

## Farmers' constraints in receiving farm information from the communication media and their suggestions to overcome the constraints

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**Abstract:** The purpose of this study was to determine the farmers' constraints in receiving farm information from the selected communication media followed by their suggestions to overcome the constraints. The study was conducted in three unions covering 15 villages of Birganj upazila under Dinajpur district. Data were collected from 256 farmers, who were to some extent literate and were involved in agricultural production enterprises (crops, animals and fishes). Interpersonal communication media (IPCM), mass communication media (MCM) and interactive electronic media (IEM) were considered in the study. The findings reveal that the highest proportion of the farmers had constraints in using IPCM in respect of neighbours and friends' inadequate knowledge on modern farm information followed by lack of adequate knowledge on pesticide use of the input dealers, and input dealers' high price demand for inputs due to their commercial attitude. The top two constraints in respect of use of MCM were: regular load shedding of electricity during watching TV programmes, and lack of farmers' participation in TV programme, while the top two constraints in using IEM were: difficulties in contacting the field level extension workers through mobile phones, and lack of farm information centre for the farmers administered by mobile companies. The top three suggestions to overcome the constraints relevant to the use IPCM were: organizing more training programmes for the farmers, ensuring training to the input dealers by the DAE and input supply companies before giving license and distributing fertilizer in open market by the dealers. The top two measures to overcome the constraints in using MCM were: repetition of the telecasted agricultural TV programme, and telecast farmers' participatory programme involving those who have been succeeded in their farming activities, while the top two measures to reduce the constraints in using IEM were: reducing the difficulties of contacting field level extension workers through mobile phone, and establishing farm information centre for the farmers by the mobile companies.

**Key words:** Farmer, constraint, receipt, information, communication, media, suggestion and overcome

### Introduction

Agricultural sector is the largest and important source of income and employment in the country. However, its productivity of crops is one of the lowest in the world. Bangladesh though an over populated country, it is blessed with fertile land. But, due to poverty and limited application of modern technology and inputs it's per hectare yield of crop is still very low. There is a big gap between actual and potential yield of many crops, and therefore, there is an ample scope to increase yield of many crops (Anon. 2004). Communication media provides necessary information for the farmers to change their way of cultivation from traditional to modern one (Miah, *et al.*, 1998). Improved farm information and technology can be communicated through various media to the farmers and one has to take into account the preference of the farmers for a particular information media (Kashem and Halim, 1991). In the rural areas of Bangladesh, people use different information media. Some of them are frequently used while others are used occasionally and rarely. Farmers usually do not use all the communication media in receiving farm information to an equal extent because the communication media have some inherent constraints to reach the farmers (Islam, 1995). In the present investigating attempt has been made to determine the farmers' constraints in receiving farm information from the selected communication media followed by their suggestion to overcome the constraints.

### Materials and Methods

The present study was conducted in three unions covering 15 villages of Birganj upazila (lowest administrative unit in Bangladesh) under Dinajpur district. Total number of farmers in these 15 villages was 1025, out of which 256 (about 25 percent) were selected as the sample by using random sampling procedure. The farmers were requested to mention the constraints that hinder their use of communication media in receiving farm information. They

were also requested to mention the means to overcome the constraints. The constraints and suggestions were ranked on the basis of number of citations of the respondents. The communication media were classified into three categories such as interpersonal communication media (neighbours and friends, input dealers, SAAO, AEO, UAO, VS and UFO), mass communication media (radio, TV, newspaper and *krishi katha*) and interactive electronic media (mobile phone) (Kashem, 2004).

### Results and Discussion

The results on the constraints faced by the farmers in receiving farm information according to different categories of communication media have been presented below. The constraints have been recorded based on farmers' citations, which were converted to percentage as well as rank order. The percentages and the rank order of the constraints and measures in overcoming the constraints have used while discussing the findings.

**Constraints faced by the farmers in receiving farm information from interpersonal communication media (IPCM):** Farmers in a rural setting like Bangladesh mostly depend on the IPCM. This is the media in which the farmers have very easy access. Farmers' constraints in receiving farm information from this media have been presented in Table 1.

A critical examination of data in Table 1 showed that lack of knowledge regarding modern farm information of the neighbours and friends (89.45 percent) emerged as the most important constraint. This might be due to the fact that farmers usually seek information most frequently from those media because of their easy access and availability locally.

Lack of adequate knowledge on pesticide use of the input dealers emerged as the second (84.38 percent) most constraint. The farmers usually collect pesticide related information from the input dealers when they purchase pesticides. But in most of the cases it was observed that

the input dealers do not have adequate knowledge on the mode of use pesticide and its impact. Consequently the

input dealers cannot provide authentic information to the farmers.

**Table 1.** Rank order of constraints faced by the farmers in receiving farm information from IPCM

Farmers' constraints on the use of IPCM	No. of citation	Percent	Rank
Lack of knowledge regarding modern agricultural information of the neighbours and friends	229	89.45	1
Lack of adequate knowledge on pesticide use of the input dealers	216	84.38	2
Input dealers' high price demand for inputs due to their commercial attitude	199	77.73	3
Lack of interest of the neighbours and friends in giving actual farm information specially related to fertilizer and pesticide application	179	69.92	4
SAAOs' too much involvement in fertilizer distribution among the farmers	173	67.58	5
Non-availability of SAAOs' in a particular location	172	67.19	6
Lack of regular field visit and monitoring by the SAAOs'	162	63.28	7
Lack of enthusiasm the input dealers to provide agricultural information in peak season due to their business	128	50	8
Input dealers sell occasionally low quality inputs like seeds and pesticide	125	48.82	9
Shortage of officers at upazila livestock office	100	39.06	10

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Lack of adequate knowledge on pesticide use of the input dealers emerged as the second (84.38 percent) most constraint. The farmers usually collect pesticide related information from the input dealers when they purchase pesticides. But in most of the cases it was observed that the input dealers do not have adequate knowledge on the mode of use pesticide and its impact. Consequently the input dealers cannot provide authentic information to the farmers.

Input dealers' high price demand for inputs due to their commercial attitude was another important constraint (77.73 percent) faced by the farmers. This may be due to the fact that many inputs have fixed price and some have

not fixed price. The input dealers sometimes take advantage of this and charge higher price from the farmers. Lack of interest of the neighbours and friends in giving actual farm information specially related to fertilizer and pesticide application was another constraint reported by the respondents. This may be due to conservativeness of the neighbours and friends. The neighbours and friends think that if they disseminate actual information to others, they would also be benefited and hence, avoided to pass the concerned information to others.

The least (39.06 percent) perceived constraint mentioned by the farmers was the shortage of officers at upazila livestock office. This might be due to the fact that the upazila livestock officer's post was kept vacant for a long period of time. For this reason VS was engaged with other official activities and consequently farmers suffered from getting advice from the concerned authority.

**Constraints faced by the farmers in receiving farm information from mass communication media (MCM):** The results on the constraints faced by the farmers related to MCM are presented in Table 2.

**Table 2.** Rank order of constraints faced by the farmers in receiving farm information from MCM

Farmers' constraints on the use of MCM	No. of citation	Percent	Rank
Regular load shedding of electricity during watching TV programmes	202	78.91	1
Lack of farmers' participation in TV programme	126	49.22	2
Lack of regular publication of farm information from the daily newspapers	123	48.05	3
Absence of farm information from the regional newspaper	117	45.70	4

The findings showed that regular load shedding of electricity during watching TV programmes. It is quite obvious that due to load shedding the farmers could not watch the agricultural TV programmes which could have essential for receiving farm information from TV.

Lack of farmers' participation in TV programme was the second most important constraint. This may be due to the reason that without involvement of the farmers most of the agricultural programmes are telecast from TV channel.

The least (45.70 percent) perceived constraint mentioned by the farmers was absence of farm information from the regional newspaper. This might be due to the fact that the

regional newspapers are not published agricultural information.

**Constraints faced by the farmers in receiving farm information from interactive electronic media:** The interactive electronic media consists of only one medium i.e. mobile phone and discussed as below (Table 3).

It is observed from Table 3 that difficulties in contacting the field level extension workers through mobile phones were the most important constraint (66.80 percent). Now-a-days mobile phones are frequently used by the city dwellers, service holders, businessmen and most often by the farmers as well. But it becomes often difficult by the farmers to contact the field level extension workers.

**Table 3.** Rank order of constraints faced by the farmers in receiving farm information from IEM

Farmers' constraints on the use of IEM	No. of citation	Percent	Rank
Difficulties in contacting the field level extension workers through mobile phones	171	66.80	1
Lack of farm information centre for the farmers administered by mobile companies	155	60.55	2
Lack of opportunities for the farmers to communicate during the radio and TV programmes	25	9.77	3

Lack of farm information centre for the farmers administered by mobile companies was the second most important constraint (60.55 percent). The farmers complain that there is no farm information cell of any mobile company which can provide farm information to the farmers. But some mobile companies have already started functioning health service programme.

Lack of opportunities for the farmers to communicate during the radio and TV programmes was another constraint as indicated by the farmers. There is no scope of having feedback readily from watching the TV programme as well as listening to radio programme on existing programmes on agriculture. Had there been some forum

for discussion on this programmes using mobile phone, the farmers would have got much benefit from them.

**Measures as suggested by the farmers to overcome the constraints in relation to the use of communication media:** Each respondent was asked to suggest important measures that would reduce the constraints in using the communication media. The suggestions are sought separately for each type of communication media viz. IPCM, MCM and IEM and the results are presented below. **Suggestions offered by the farmers to overcome the constraints of interpersonal communication media (ICPM):** Many suggestions were provided by the farmers to overcome the constraints of IPCM. These have been summarized Table 4.

**Table 4.** Rank order of suggestions offered by the farmers to overcome the constraints related to IPCM

Suggestions to overcome the constraints related IPCM	No. of citation	Percent	Rank
Organizing more training programmes for the farmers	203	79.30	1
Ensuring training to the input dealers by the DAE and input supply companies before giving license	191	74.61	2
Distributing fertilizer in open market by the dealers	180	70.31	3
Taking initiatives by the government in relation to quality seed marketing	170	66.41	4
Strengthening the Block visits by the controlling authority of SAAOs	154	60.16	5
Arrangement of agricultural training for the mosque imams so that they can render effective advise to the rural farmers	140	54.69	6
Initiatives taken by the government for input price fixation	137	53.52	7
Increasing the sincerity of the SAAOs through providing incentives to dedicated officers	101	39.45	8

It is evident from the data contained in Table 4 that organizing more training programmes for the farmers was the foremost (79.30 percent) suggestion. The training programmes could enable the farmers to obtain the latest information and equip themselves with necessary knowledge and skills related to modern technology.

Ensuring training to the input dealers by the DAE (Department of Agricultural Extension) and input supply companies (seeds, fertilizers and pesticides) before giving license was the second most important (74.61 percent) suggestion cited by the farmers. Training would enhance their capabilities in the information acquisition, processing and dissemination of inputs related information to the farmers.

Distributing fertilizer in open market by the dealers was another (70.31 percent) suggestion as cited by the farmers. At the time of data collection the SAAOs (Sub-Assistant Agricultural Officers) of the DAE were very much busy in distributing fertilizer and hence, their duties for providing advice to the farmers were inadequate. Probably farmers would be happy if they get fertilizers in open market instead of involvement of SAAOs in respect of fertilizer distribution.

Taking initiatives by the government in relation to quality seed marketing was another (66.41 percent) suggestion cited by the farmers. It was known that quality seeds are responsible for increase of production of any crop. But in Bangladesh BADC (Bangladesh Agricultural Development Corporation) supplies about one-fourth of seeds among the farmers while the considerable amount of seeds are supplied by the private companies which are mostly non-quality seeds than that of BADC seeds. Most of the input dealers are selling those seeds which are supplied by the private companies.

**Suggestions offered by the farmers to overcome the constraints of MCM:** The suggestions obtained in this connection are summed up in Table 5.

It is noted from the data in Table 5 that the foremost (77.34 percent) suggestion cited by the farmers was repetition of telecast agricultural TV programme. This implies that farmers often cannot watch the useful TV programmes on agriculture due to frequent load shedding. Repetition of previously telecasted TV programme would increase the farmers' opportunities to watch the programme which they had missed before. Possibly due to

**Table 5.** Rank order of suggestions provided by the farmers to overcome the constraints related to MCM

Suggestions to overcome the constraints related MCM	No. of citation	Percent	Rank
Repetition of the telecasted agricultural TV programme	198	77.34	1
Telecast farmers' participatory programme involving those who have been succeeded in their farming activities	121	47.27	2
Arranging to allocate a full page farm information in the national dailies, at least once in a week	114	44.53	3
Publishing farm information through the local newspapers	109	42.58	4

this reason farmers suggested this measure to overcome the constraint.

Telecast farmers' participatory programme involving those who have been succeeded in their farming activities was the second most important (47.27 percent) suggestion offered by the farmers. With the active involvement of the farmers, it is possible to increase their self-confidence, and control of the development process. Publishing farm information through the local newspapers was another

(42.58 percent) suggestion cited by the farmers. Most of the farmers frequently read local newspaper but the local newspaper are sub-standard and fail to provide modern agricultural information.

**Suggestions provided by the farmers to overcome the constraints of IEM:** Suggestions that were provided in this respect are shown in Table 6.

**Table 6.** Rank order of suggestions offered by the farmers to overcome the constraints related to IEM (mobile phone)

Suggestions to overcome the constraints related IEM	No. of citation	Percent	Rank
Reducing the difficulties of contacting field level extension workers through mobile phone	151	58.98	1
Establishing farm information centre for the farmers by the mobile companies	139	54.30	2
Creating provision by radio and TV authorities for sending instant feedback through mobile phones by the farmers during the display of farm programmes	115	44.92	3

It is observed from Table 6 that reducing the difficulties of contacting field level extension workers through mobile phone (58.98 percent) was the most important suggestion provided by the farmers. Now-a-days many farmers receive farm information using their mobile phones. But they have very limited contact with the extension workers (AEO, UAO, UFO etc.). If the concerned authority takes initiative in providing information from their unit level extension officers of the DAE, DLS and DoF to the farmers at certain hours of office time, the farmers would receive farm information easily.

Creating provision by radio and TV authorities for sending instant feedback through mobile phones by the farmers during the display of farm programmes was another suggestion to overcome the constraint of mobile phone as a farm information media. Nowadays there are scopes for listeners to take part in watching many television programmes (like talk show) on mobile/cell phones. If there is any scope of taking part in agricultural programmes and thereby offering feedback to farmers it would be effective for farmers in receiving agricultural information.

In the era of high technological development farmers are very careful in selecting technologies for adoption. Population is increasing rapidly and consequently the cultivable land is decreasing correspondingly. Hence the only option available to the farmers is to increase per unit production of crops, animals and fishes. However, in order to take the rational decision to adopt any technology,

farmers have to adequate knowledge and information from the available communication media in which they have easy access, confidence and trust. But the findings of the present study clearly demonstrate that farmers still face considerable constraints in using the different communication media in receiving agricultural information. The rate of adoption of different modern technologies would slow so long the farmers would continue to face constraints in using the communication media. Therefore, the concerned administrators, and policy makers should give due attention on this matter and arrange to reduce the constraints as far as possible.

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