



A Study on Effectiveness Level of Various Information Delivery Methods Used by Agricultural Technology Management Agency (ATMA) in East Khasi Hills District of Meghalaya

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Abstract

The present study entitled “Role of Agricultural Technology Management Agency (ATMA) in information dissemination in East Khasi Hills district of Meghalaya”. The study was conducted in Myllem and Mawphlang blocks of East Khasi Hills District of Meghalaya. A total of 120 respondents from 12 villages were randomly selected and data were collected and analysed by using appropriate statistical tools. According to the response from the respondents and after analysis of data, the level of effectiveness of various information delivery methods used by ATMA was found to be medium (46.66%). It was also found that variables like age, gender, education, occupation, farming experience, extension contact, innovativeness and risk orientation have a positively significantly correlation with the level of effectiveness. While variables like, annual income and mass media exposure have a positively non-significant correlation with the level of effectiveness of the information delivery methods used by ATMA.

Keywords: ATMA, information dissemination, effectiveness, respondents, information delivery methods

Introduction

About a decade ago, in order to introduced reforms in the public sector agricultural extension system and increase its relevance, accessibility, and efficiency of knowledge sharing among various stakeholders, the Agricultural Technology Management Agency (ATMA) was introduced as a pilot (1998-2003) in 28 districts (DAC, 2010)[1]. ATMA is very much responsible for all the technology dissemination activities at the district level. It would have linkage with all the line departments, research organizations, non-governmental organizations and other agencies associated with agricultural development in the district. Research and Extension units within the project districts such as ZRS or substations, KVKs and the key line Departments of Agriculture, Animal Husbandry, Horticulture and Fisheries etc. would become constituent members of ATMA[2]. ATMA was implemented in the state of Meghalaya since 2010 but it was until 2017 that this scheme has been re-organised, elevated, expanded and improved. The scheme has been implemented in all the districts of the state and many works have been actively carried on by it. According to the respondents, ATMA is actively working in their area and many of the agricultural information being disseminated has also been very effective.



Aims and objectives of ATMA

1. ATMA aims at making extension system farmer driven and farmer accountable.
2. To set up priorities for sustainable agricultural development with Farming Systems Approach.
3. To execute various plans through line departments, training institutions, NGO's, farmers' organizations, and allied institutions.
4. ATMA aims to provide an effective mechanism for co-ordination and management of activities of different agencies which are involved in technology adaption/validation and dissemination at the district level and below.
5. To facilitate the empowerment of farmers/producers through assistance for mobilization, organization into associations, cooperatives etc. for their increased participation in planning, marketing, technology dissemination and agro-processing etc.

Effectiveness of the information delivery methods was conceptualized as the efficiency of the different information delivery methods that are used by ATMA in dissemination of agricultural information to the farmers. The effectiveness of the information delivery methods is operationalized and measured through the structured interview schedule prepared for the same by incorporating the construct and content of the extent of efficiency of the information which were received by the farmers through various information delivery methods used by ATMA. The responses from the farmers are taken with the help of five point scales to represent the degrees namely very low(1), low(2), medium (3), high(4) and very high (5). The total score of effectiveness of the information delivery methods was obtained by adding the scores of all items in the scale.

Objectives of The Study

The main objective of this study is to find the level of effectiveness of various information delivery methods used by ATMA. The specific objectives are:

- i. To find out the level of effectiveness of the information delivery methods of ATMA.
- ii. To find the relationship between the socio-economic variables with the level of effectiveness.

Research Methodology

For the present study both primary and secondary data were collected.

Selection of District: East Khasi Hills District was selected by purposive sampling for the research work since it is one of the major districts in the State where the works of ATMA have been actively going on.

Selection of blocks : There are 11 blocks in East Khasi Hills District, out of these Mawphlang and Myllem blocks was selected by purposive sampling because both the blocks are well covered under ATMA scheme.

Selection of villages : There are 184 villages in Mawphlang block and 107 villages in Myllem Block. After consultation with the Block Technology Managers (BTM's) of these two blocks, 6 villages from Mawphlang block and 6 villages from Myllem block were selected randomly for the present study.

Selection of respondents: After consultation with the Block Technology Managers (BTM's) of Mawphlang and Myllem block, list of the beneficiaries of ATMA were given and out of these 10 respondents from each of the 12 villages of the two blocks were selected. Thus, making a total number of 120 respondents.

Data Analysis

After collection of the data from the respondents, they are being analyzed accordingly. Statistical tools such as frequency, percentage, mean, Microsoft excel and coefficient correlation has been used for analysis of data.



TABLE1: Socio-Economic Variables of the Respondents

Sl.no	Variables	Intervals	Frequency	Percentage
1	Age	20-35 36-55 Above 55	24 52 44	20.00 43.40 36.60
2.	Education	Illiterate Literate Primary Middle High school Graduate	1 14 44 34 23 4	0.84 11.66 36.66 28.33 19.17 3.34
3.	Occupation	Farming Farming +labour Farming +business	89 20 11	74.16 16.66 9.18
4.	Farming experience	5-10 years 10-20 years More than 20 years	10 76 34	8.30 63.30 20.40
5.	Annual income	20,000-40,000 40,000-60,000 Above 60,000	28 45 47	23.34 37.50 39.16
6	Level of extension contact	Low (7-10.66) Medium (10.64-14.30) High (14.40-18)	35 46 39	29.20 38.30 32.50
7	Mass media exposure	Low (6-8.66) Medium (8.67-11.33) High (11.34-14)	32 57 31	26.60 47.60 25.80
8	Innovativeness	Low (6-8.33) Medium(8.34-10.67) High (10.68-13)	4 81 35	3.30 67.50 29.20
9	Risk orientation	Low (8-10.33) Medium (10.34-12.67) High (12.68-15)	15 57 48	12.50 47.50 40.00



From the above table 1, it was found that maximum number of respondents (43.40%) belonged to the age group of 36-55 years of age, 36.6 per cent of the respondents were educated up to Primary school. Majority (74.16%) of the respondents only do farming as their occupation, Majority (63.30%) of the respondents have 10-20 years of farming experience. 39.10 per cent of the respondents have an annual income of above 60,000 through agriculture, 38.30 per cent of the respondents have medium level of extension contact (Similar findings was also reported by **Deshmukh et al.** in 2007) [3]. 47.60 per cent of the respondents have medium level of mass media exposure. Majority (67.50%) of the respondents have medium level of innovativeness and 47.50 per cent of the respondents have medium level of risk orientation.

Table 2: Distribution of the respondents regarding the effectiveness of various information delivery methods used by ATMA

Sl. no	Statements	Very high	High	Medium	Low	Very low
1	Information contents were relevant.	9 (7.50)	86 (71.66)	25 (20.84)	0 (0)	0 (0)
2	It was easy to understand.	28 (23.30)	76 (63.30)	16 (13.40)	0 (0)	0 (0)
3	Knowledge has increased as a result of the information received in a particular area.	14 (11.66)	43 (35.83)	61 (50.83)	2 (1.68)	0 (0)
4	Information given was timely.	1 (0.80)	43 (35.83)	62 (51.66)	14(11.71)	0 (0)
5	There was clarification on doubts and queries.	18 (15.00)	85 (70.80)	16 (13.40)	1 (0.80)	0 (0)
6	There was overall satisfaction from information received.	9 (7.50)	45 (37.50)	63 (52.50)	3 (2.50)	0 (0)
7	Information given was based on participatory need assessment.	5 (4.16)	10 (8.33)	78 (65.00)	27 (22.51)	0 (0)
8	Applicability of the delivery methods to local situation.	4 (3.40)	19 (15.80)	85 (70.80)	12 (10.00)	0 (0)
9	There was increased in your enterprise, production & productivity	5 (4.16)	7 (5.83)	106 (88.33)	2 (1.68)	0 (0)
10	Socially compatible	4 (3.30)	16 (13.40)	96 (80.00)	4 (3.30)	0 (0)



Table 2.1: Distribution of the respondents regarding the level of effectiveness of various information delivery methods used by ATMA.

Sl.no	Category	Frequency	Percentage
1	Low (27-33.66)	14	11.68
2	Medium (33.67-40.33)	56	46.66
3	High (40.34-47)	50	41.66
	Total	120	100.00

From the above table 2.1, it is found that according to the response from the respondents, the level of effectiveness of various information delivery methods used by ATMA was found to be medium (46.66%) , followed by high (41.66%) and low (11.68%) respectively.

Table 2.2: Relationship between Independent Variables with effectiveness of information delivery methods used by ATMA.

Sl.No.	Independent variables	“r” value
1.	Age	0.153*
2	Education	0.225*
3	Occupation	0.142*
4	Farming experience	0.454*
5	Annual income	0.062NS
6	extension personnel contact	0.321*
7	mass media exposure	0.012NS
8.	Innovativeness	0.194*
9	Risk Orientation	0.232*

*= Significant

NS= Non-Significant

The correlation coefficient “r” between 10 different independent variables and level of effectiveness of various information delivery methods used by ATMA were found that variables like age, education, occupation, farming experience, extension contact, innovativeness and risk orientation have a positively significantly correlation with the level of effectiveness. While variables like, annual income and mass media exposure have a positively non-significant correlation with the level of effectiveness of various information delivery methods used by ATMA.

Conclusion:

The objective of this paper is to find out the level of effectiveness of various information delivery methods used by ATMA. Thus, from the above findings, it can be concluded that according to the response from the respondents, the level of effectiveness of various information delivery methods used by ATMA was found to be medium (46.66%). The results also shows that age, education, occupation, farming experience, extension contact, innovativeness and risk orientation have a positively significantly correlation with the level of



effectiveness. While variables like, annual income and mass media exposure have a positively non-significant correlation with the level of effectiveness of various delivery methods used by ATMA.

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