use to listen the FBP.

Table 9. Respondents' distribution on basis of opinion on usefulness of the FBP

Opinion	Number	Percent
High useful	0	0
Moderate useful	6	4.06
Low useful	16	10.81
Not useful	2	1.35
No comment	124	83.78

Relationship between respondents selected characteristics and preference of the FBP

To find out the relationship between respondents selected characteristics and their preference of FBP, correlation co-efficient analysis was used. Various relationships regarding the above aspects were depicted in Table 10.

Level of education of the respondents had a significant positive relationship ($r = 0.172^*$) with their preference of FBP. It showed that respondents with increased level of education had more preference to the FBP. Information disseminated through the FBP required a certain level of education for their interpretation and use. For that, the respondents with lower level of education had less preference to the FBP in comparison to those with higher level of education. Regarding education, similar relationship was also reported by Miah *et al.* (2000) with communication exposure.

Farm size of the respondents showed significant positive relationship ($r = 0.229^{**}$) with their preference of the FBP. It indicated that large farm holders had more preference to FBP than the small farm holders. It was due to the fact that small farm holders had tendency to use traditional and proven technology to their farms because they usually do not like to take any risk of new technology. That was why they did not prefer the FBP. However, the large farmholders had a tendency to do something new and they had also the capability to take risk of new

technology. So, they preferred FBP to a certain extent in a view to get new agricultural information. The results were in conformity with findings of Islam *et al.*

(2001). They observed similar relationship between farm size and farmers' preference of mass contact media in receiving agricultural information.

Table 10. Relationship between respondents' selected characteristics and preference of the FBP

Dependent variable	Characteristics of the respondents	Calculated value of 'r'
Preference of the FBP	Age	-0.026
	Level of education	0.172*
	Family size	0.088
	Farm size	0.229**
	Annual income	0.009
	Having additional recreation equipment	-0.168*
	Agricultural knowledge	0.507**
	Cosmo politeness	0.037

* Significant at $p < 0.05$; ** Significant at $p < 0.01$

Respondents having additional recreation equipment had a significant negative correlation ($r = -0.168^*$) with their preference of the FBP. It inferred that respondents having either a TV or a TV plus other recreation equipment had low preference of the FBP in comparison to those who had only a radio. It might be due to audio-visual media is more attractive and entertaining than audio media like radio.

Respondents knowledge on agriculture showed a significant positive correlation ($r = 0.507^{**}$) with their preference of FBP. It indicated that an increased in agricultural knowledge of the respondents

correspondingly increased their preference of the FBP. In a study, Islam *et al.* (2001) also found similar relationship between agricultural knowledge and farmers' preference of mass contact media.

On the other hand, respondents' age, family size and cosmopoliteness was found having an insignificant relationship with preference of the FBP. This means that the characteristics are independent to the preference of FBP. Rahman (2002) also observed no relationship of age, family size and annual income with preference of information sources.

Conclusions

It is evident from the findings that most of the farm families of the study area did not have a radio. Among the radio owners only a few listen to and preferred the FBP. The major causes for not listening the FBP are due to not aware about the FBP and having TV and other recreation equipment by the respondents. Therefore, proper campaign

should be undertaken about the FBP to aware the intended listeners. On the other hand, information disseminated through the FBP were mainly supply-led rather than demand-led. So, introducing 'phone-in' facility could improve the listeners' preference about the FBP.

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