

Awareness and Impact of Electronic Media on Farmers

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ABSTRACT

The present study was conducted during 2014 in Mandya, Pandavapura and Srirangapatna taluks of Mandya district in Karnataka state. Eight hundred farmers who were having access to farm broadcast and telecast were selected randomly from 20 villages in three sampled taluks of Mandya district. Expost facto research design was followed in the present study. The results revealed that the overall mean score was more for the farm telecast programmes from the farm broadcast. Majority of farmers expressed that they have been created awareness on crop varieties, soil type, planting season, fertilizer management, pruning, weed management, irrigation management, intercropping and post-harvest technologies through farm broadcast and telecast. Extension agency contact, innovativeness, economic motivation, scientific orientation, decision making pattern, attitude towards farm broadcast, attitude towards farm telecast, nature of family, time management and possession of media of farmers had positive and significant to highly significant relationship with farm information awareness. The farmers also expressed that farm programmes (farm broadcast and telecast) have increased their knowledge level on improved farming technologies, provided information and entertainment to the farmers. Whereas, the farm telecast has imparted skill among the farmers on farm activities.

Keywords : Awareness, impact, electronic media

THE success of agricultural development programmes in developing countries largely depends on the nature and extent of use of mass media in mobilization of people for development. The planners in developing countries realize that the development of agriculture could be hastened with the effective use of mass media. It creates empathetic spirit, widens people's horizon and conducive climate for change.

The main function of mass media is to inform, educate and motivate the people to accept new ideas and technologies for increasing their living conditions and status. The mass media plays a very important role in bringing about change in the behaviour of users by putting across the useful information leading to decision making for adoption of innovations. Among the different mass media, radio and television are considered as an institutionalized source of information for creating awareness among people (Raj, 2012).

Radio and television have been acclaimed to be the most effective media for diffusing the scientific knowledge to the masses. In a country like India, where literacy level is low, the choice of communication media is of vital importance (Schramm, 1964). In this regard, the television and radio are

significant, as they transfer modern agricultural technology to literate and illiterate farmers even in interior areas, within short time. In India, farm and home broadcast with agricultural thrust were introduced in 1966 to enlighten farmers on the use of various technologies to boost agricultural development. With the main stream of Indian population engaged actively in agriculture, television could serve as a suitable medium of dissemination of farm information and latest technical know-how. The farmers can easily understand the operations, technology and instruction through television.

The ultimate purpose of any media is to convey ideas and make the people to follow the recommendations in their daily life. But, to what extent the media are successful in this endeavor can be judged only by the media users who are at the receiving end and benefitted ultimately. In this backdrop, the present study is carried out with the following specific objectives:

1. To know the level of awareness about the components of mass media communication channels of farmer.

2. To find out the extent of awareness created among farmers regarding crop production activities through farm programme
3. To ascertain the relationship of independent variables of farmers with their farm information awareness.
4. To analyze the item-wise audience activity of farmers regarding farm programme
5. To study the impact of mass media communication channels of farmers.

METHODOLOGY

The present study was conducted during 2014 in Mandya, Pandavapura and Srirangapatna taluks of Mandya district in Karnataka state. A total of 20 villages were selected randomly from Mandya (7 Nos.), Pandavapura (7 Nos.) and Srirangapatna taluks (6 Nos.) for the study. Eight hundred farmers who were having access to farm broadcast and telecast were selected from 20 villages in three sampled taluks of Mandya district. Expost facto research design was followed in the present study.

Awareness of farmers towards farm programme

Awareness of farmers towards farm programme in the present study refers to the extent to which the farmer respondents are aware about the farm broadcast and telecast. Farm programme telecasted by Chandana and E-TV channels and farm programme broadcasted by All India Radio, Bengaluru, were considered for the study. The details of the farm programmes (days, time and duration) considered for the study is as follows:

For each media, awareness testing questions were framed based on various components of farm programmes. These were administered to the respondents with dichotomous responses. A scoring pattern of 1 and 0 was given for 'correct' and 'incorrect responses, respectively. The obtained scores for all the items were summed up to get the awareness score of an individual respondent. Further mean scores were worked out for each respondent of all programme.

Fifteen crop production technologies (Table II) were listed and presented to the respondents to find

the awareness created on the crop production activities through farm telecast and farm broadcast.

Audience activity of farmers

Audience activity is operationalised in the present study as the voluntary and selective orientation by audience towards the communication. For this purpose, data were collected on three dimensions of audience activity *viz.*, pre-exposure selectivity, exposure involvement and post-exposure utility. Mean scores were worked out for the three dimensions of the audience activity.

Impact of farm programmes

The respondents were asked to give their opinion on perceived impact of radio and television on their farming by way of responding "yes" or "no" and scores assigned were 1 and 0, respectively. Mean scores were worked out for each of the opinion of the respondents.

A total of 15 independent variables (Table III) of farmers selected for the study were measured using a structured schedule with suitable scales. The collected data was analyzed using frequency, percentage, mean score, zero order correlation test and multiple regression analysis.

RESULTS AND DISCUSSION

Awareness about the components of mass media communication channels of farmer

With regard to the farm broadcast programmes, 'Krishiranga' obtained higher overall mean score (4.63) compared to the overall mean score (2.63) of 'Ratharige-salahe' (Table I). In respect of farm telecast programmes, 'Krishidarshana' telecasted by Dooradarshan obtained an overall higher mean score (5.18) than the overall farm telecast mean score (3.38) of 'Annadatha' telecasted by E-TV. Since all the respondents belong to farm family, they have listened and viewed farm programmes for collecting information on improved crop production technologies. Similar findings were reported by Adikaari (2014), Singh (2014) and Ani *et al.* (2015).

The title component of both farm broadcast and farm telecast programmes received higher mean score compared to the mean score of other components like

TABLE I
Awareness about the components of mass media communication channels of farmers

Components of farm programmes	Farm programme (mean scores)	
	Farm broadcast	Farm telecast
A. Farm broadcasts		
1. Krishiranga	4.63	
a. Title	0.95	
b. Day	1.00	-
c. Time	0.57	-
d. Duration	0.70	-
c. Subject matter	0.78	-
d. Mode of presentation	0.63	-
2. Ratharigesalahe	2.63	-
a. Title	0.96	-
b. Day	0.53	-
c. Time	0.25	-
d. Duration	0.31	-
e. Subject matter	0.64	-
f. Mode of presentation	0.47	-
B. Farm telecast		
1. Krishidarsahan		5.18
a. Title	-	1.00
b. Day	-	0.96
c. Time	-	0.72
d. Duration	-	0.82
e. Subject matter	-	0.88
f. Mode of presentation	-	0.81
2. Annadatha		3.38
a. Title		1.00
b. Day		0.85
c. Time		0.15
d. Duration		0.53
e. Subject matter		0.80
f. Mode of presentation		0.58

day, time, duration, subject matter and mode of presentation.

Hence, it could be concluded that among the farm programmes, the overall mean score was higher for the farm telecast programmes compared to farm broadcasts. This is quite obvious as television demands

engaging more senses (hearing and seeing), thereby developing good impact in the minds of viewers than radio.

Awareness created among farmers regarding crop production activities through farm programmes

Table II revealed that the farm broadcasts has created awareness among 93.75 per cent of farmers on irrigation management followed by placement of fertilizer (93.00%), weed management (91.50%), post-harvest technologies (89.88%), pruning (88.88%), varieties (88.75%), fertilizer management (87.50%), soil type (86.25%), planting season (79.00%),

TABLE II
Awareness created among farmers regarding crop production activities through farm programmes (n=800)

	Farm broadcast		Farm telecast	
	No.	%	No.	%
Varieties	710	88.75	692	86.50
Soil type	690	86.25	468	58.50
Planting season	632	79.00	462	57.75
Spacing	485	60.63	343	42.86
Size of the pit	440	55.00	352	44.00
Nursery planting	234	24.50	339	42.50
Nursery management	212	26.50	462	57.75
Fertilizer management	700	87.50	571	71.38
Placement of fertilizer	744	93.00	593	74.13
Micro nutrient application	202	25.25	436	54.50
Pruning	711	88.88	568	71.00
Weed management	732	91.50	563	70.38
Irrigation management	750	93.75	692	86.50
Inter cropping	610	76.25	565	70.63
Post harvest technologies	719	89.88	582	72.76

intercropping (76.25%), spacing (60.63%), size of pit (55.00%), nursery management (26.50%), application of micro nutrients (25.25%) and nursery planting (24.50%).

It is also observed from Table II that the farm telecast has created awareness among farmers (86.50% each) on varieties and irrigation management followed by placement of fertilizer (74.13%), post-harvest technologies (72.76%), fertilizer management (71.36%), pruning (71.00%), intercropping (70.63%), weed management (70.38%), soil type (58.50%), planting season (57.75%), nursery management (57.75%), application of micro nutrients (54.50%), size of pit (44.00%) spacing (42.86%), and nursery planting (42.50%).

It can be inferred from the above results that both the farm broadcast and farm telecasts have created awareness among farmers regarding improved crop cultivation practices.

Relationship and extent of contribution of independent variables of farmers with their farm information awareness

The relationship between independent variables of farmers with their farm information awareness is presented in Table III. It could be observed from the results that 10 out of 15 independent variables were found to have significant to highly significant relationship with the farm information awareness of farmers.

Extension agency contact, innovativeness, economic motivation, scientific orientation, decision making pattern, attitude towards farm broadcast and attitude towards farm telecast, had positive and significant relationship with farm information awareness at one per cent level. Whereas, nature of family, time management and possession of media of farmers had significant relationship with the farm information awareness at five per cent level. Age,

TABLE III
Relationship and extent of contribution of independent variables of farmers with their farm information awareness

Independent variables	Correlation co-efficient ('r' value)	Partial regression co-efficient (b)	Standard error and recoeffcient	't' value
Age	-0.071 NS	-0.142	0.079	1.799 NS
Educational status	0.049 NS	0.343	0.461	0.744 NS
Farming experience	-0.031 NS	5.786	0.096	0.605 NS
Farm size	0.075 NS	9.993	0.137	0.728 NS
Nature of family	0.223 *	4.402	1.408	3.127 **
Social participation	0.031 NS	-8.198	0.007	0.121 NS
Extension agency contact	0.349 **	-5.105	0.094	0.544 NS
Innovativeness	0.245 **	-2.055	1.141	1.800 NS
Economic motivation	0.381 **	1.121	0.366	3.062 **
Scientific orientation	0.435 **	0.268	0.131	3.066 **
Decision making pattern	0.442 **	3.482	1.281	2.717 **
Attitude towards farm broadcast	0.399 **	2.905	0.441	0.066 NS
Attitude towards farm telecast	0.338 **	1.854	0.337	0.055 NS
Time management	0.191 *	0.343	0.484	0.710 NS
Possession of media	0.151 *	1.934	1.588	2.218 **

NS=Non-significant ; * Significant at 5 per cent level; ** Significant at 1 per cent level; $R^2 = 0.634$

educational status, farming experience, farm size and social participation of farmers had non- significant relationship with the farm information awareness.

For every unit increase in the extension agency contact, innovativeness, economic motivation, scientific orientation, decision making pattern, attitude towards farm broadcast, attitude towards farm telecast, nature of family, time management and possession of media there will be an increase in farm information awareness of farmers

The contribution of 15 independent variables of farmers towards farm information awareness was also assessed and the findings are presented in Table III. The findings revealed that five out of 15 independent variables, namely, nature of family, economic motivation, scientific orientation, decision

making pattern and possession of media of farmers had contributed significantly towards developing farm information awareness among farmers. The R² value indicated that all the 15 independent variables had contributed to the tune of 63.40 per cent of variation in farm information awareness of farmers.

Item-wise audience activity of farmers regarding farm programme

It is observed from Table IV that ‘completing all the works in advance’ (2.51 and 2.58 mean score) and ‘very much interested to become aware about the farm programmes’ (1.48 and 1.64 mean score) were the predominant activities performed by farmers in the pre-exposure selectivity with respect of both farm broadcast and farm telecast, respectively. Since, the farm programmes are being broadcast / telecasted

TABLE IV

Item-wise audience activity of farmers regarding farm programme

Audience activity	Mean scores	
	Farm broadcast	Farm telecast
I. Pre-exposure selectivity		
1. No other engagements are fixed on that day	1.11	1.22
2. I eagerly wait for the farm programmes	1.21	1.46
3. I complete all the works in advance	2.51	2.58
4. I am very much interested to become aware about the farm programmes	1.48	1.64
5. I ask my family members to remind me on the particular day	1.23	1.36
II. Exposure involvement		
1. I will not attend to any item of work	1.16	1.48
2. I allot definite time and give undivided attention for farm information	1.15	1.25
3. I used to take notes	1.32	1.38
4. I engaged in silent works (Eat, dress chatting)	2.72	2.13
III. Post-exposure utility		
1. I discuss about the farm information with others	1.61	1.68
2. I disseminate the farm information to others	1.49	1.53
3. I use to think about and evaluate the farm messages	1.07	1.08
4. I use to refer the notes back whenever need arises	1.10	1.21
5. I try to apply the practices advocated in the messages in my field conditions	1.08	1.36
6. To clarify doubts and get more details I write feedback letters	1.10	1.03

TABLE V
*Impact of farm programmes on
 farming community*

Opinions	Mean scores	
	Broadcast	Telecast
Increases knowledge	1.2861	2.2437
Crop production technologies	0.3652	0.5906
Crop development programme	0.2934	0.1326
Rural development programme	0.4718	0.1250
Better family living	0.0713	0.3021
Improves skill	0.0000	0.7210
Farm activities	0.0000	0.3021
Farm related activities	0.0000	0.0951
Adopting improved practices	0.0000	0.3264
Developsfavourable attitude	0.5824	1.3752
Crop cultivation practices	0.2360	0.5201
Crop development	0.0258	0.0925
Extension workers	0.0502	0.0832
Social welfare programmes	0.0258	0.0527
Rural development programme	0.0424	0.1065
Provides Information	1.4685	1.6196
Awareness about agricultural technology	0.9361	0.9871
Agricultural marketing strategies	0.5324	0.6325
Provide Entertainment	1.0000	1.0000
Entertains and gives happiness	1.0000	1.0000

during late evening, it is quite possible for the farmers to complete all the household activities in advance for listening/viewing the farm programmes.

‘Engaging in silent works like eating, dressing, chatting etc.’ (2.72 and 2.13 mean score) is the predominant activity performed by farmers in exposure

involvement of farm broadcast and farm telecast, respectively. The farmers can perform other activities while listening to radio, hence the mean score (2.72) of farm broadcast was found higher than the mean score of farm telecast (2.13). The activity ‘discussion with others’ (1.61 and 1.68 mean score) had secured the highest mean score in post-exposure utility followed by ‘disseminating the farm information’ (1.49 and 1.53 mean score) for farm broadcast and farm telecast, respectively. It is possible for the farmers to discuss and disseminate the farm information after the farm programmes when they meet each other in the evening hours.

Impact of mass media communication channels of farmers

The farmers have increased their knowledge on rural development activities (0.4712) and crop development programmes by listening farm broadcast and viewing farm telecast, respectively. The farmers also improved skill on adoption of improved practices (0.3264), farm activities (0.3021) and farm related activities (0.0951) by viewing farm telecast. Favorable attitude has been developed among farmers towards crop cultivation practices (0.2360 and 0.5201 mean score) by the farmers after listening to farm broadcast and viewing farm telecast. The farmers are informed about agricultural technology (0.9361 and 0.9871 mean score) from farm broadcast and farm telecast, respectively. The farm broadcast and telecast (1.00 mean score each) have provided entertainment and happiness to the farmers. More or less similar findings were reported by Singh *et al.* (2014). It can be inferred from the above findings that farm programmes have increased knowledge level on improved farming technologies, provided information and entertainment to the farmers. Whereas, the farm telecast has imparted skill among the farmers on farm activities. Majority of farmers expressed that they have been created awareness on crop varieties, soil type, planting season, fertilizer management, pruning, weed management, irrigation management, intercropping and post-harvest technologies through farm broadcast and telecast.

It can be concluded from the study results that both farm broadcast and farm telecast have increased knowledge level on improved farming technologies, provided information and entertainment to the farmers. Whereas, the farm telecast has imparted skill among the farmers on farm activities.

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