

DISSEMINATION OF AGRICULTURAL INFORMATION THROUGH MASS MEDIA TO THE FARMERS OF DHARWAD REGION IN KARNATAKA

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ABSTRACT

The main aim of the study was to identify the process of dissemination of agricultural information through mass media to the farmer community. The study population consists of 1687 farmers having educational qualification of above seventh class. The survey method using the questionnaire as a tool was adopted to collect necessary data. From this study, it is clear that farmers consider television as the most important mass media which disseminates information pertaining to their needs. Farmers also depend on traditional mass media like magazines, newspaper, and radio. Farmers are less aware of agricultural supports available via the Internet.

KEYWORDS: Agricultural Information, Mass Media, Electronic Media, Print Media, Information Dissemination

INTRODUCTION

Agricultural sector plays a crucial role in the national development; often it is the backbone of Indian economy. The government of India has an aim towards doubling the agricultural production by 2020. The role of Mass media is to transferring modern agricultural technologies to the farmers. Today print and electronic mass media should create awareness on the problems arising due to unscientific agricultural practices, related consequences, and issues and provide suggestion to reduce the stress on the environment. The mass media are effective in improving the farmers learning efficiency and creating awareness among them. Due to the development of enormous technologies towards crop production creates a sense of dynamism and urgency towards sharing these exploded technologies from the research stations to the farmers. There is a need for the study to know the availability of various forms of information resources and to know the extent of utilization of these resources by the agriculturalist. Hence, the present study on dissemination of agricultural information through mass media to the farmers of Dharwad region in Karnataka was conducted.

OBJECTIVES OF THE STUDY

The main objectives of the study are

- To examine the use of mass media by the farmers for getting agricultural related information.
- To know the role of mass media in disseminating agricultural information to the farmers.
- To find out the extent of use of internet by farmers for gathering information.

- To know the impact of mass media on agricultural productivity.

REVIEW OF LITERATURE

The investigators have conducted a detailed search for literature and browsed databases such as Library & Information Science Abstracts (LISA), Library, Information Science & Technology Abstracts (LISTA), Academic Search Premier, Business Source Premier, Science Direct, Wiley Inter-Science, Vidyanidhi and Internet.

Khan, Rahman, and Nasir, Uddin (2017) conducted a study to determine the effectiveness of selected mass media in the transfer of agricultural technology to farmers of Bangladesh. This study also identifies the influential factors affecting the effectiveness of mass media in the transfer of technology to farmers. This study was conducted in three villages of Gouripur subdivision under Mymensingh district at Bangladesh. 110 farmers were interviewed using a questionnaire for data collection. Television was the most popular mass media compared to leaflet, poster, radio and magazine based on the farmer's responses. Out of eight characteristics, farmer's education, extension contact and use of media had positively significant with the effectiveness of mass media. About 39.30% of the total variation in perceived effectiveness of mass media explained by two variables, namely education and use of media has been revealed by the method of Multiple Regression Analysis.

Singh and Singh (2017) conducted a study in Rajgarh District of Madhya Pradesh during the year 2013-14 to find out the utilization level of communication channels of growers of wheat and to investigate the association between social participation of respondents and level of utilization of communication channels. The study resulted that the television was the most utilized communication channel followed by progressive farmers.

Mgbakor, Iyobor, and Okezie (2013) investigated the socioeconomic efforts of mass media on farmers in Ika of North East Local Government Area of Delta State, Nigeria. Its study was conducted to investigate the kind of services provided by extension workers in increasing farm output. A total of 96 farmers were randomly selected and interviewed. The findings of the study highlights that the visit of extension workers to farmers were aimed at teaching them modern technologies, a majority of the benefits from extension services were due to the usefulness of the innovations. The inadequate capital, language, power failure, time of programmes, frequency modulation and mode of presentation are the major constraints militating against the used mass media.

Ajaykumar and Veerabhadraiah (1991) observed that a large number of grape growers (51 percent) had a medium level of newspaper use followed by high (27 per cent) and low as (22 per cent). Further newspaper and television were regularly used mass media by a large percentage of farmers (19 per cent and 50 per cent). Many of them used extension folders, farm magazines and farm radio occasionally. It is quite interesting to note that the mass media were used in their day to day life and a considerable percentage of farmers did not use radio, farm magazines and extension folders.

METHODOLOGY

The Population of the study consist of 1687 farmers having educational qualification of above seventh class and having landholding of more than one acre were obtained from registers maintained by Taluk Survey Office of Dharwad, Hubli urban, Kalghatgi, Navalgund, Kundgol, Hubli rural, Alnavar and Annigeri. Random sampling technique has been adopted for the selection of samples in each taluk. The questionnaire in English and Kannada was designed to collect data.

In addition to questionnaire method, the interview schedule was also used to collect required information as a supplement to the questionnaire method to bring more clarity to the data which are essential and use for analysis and interpretation of data.

ANALYSIS AND INTERPRETATION OF DATA

The data was collected by different methods were analyzed and interpreted and same as presented in the following tables.

Distribution of Questionnaire

The distribution of questionnaire among respondents has been shown in Table-1. A total of 1903 questionnaire were distributed among the respondents of Dharwad district, Of which 1687 filled-up questionnaires were received back consisting of 88.64% responses. The Table-1 also shows that the highest number of questionnaires have been received from the respondents of Alnavar 193 (92.34%), followed by Kundgol 214 (91.85%) and the respondents of Dharwad amounting 256 (88.89%). The Taluk wise details of the questionnaire distributed to the farmers and the amount of questionnaires received from the farmers are indicated in Table-1.

Table 1: Distribution of Questionnaire

Taluk in Dharwad District	Questionnaire Distributed (N=1903)	Questionnaire Received (N=1687)	Percentage
Dharwad	288	256	88.89
Hubli Urban	254	218	85.83
Kalghatgi	212	184	86.79
Navalgund	256	227	88.67
Kundgol	233	214	91.85
Hubli rural	234	204	87.18
Alnavar	209	193	92.34
Annigeri	217	191	88.02

Gender and Age Wise Distribution

The gender and age wise distribution of respondents under the study has been shown in Table-2. The Table 2 shows that out of the 1687 total respondents, 905 (53.64%) is Male and the remaining 782 (46.35%) are Female. About 397 (23.53%) of respondents belong to the age group of 'Below 25 years', followed by 343 (20.33%) belong to '46-55 years', 342 (20.27%) belong to '26-35' years, 329 (19.50%) belong to '36-45' years and 276 (16.36%) of respondents belong to the age group of 'Above 55 years'.

Table 2: Gender and Age Wise Distribution

Age (In Years)	Male (N=905)	Female (N=782)	Total (N=1687)
<25	218 (24.09)	179 (22.89)	397 (23.53)
26-35	179 (19.78)	163 (20.84)	342 (20.27)
36-45	175 (19.34)	154 (19.69)	329 (19.50)
46-55	194 (21.44)	149 (19.05)	343 (20.33)
Above 55	139 (15.36)	137 (17.52)	276 (16.36)

The above Table-2 also depicts that 218 (24.09%) of male respondents and 179 (22.89%) of female respondents belongs to the age group of 'Below 25 years'.

Educational Qualification Wise Distribution

The educational qualification wise distribution of respondents has been shown in Table-3. The Table-3 shows that 587 (34.80%) of respondents have educational qualification up to 7th standard, followed by 453 (26.85%) of respondents have qualification of up to 10th standard, 349 (20.69%) of respondents have qualification of Intermediate, 157 (9.31%) of respondents are graduates and 141 (8.36%) of respondents have qualification of postgraduate and above.

Table 3: Educational Qualification Wise Distribution

Educational Qualification	Total (N=1687)	Percentage
Up to 7 th	587	34.80
Up to 10 th	453	26.85
Intermediate	349	20.69
Graduate	157	9.31
Post Graduate and Above	141	8.36

Use of Mass Media

The mass media used by the respondents has been shown in Table-4. The Table-4 depicts that 623 (36.93%) of respondents use Television, followed by 478 (28.33%) of respondents use Magazines, 381 (22.58%) of respondents use Radio and 205 (12.15%) of respondents use the Internet.

The Table-4 also shows that in Kalagatgi taluk 89 (39.21%) of respondents use Television and 72 (31.72%) of respondents use Magazines, followed by 74 (28.91%) of respondents in Dharwad taluk use Radio and 37 (19.17%) of respondents in Alnavar taluk use the Internet.

Table 4: Use of Mass Media

Sources	Taluku in Dharwad District								Total (N=1687)
	DWD (N=256)	HU (N=218)	HR (N=184)	KH (N=227)	NG (N=214)	KG (N=204)	AV (N=193)	AG (N=191)	
TV	97 (37.89)	79 (36.24)	65 (35.33)	89 (39.21)	83 (38.79)	76 (37.25)	66 (34.20)	68 (35.60)	623 (36.93)
Magazine	69 (26.95)	64 (29.36)	58 (31.52)	72 (31.72)	68 (31.78)	53 (25.98)	42 (21.76)	52 (27.23)	478 (28.33)
Radio	74 (28.91)	57 (26.15)	42 (22.83)	41 (18.06)	39 (18.22)	42 (20.59)	48 (24.87)	38 (19.90)	381 (22.58)
Internet	16 (06.25)	18 (08.26)	19 (10.33)	25 (11.01)	24 (11.21)	33 (16.18)	37 (19.17)	33 (17.28)	205 (12.15)

Note: DWD-Dharwad, HU- Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV-Alnavar, AG-Annigeri

Use of Agriculture Magazines

The use of Agricultural Magazines by the respondents has been summarized in Table-5. The Table-5 shows that 1153 (68.35%) of respondents opine as ‘Yes’ towards the use of agricultural magazines and 534 (31.65%) of respondents opine as ‘No’.

The Table-5 also shows that 164 (64.06%) of respondents from Dharwad, 161 (73.85%) of respondents from Hubli Urban, 135 (73.37%) from Hubli Rural, 153 (67.40%) from Kalghatgi, 135 (63.08%) from Navalgund, 118 (57.84%) from Kundgol, 138 (71.50%) from Alnavar and 149 (78.01%) of respondents from Annigeri taluk opine as ‘Yes’ i.e. they use Magazines for gathering agricultural information and 92 (35.94%) of respondents from Dharwad, 57 (26.15%) of respondents from Hubli Urban, 49 (26.63%) from Hubli Rural, 74 (32.60%) from Kalghatgi, 79 (36.92%) from Navalgund, 86 (42.16%) from Kundgol, 55 (28.50%) from Alnavar and 42 (21.99%) of respondents from Annigeri taluk opine as ‘No’ i.e. they do not use Magazines for gathering agricultural information.

Table 5: Use of Agriculture Magazines

Opinion	Taluku in Dharwad District								Total (N=1687)
	DWD (N=256)	HU (N=218)	HR (N=184)	KH (N=227)	NG (N=214)	KG (N=204)	AV (N=193)	AG (N=191)	
Yes	164 (64.06)	161 (73.85)	135 (73.37)	153 (67.40)	135 (63.08)	118 (57.84)	138 (71.50)	149 (78.01)	1153 (68.35)
No	92 (35.94)	57 (26.15)	49 (26.63)	74 (32.60)	79 (36.92)	86 (42.16)	55 (28.50)	42 (21.99)	534 (31.65)

Note: DWD-Dharwad, HU- Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV-Alnavar, AG-Annigeri

Magazines Subscribed

The magazines subscribed by respondents have been shown in the Table-6. The Table-6 depicts that 588 (51.00%) of respondents subscribe Krushi Munnade, followed by 514 (44.58%) Annadata, 491 (42.58%) Krishi Jagran, 480 (41.63%) Adike Patrike, 474 (41.11%) Pashu Siri, 464 (40.24%) Agri Mahiti, 453 (39.29%) Negila Yogi, 424 (36.77%) Sujatha Sanchike, 392 (34.00%) Krishi Kayaka, 374 (32.44%)

Raitha Dwayani and 353 (30.62%) of respondents subscribe to Sharad Krushi magazine.

The Table-6 also depicts that 89 (54.27%) of respondent from Dharwad, 74 (45.96%) of respondents from Hubli Urban and 84 (62.22%) of respondents from Hubli Rural subscribe to Annadata, followed by 74 (48.37%) of respondents from Kalghatgi, 78 (56.52%) of respondents from Alnavar and 92 (61.74%) of respondents from Annigeri subscribe to Krushi Munnade, 76 (56.30%) of respondents from Navalgund subscribe to Agri Mahiti and 67 (56.78%) of respondents from Kundgol subscribe to Negila Yogi magazine.

Table 6: Magazines Subscribed

Sources	Taluku in Dharwad District								Total (N=1153)
	DWD (N=164)	HU (N=161)	HR (N=135)	KH (N=153)	NG (N=135)	KG (N=118)	AV (N=138)	AG (N=149)	
Krishi Jagran	59 (35.98)	68 (42.24)	53 (39.26)	67 (43.79)	52 (38.52)	65 (55.08)	63 (45.65)	59 (39.60)	491 (42.58)
Agri Mahiti	68 (41.46)	51 (31.68)	52 (38.52)	55 (35.95)	76 (56.30)	57 (48.31)	54 (39.13)	51 (34.23)	464 (40.24)
Pashu Siri	73 (44.51)	62 (38.51)	69 (51.11)	73 (47.71)	37 (27.41)	46 (38.98)	61 (44.20)	53 (35.57)	474 (41.11)
Annadata	89 (54.27)	74 (45.96)	84 (62.22)	39 (25.49)	46 (34.07)	51 (43.22)	53 (38.41)	76 (51.01)	514 (44.58)
Adike Patrike	74 (45.12)	53 (32.92)	73 (54.07)	51 (33.33)	59 (43.70)	42 (35.99)	49 (35.51)	79 (53.02)	480 (41.63)
Raitha Dwayani	51 (31.10)	48 (29.81)	79 (58.52)	34 (22.22)	28 (20.74)	39 (33.05)	27 (19.57)	68 (45.64)	374 (32.44)
Krishi Kayaka	58 (35.37)	72 (44.72)	38 (28.15)	44 (28.76)	37 (27.41)	58 (49.15)	32 (23.19)	49 (32.89)	392 (34.00)
Sharad Krushi	39 (23.78)	58 (36.02)	42 (31.11)	29 (18.95)	34 (25.19)	46 (38.98)	43 (31.16)	62 (41.61)	353 (30.62)
Krushi Munnade	85 (51.83)	64 (39.75)	83 (61.48)	74 (48.37)	55 (40.74)	57 (48.31)	78 (56.52)	92 (61.74)	588 (51.00)
Sujatha Sanchike	69 (42.07)	53 (32.92)	57 (42.22)	59 (38.56)	42 (31.11)	33 (27.97)	55 (39.86)	55 (36.91)	424 (36.77)
Negila Yogi	64 (39.02)	57 (35.40)	63 (46.67)	48 (31.37)	34 (25.19)	67 (56.78)	52 (37.68)	68 (45.64)	453 (39.29)
Note: DWD-Dharwad, HU- Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV-Alnavar, AG-Annigeri									
Chi-Square=99.799, P-Value < 0.00001. The result is significant at P< 0.05									

Use of Radio for Agricultural Information

The use of radio for agricultural information by the respondents has been summarized in Table-7. The Table-7 depicts that 1273 (75.46%) of respondents opine as 'Yes'. i.e. they use radio for agricultural information and 414 (24.54%) of respondents opine as 'No'.

The Table-7 also depicts that 184 (71.88%) of respondents from Dharwad, 183 (83.94%) of respondents from Hubli Urban, 135 (73.37%) from Hubli Rural, 196 (86.34%) from Kalghatgi, 149(69.63%) from Navalgund, 125 (61.27%) from Kundgol, 149 (77.20%) from Alnavar and 152 (79.58%) of respondents from Annigeri taluk opine as 'Yes' i.e. they use Radio for gathering agricultural information and 72 (28.13%) of respondents from Dharwad, 35 (16.06%) of respondents from Hubli Urban, 49 (26.63%) from Hubli Rural, 31 (13.66%) from Kalghatgi, 65 (30.37%) from Navalgund, 79 (38.73%) from Kundgol, 44 (22.80%) from Alnavar and 39 (20.42%) of respondents from Annigeri taluk opine as 'No' i.e. they do not use Radio for gathering agricultural information.

Table 7: Use of Radio for Agricultural Information

Radio	Taluks in Dharwad District								Total (N=1687)
	DWD (N=256)	HU (N=218)	HR (N=184)	KH (N=227)	NG (N=214)	KG (N=204)	AV (N=193)	AG (N=191)	
Yes	184 (71.88)	183 (83.94)	135 (73.37)	196 (86.34)	149 (69.63)	125 (61.27)	149 (77.20)	152 (79.58)	1273 (75.46)
No	72 (28.13)	35 (16.06)	49 (26.63)	31 (13.66)	65 (30.37)	79 (38.73)	44 (22.80)	39 (20.42)	414 (24.54)

Note: DWD-Dharwad, HU-Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV-Alnavar, AG-Annigeri

Radio Programme Heard

The Radion programmes heard by the respondents have been summarized in Table-8. The Table-8 shows that 930 (73.06%) of respondents listen Krishiranga, followed by 909 (71.41%) Kisanvani, 586 (46.03%) Raitarige Salahegalu, 448 (35.19%) Meet the specialist and 378 (29.69%) respondents listen to Agricultural Marketing programme. The Table-8 also shows that 134 (72.83%) of respondents from Dharwad, 127 (94.07%) from Hubli Rural and 88 (59.06%) from Navalgund listen Kisanvani, followed by 162 (88.52%) of respondents form Hubli Urban, 162 (82.65%) from Kalghatgi, 98 (78.40%) from Kundgol, 95 (63.76%) from Alnavar and 79 (51.97%) from Annigeri listen to Krishiranga programme on radio.

Table 8: Radio Programme Heard

Name of Radio Programme	Taluks in Dharwad District								Total (N=1273)
	DWD (N=184)	HU (N=183)	HR (N=135)	KH (N=196)	NG (N=149)	KG (N=125)	AV (N=149)	AG (N=152)	
Krishiranga	129 (70.11)	162 (88.52)	119 (88.15)	162 (82.65)	86 (57.72)	98 (78.40)	95 (63.76)	79 (51.97)	930 (73.06)
Kisanvani	134 (72.83)	138 (75.41)	127 (94.07)	159 (81.12)	88 (59.06)	93 (74.40)	93 (62.42)	77 (50.66)	909 (71.41)
Raitarige Salahegalu	61 (33.15)	68 (37.15)	93 (68.89)	96 (48.98)	52 (34.90)	62 (49.60)	82 (55.03)	72 (47.37)	586 (46.03)
Meet the specialist	38 (20.65)	49 (26.77)	67 (49.63)	88 (44.90)	37 (24.83)	69 (55.20)	33 (22.15)	67 (44.08)	448 (35.19)
Agricultural Marketing	57 (30.98)	67 (36.61)	62 (45.93)	72 (36.73)	33 (22.15)	27 (21.60)	27 (18.12)	33 (21.71)	378 (29.69)

Note: DWD-Dharwad, HU-Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV-Alnavar, AG-Annigeri

Chi-Square=1766.66, P-Value < 0.00001. The result is significant at P< 0.05.

Use of Television for Agricultural Information

The use of Television for agricultural information by the respondents has been summarized in Table-9. The Table-9 shows that 1592 (94.37%) of respondents opine as ‘Yes’. i.e. they use television for agriculture information and 95 (05.63%) of respondents opine as ‘No’.

The Table-9 also shows that 243 (94.92%) of respondents from Dharwad, 210 (96.33%) of respondents form Hubli Urban, 172 (93.48%) from Hubli Rural, 221 (97.36%) from Kalghatgi, 198 (92.52%) from Navalgund, 186 (91.18%) from Kundgol, 179 (92.74%) from Alnavar and 183 (95.81%) of respondents from Annigeri taluk opine as ‘Yes’ i.e. they use television for gathering agricultural information and 13 (05.08%) of respondents from Dharwad, 08 (03.67%) of respondents form Hubli Urban, 12 (06.52%) from Hubli Rural, 06 (02.64%) from Kalghatgi, 16 (7.48%) from Navalgund,

18 (08.82%) from Kundgol, 14 (7.25%) from Alnavar and 08 (04.19%) of respondents from Annigeri taluk opine as 'No' i.e. they do not use Television for gathering agricultural information.

Table 9: Use of Television for Agricultural Information

TV	Taluks in Dharwad District								Total (N=1687)
	DWD (N=256)	HU (N=218)	HR (N=184)	KH (N=227)	NG (N=214)	KG (N=204)	AV (N=193)	AG (N=191)	
Yes	243 (94.92)	210 (96.33)	172 (93.48)	221 (97.36)	198 (92.52)	186 (91.18)	179 (92.74)	183 (95.81)	1592 (94.37)
No	13 (05.08)	08 (03.67)	12 (06.52)	06 (02.64)	16 (7.48)	18 (08.82)	14 (7.25)	08 (04.19)	95 (05.63)

Note: DWD-Dharwad, HU- Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV-Alnavar, AG-Annigeri

Television Programmes Viewed

The Television programmes viewed by the respondents have been summarized in Table-10. The Table-10 shows that 1272 (79.90%) of respondents view Krishidarshan, followed by 1042 (65.45%) Annadata, 508 (31.91%) Kasturi Krishi and 465 (29.21%) of respondents view Marali Baa Mannige. The Table-10 also shows that Krishidarshan is most popularly viewed a television program on all the taluks of Dharwad district.

Table 10: Television Programmes Viewed

Name of the Programmes	Taluks in Dharwad District								Total (N=1592)
	DWD (N=243)	HU (N=210)	HR (N=172)	KH (N=221)	NG (N=198)	KG (N=186)	AV (N=179)	AG (N=183)	
Krishidarshan	219 (90.12)	198 (94.29)	129 (75.00)	183 (82.81)	159 (80.30)	173 (93.01)	119 (66.48)	92 (50.27)	1272 (79.90)
Annadata	218 (89.71)	89 (42.38)	126 (73.25)	133 (60.18)	143 (72.22)	157 (84.41)	98 (54.75)	78 (42.62)	1042 (65.45)
Kasturi Krishi	79 (32.51)	38 (18.10)	69 (40.11)	82 (37.10)	67 (33.84)	49 (26.34)	57 (31.84)	67 (36.61)	508 (31.91)
Marali Baa Mannige	83 (34.16)	56 (26.67)	74 (43.02)	48 (21.72)	55 (27.78)	44 (23.66)	53 (29.61)	52 (28.42)	465 (29.21)

Note: DWD-Dharwad, HU- Hubli Urban, HR- Hubli Rural, KH- Kalghatgi, NG- Navalgund, KG- Kundgol, AV- Alnavar, AG-Annigeri

Chi-Square=15114.41, P-Value < 0.00001. The result is significant at P< 0.05

Level of Usefulness of Information provided by Media

The opinion about the level of usefulness of information provided by media by the respondents has been summarized in Table-11. The Table-11 depicts that 598 (35.45%) of respondents opine about the information provide via Magazines as very useful, followed by 629 (37.29%) of respondents opine Radio as very useful, 668 (39.60%) of respondents opine Television as extremely useful and 598 (35.45%) of respondents opine about the information provided via Internet as Moderately Useful.

Table 11: Level of Usefulness of Information provided by Media

Media	Not Useful	Not very useful	Moderately Useful	Very useful	Extremely Useful	Mean	SD
Magazines	191 (11.32)	193 (11.44)	216 (12.80)	598 (35.45)	489 (28.99)	03.59	37.19
Radio	140 (8.30)	127 (7.53)	253 (15.00)	629 (37.29)	538 (31.89)	03.77	39.59
Television	63 (3.37)	68 (4.03)	295 (17.49)	593 (35.15)	668 (39.60)	04.03	40.30
Internet	115 (6.82)	164 (9.72)	598 (35.45)	498 (29.52)	312 (18.49)	03.77	34.91
Chi-Square=73.452, P-Value< 0.00001. The result is significant at P < 0.05							

Impact of ICT on Agricultural Productivity

The opinion gathered towards the impact of ICT on agricultural productivity by the respondents has been summarized in Table-12. The Table-12 also depicts that 956 (56.67%) of respondents opine the impact of ICT on productivity as great improvement, followed by 895 (53.05%) of respondents opine change in verity of crop as great improvement, 732 (43.3%) of respondents opine about income as fairly improvement, 618 (36.63%) of respondents opine agriculture wealth as moderately improvement, 620 (36.7%) of respondents opine about liberal spending on agriculture as moderately improvement, 529 (31.36%) of respondents opine about change in pesticide and fertilizers application as great improvement and 651 (38.59%) of respondents opine about price of product as fairly improvement.

Table 12: Impact of ICT on Agricultural Productivity

Impact of ICT on Agricultural Productivity	Great Improvement	Moderately Improvement	Fairly Improvement	No Improvement	Mean	SD
Productivity	956 (56.67)	621 (36.81)	59 (3.50)	51 (3.02)	01.53	31.73
Change in verity of crop	895 (53.05)	597 (35.39)	118 (6.69)	77 (4.56)	01.63	30.52
Income	358 (21.22)	512 (30.35)	732 (43.39)	85 (5.04)	02.32	36.70
Agriculture wealth	512 (30.35)	618 (36.63)	429 (25.43)	128 (7.59)	02.10	31.08
Liberal spending on agriculture	453 (26.85)	620 (36.75)	327 (19.38)	287 (17.01)	02.27	30.87
Change in pesticide and fertilizers application	529 (31.36)	418 (27.78)	498 (29.52)	242 (14.34)	02.33	31.70
Price of product	329 (19.50)	310 (18.38)	651 (38.59)	397 (23.53)	02.66	35.95
Chi-Square= 2365.821, P-Value < 0.00001. The result is significant at P < 0.05						

RECOMMENDATIONS AND SUGGESTIONS

Based on the objectives and research questions, the following recommendations are drawn:

- More efforts should be geared to planning rich agricultural programmes during morning and evenings hours via radio and television so that farmers may utilize these programmes to improve their farming activities.
- The stakeholders like Non-Governmental Organizations and other cooperate bodies should Endeavour to sponsor some of the agricultural programmes to help farmers' education.
- Rural television viewing centers should be constructed and equipped to educate farmers on new technology-based

agricultural practices, safety and citizenship.

- The Krishi Vigyan Kendras, Government, Non-Government and University Information Centers should educate farmers on the latest innovations in agricultural practices.
- The media should also encourage rural farmers to form listeners groups or forums.

CONCLUSIONS

In the developing country, the success of Agricultural Development Programmes (ADP) depends largely on the nature and extent of use of mass media in the process of mobilization of people for development. In the case of developing countries like India realized that the development of agriculture could be hastened with the effective use of available mass media. The mass Medias like radio and television have been acclaimed to be the most effective media for disseminating the scientific knowledge to the farmers. Even illiterate farmers can get information about advancement in agricultural technology. Along with radio and television, the newspaper and agriculturally related magazine are also commonly used by the farmers. They are playing a vital role in the dissemination of agricultural information among the farmer community.

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