

## Effectiveness of Group Approach in Disseminating Farm Information to the Farmers

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### Abstract

The study was conducted to identify effectiveness of group approach in disseminating farm information. The study also attempted to explore the relationship between nine selected characteristics of the farmers and their opinion on effectiveness of Agricultural Diversification and Intensification Project (ADIP) under the Department of Agricultural Extension (DAE) in Ghatail upazila of Tangail district. One hundred respondents, fifty from Group Farmers (GF) and fifty from Non-Group Farmers (NGF) were selected following random sampling procedure. Most of the GF received farm information from their weekly meeting or group-led extension activities whereas 52% NGF did not receive any information from GF and 30% farmers considered the information as 'supply-led rather than demand-led. A highly significant number of GF (90%) attended in weekly meeting and shared information with absent members. Although 66% farmers made satisfactory opinions on effectiveness of group approach, a large proportion (42%) of the NGF did not consider group approach as an effective method of extension. The findings further showed that education, income, agricultural knowledge, innovativeness, group participation and communication exposure were correlated with the opinion of farmers on effectiveness of group approach in the dissemination of farm information. The GF members were able to take advantages from group meetings efficiently. Commitment of SAAO's work, need-based information and management aspects of group were provided as major suggestions to improve the existing performance of GF in transferring farm information.

**Keywords:** *Group approach, effectiveness, dissemination, ADIP*

### Introduction

In order to increase the coverage of information among the various categories of farmers, a project named Agricultural Support Services Project (ASSP) was undertaken within the framework of T&V system in 1992 emphasizing demonstration of improved farming practices, field days and farmer's rally, and meeting with farmer's groups. By strengthening the T&V system through the inclusion of ASSP, DAE has

sought to develop its own pertinent approach to extension. DAE's Revised Extension Approach (REA) specially embraced the Department's mission within the context of the New Agricultural Extension Policy (NAEP) in 1996. DAE implements the NAEP through the REA. It is applied within the extension planning cycle model and based on five key principles as, 'decentralization', 'responsiveness to farmer

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needs', 'targeting', 'working with groups', and 'using a wide range of extension methods'. Among these, working with groups is one of the key principles, involving a shift in emphasis from individual contact to group contact -though this does not mean that individual contact is abolished (DAE, 1999). But now, working with groups as an integral part of the DAE's new approach. The NEAP endorses the principle that extension staff should work with groups of all kinds, in order to bring maximum benefit to the farmers. It recognizes that a very wide range of mutual interest groups already exist in the field. The existing groups would be the focus of extension activity (Anonymous, 1996). As an integral part of DAEs new approach. It is expected that rapid dissemination of agricultural information would be possible through group extension methods. It would be able to lead to a faster spread of knowledge among farmers.

With the introduction of group approach of extension in disseminating farm information among farmers, a group of 30-35 members named Gram Krisak Sanghathan (GKS) was

formed by the DAE on the basis of farmer's socio-economic status (Garforth, 1993:14). As per NAEP, DAE is now working with three types of group like, 'single event groups', 'temporary groups', and 'permanent groups'. Permanent groups are formed by the DAE in partnership with local NGOs as per different projects rule of DAE, which along with other extension providers have been working with all types of groups to exchange information effectively from the very beginning of NAEP implementation. However, very little organized efforts have so far been undertaken to find out the effectiveness of group approach of extension in disseminating farm information to the intended audience. Considering all of these points, the need of such a study was strongly felt with the following objectives:

1. To measure the effectiveness of group approach in disseminating farm information to the farmers; and
2. To determine some selected characteristics of the farmers and to explore relationship between these characteristics and their opinion on effectiveness of group approach.

### **Methodology**

The locale of the study was Deulabari and Digar unions of Ghatail upazila of Tangail district. Considering the intensity of the project activities, two villages were selected from two unions. The selected villages were Pakutia under Deulabari union and Garatra under Digar union. Total number of farm families of these villages was 518 and 450 and total number of groups were 10 and 07 respectively. All the farmers of the selected villages were considered as the target population of this study. Using the updated list of the groups ten groups were selected, 05 from each village following random

sampling procedure. Five members from each of the ten groups were again selected randomly as a sample size. Out of group, Non-Group Farmers (NGF) 50 farmers were selected as sample following random sampling procedure. A reserve list (10 GF+5 NGF) was prepared so that the farmers of this list could be used for interview if any respondent included in the original sample was not available during collection of data. Finally, for this study the sample size was 100 (50 GF+50 NGF). The respondents were selected based on some major criteria i.e. the respondents were actively participated

members of the Group Farmers (GF) formed by the DAE at the concerned area and the NGF were more or less equivalent to GF except the involvement of any group or group-led extension activities. Data were collected by the researcher through face-to-face interview during April 25 to May 30, 2006. Data obtained from the respondents were compiled, coded, tabulated and analyzed in accordance with the objectives of the study.

Statistical measures such as number, frequency, distribution, range, mean, percentage, standard deviation, and correlation of co-efficient ( $r$ ) were used in describing the data. Nine selected characteristics of the respondents were age, education, farm size, family size, annual income, agricultural knowledge, innovativeness, group participation, communication exposure were the dependent

variables and these were measured employing prevailing standard methods.

In this study, it is expected that the GF supposed to receive agricultural information from the extension agent to practice and disseminate them to the NGF effectively. To assess the extent of effectiveness of group approach several logical steps like access to information by the farmers, sharing of information among GF members and opinion on effectiveness of group approach were interpreted. In measuring farmers' opinion on effectiveness of group approach, a 4-point rating scale was used. The scale contained 15 types of agricultural information in terms of disseminating those by the GF members. The respondents were asked to mention how much the GF meeting was effective in disseminating the information. Appropriate scores were assigned for each of the responses of the farmers to measure the extent of effectiveness of GF meetings.

## **Findings and Discussion**

### **Access to agricultural information by the farmers**

It is a fact that not all farmers respond equally to all information delivered to them. They usually respond to the information that is essential for performing various farming operations. Considering this view, an attempt was made to find out the type of information that were known to them, received by them and had not been received by the farmers (Table 1).

The number of farmers who previously knew about the information supplied was on seed preservation (42) cultivation of shade loving crops (40), farmyard manure preservation (34), management of existing fruit trees (33) and dhaincha is a better alternative than urea

(19) respectively. These crops are grown within the study area and probably due to experiences on production of above-mentioned crop; the farmers have better exposure to various farming aspects of these crops.

The information on pest management by using African dhaincha was received by maximum number of farmers (73) followed by homestead vegetable production (67), papaya cultivation (62), cultivation of dhaincha as green manure (59), supplementary irrigation in rice (55) and management of soil health by crop residue (52). It might be due to the reason that the newness and need-based information attracted maximum respondents while known

information have attracted minimum number of farmers. The data revealed that the information on IPM and production of quality seed have not reached to maximum number (48) of farmers followed by use of sweeping net (44) respectively (table 1). Findings also revealed that 80% GF & 30% NGF received information through GF meeting, while 12% GF & 18% NGF knew

previously and the rest 8% GF and 52% NGF did not receive any information through GF or their activities (Fig.1). Apart from this, majority NGF received the information not from the GF but personally contacting with different information sources in their time of need. This means that the majority (70%) NGF was deprived of information disseminated by the GF.

Table 1. Distribution of the respondents on the basis of dissemination of agricultural information by them

Extension messages	GF (No.=50)		NGF (No.=50)		Percentage (Total No. = 100)		
Cultivation of dhaincha as green manuring is a better alternative than urea.	5	40	14	19	19	59	22
FYM can be easily prepared by preserving household wastage, cow dung and all kinds of poultry excreta.	19	28	15	20	34	48	18
Crop residue recycling is good for soil fertility	0	42	4	10	4	52	44
Over use of chemical fertilizer is responsible for lower soil fertility.	7	42	9	12	16	54	30
Homestead vegetable production from a small area of 6m X 6m may ensure the supply of 200g of fresh vegetables against the current availability of 30-40g.	3	50	10	17	13	67	20
High land adjacent to the homestead can be utilized for the establishment of a small scale mix orchard by planting of short growing fruits and initially inter-crop can be practiced within the rows of fruit plants.	4	37	8	12	12	49	39
Ginger, turmeric, broad leaf coriander can be produced in the shady or partially shady area of homestead because they require little care and are not likely to be damaged by poultry, goat and cattle.	22	28	18	15	40	43	17
Pruning, top working, manuring, fertilization, watering and pesticides application should be taken care of in management of existing fruit plants.	7	40	26	14	33	54	13
Three seedlings of papaya are to be planted in a pit about 2m X 2m spacing. After flowering, all plants to be removed except the female.	0	45	0	17	0	62	38
To produce quality seed, rouging should be done during flowering stages of rice as per need of the crop.	0	43	0	9	0	52	48
Use of jute bags lined with polythene may be used for seed preservation, if metal container is not available.	20	30	22	20	42	50	8
Rice plant need maximum (2"- 4") water at panicle initiation to flowering stage. At this period, supplementary irrigation must be ensured for better results.	2	44	5	11	7	55	38
For perching, green manuring and using fuel purpose, 'African dhaincha' can be planted in T. Aman rice field.	0	50	0	23	0	73	27
IPM advocates that pesticide can be used as a last resort in managing pest and diseases.	0	46	0	6	0	52	48
Sweeping net is to be used for insect catching and to assess the extent of insect infestation.	0	39	0	17	0	56	44
Total/ Average:	6	40	9	15	15	55	30

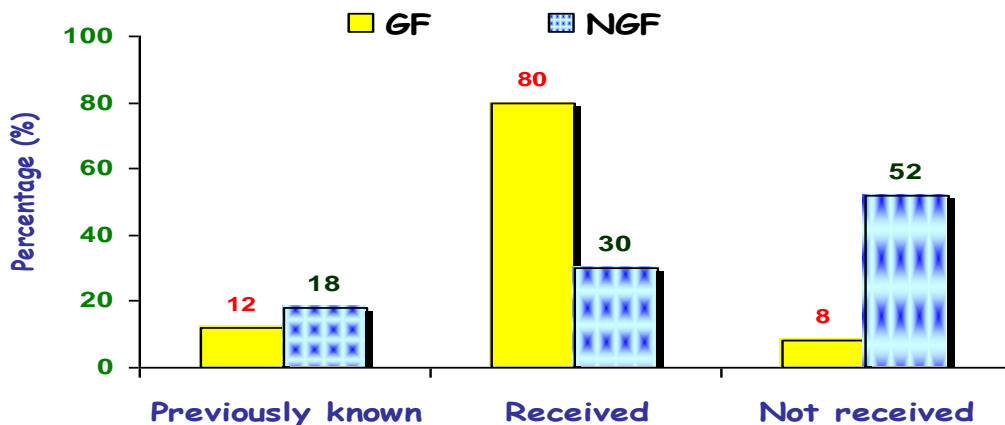


Figure 1. Distribution of the respondents according to their access to agricultural information

**Sharing of information among GF members**

Data shown in Table 2 indicate that 90% GF had made comments in favor of sharing information among them. They attended weekly group meeting regularly and shared agricultural information with absent members.

Table 2. Distribution of the respondents according to their opinion regarding sharing of information

Opinions	Respondents	
	No.	Percentage
Regularly	45	90
Occasionally	3	6
Rarely	2	4
Total	50	100

About 6% members shared information occasionally and only 4% had no interest on sharing information. The sharing of information among the GF was a regular

(90%) phenomenon. This means that the present role of GF in disseminating farm information had found to be effective and encouraging.

**Opinion on effectiveness of group approach**

Data shown in Table 3 indicate that 56% of GF felt group meeting as highly effective medium of delivering information from extension agent to the farmers, while 30% as effective and 14% considered as somewhat effective in maintaining flow of farm information among GF and NGF members. On the other hand, 42% NGF considered group approach as not effective method while 26% as effective, 22% as somewhat effective and only 10% as very effective. It is, therefore, concluded that a large proportion of the farmers considered group approach as an effective method of extension and may be continued to contribute in further also.

Table 3. Distribution of the respondents according to their opinion on effectiveness of group approach

Extent of effectiveness	Respondents			
	GF		NGF	
	No.	%	No.	%
Very effective	28	56	5	10
Effective	15	30	13	26
Somewhat effective	7	14	11	22
Not effective	0	0	21	42
Total	50	100	50	100

### Suggestions regarding the dissemination of farm information by the GF

Some of the members of GF (20) made some suggestions to improve the existing performances of their group in transferring agricultural information from SAAO to

members as well as to the NGF. The suggestions provided by the farmers are presented in the following Table 4.

Table 4. Rank order of suggestions given by the respondents

Rank order	Suggestions	No. of citation
1	Commitment of SAAOs work	18
2	On the spot training for the farmers	15
3	Use of audio-visual aids to provide information	15
4	Supervision of extension activities at the grass root level	12
5	Supply of demand-led information to the farmers	10
6	Motivation of GF members	9
7	Strong leadership	6
8	Better arrangement and preparation of the meeting	5
9	Timely attend in the meeting	3

### Relationship between dependent and independent variables

The summary of correlation test between selected characteristics of the respondents and their opinion on effectiveness of group approach in disseminating farm information is shown in Table 5. The data depict that out of nine selected characteristics of the respondents education, annual income, agricultural knowledge, innovativeness, group participation and communication exposure were positively correlated with their opinion on effectiveness of group approach in disseminating farm information. These findings indicate that the large or more is the education, annual income, agricultural

knowledge, innovativeness, communication exposure of the respondents the higher is the opinion on effectiveness of group approach in disseminating agricultural information. It means that these independent variables have exerted significant and positive impact in realization of favourable effectiveness of group approach in disseminating agricultural information for uplifting the socioeconomic aspects of their livelihood. This findings also confirmed with earlier findings of Singh (1982), Habib (2000), Nurzaman, (2000) and Islam and Kashem (1997).

Group participation of the respondents had a highly significant positive relationship with their opinion on effectiveness of group

approach. The finding implies that the respondents having more group participation

were likely to have better opinion on effectiveness of group approach.

Table 5. Relationship between selected characteristics of the respondents and their opinion on effectiveness of group approach in disseminating agricultural information

Dependent variable	Independent variables	Values of 'r' (GF) N = 50 df=48
Effectiveness of group approach in the dissemination of farm information.	Age	-0.027
	Education	0.288*
	Family size	-0.126
	Farm size	0.203
	Annual income	0.329*
	Agricultural knowledge	0.580**
	Innovativeness	0.857**
	Communication exposure	0.579**
	Group participation	0.898**

\* = Correlation is significant at 0.05 level of probability

\*\* = Correlation is significant at 0.01 level of probability

## Conclusion

Based on the above findings the following conclusions can be drawn:

1. It was found that the largest segment 80% of GF and 30% of NGF received farm information from the group meeting or group-led extension activities, which led to conclude that the farm information was supply-driven rather than demand-driven, almost all the GF attended in their weekly group meeting and shared agricultural information with absent members.
2. The sharing of information among the GF was regular 90%. The main advantage of group approach is to bring extension staff into contact with more farmers leading to conclude that the present role of GF in disseminating farm information is found to be effective and encouraging. Findings showed that the majority (66%) of the farmers made

satisfactory opinion towards effectiveness of group approach, nevertheless, a large proportion (42%) of the NGF did not consider group meeting as an effective method of extension in maintaining adequate flow of farm information to and from the farmers.

3. The poor organization (marginal and small farmers group), management of aspects GF, commitment of SAAOs work, supply of inadequate need based farm information and poor supervision of extension activities at the grass root level were found to be the main reasons of less effective performance of GF meeting.

Based on the above conclusions the following recommendations can be made:

1. Considering the existing performance of GF in disseminating farm information, there is a need for making all out efforts

by the concerned authority for making the GF effective to the farmers.

2. The DAE needs to form effective and productive farmers' group at grass root

level instead of working with others' group.

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