

Balancing role of traditional and advanced communication media in field conditions

P. TIWARI, UMA S. HIREMATH AND ACHALA GAKKHAR

ABSTRACT

The present age is considered as the 'information age' where rapid dissemination of booming IT technology and advanced communication media have the capability to benefit the impoverished masses not only the educated elite. The new innovative communication technologies are need based, accessible, innovative, and transferable and timely. This makes agriculture more productive by need based real time information and customized, categorized information to the end users. This study carried at Dharwad aims to document the balancing role of traditional and advanced communication media utilized by extension personnel while communicating with the farmers. The structured questionnaire along with personal interview was utilized as the tool for data collection. The study revealed that traditional communication media such as charts, television, models and slides show are still the more preferred aid for communicating in the field conditions while the tools of information technologies, telephone and computers are being utilized to a greater extent.

KEY WORDS : Advanced communication media, Information age, Dissemination of information

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INTRODUCTION

The increasingly competitive and fast changing world of today getting amalgamated with rapid changes in the fields of information processing, storage and dissemination brought forward by the advancements of science, information and communication technology is creating information society for each and everyone. Similarly, Kumar *et al.* (2002) stated that owing to the breakthrough in science and technology, there is virtually an information explosion going to occur as the world today has gone far ahead in the use of electronic communication system. They were of the opinion that the electronic media are revolutionizing the communication process resulting in the emergence of many new communication devices such as Interactive Computer Video Technology (ICVT), Computer Aided Systems (CAS), Internet, Videotext, Teletext Video Conferencing. But these advanced media are putting enormous demands for multi-skilled, adaptive, intellectual and innovative work force. If knowledge,

inherent skills, talents and learning are not renewed and refreshed, the capacity of individuals and extension workers of communities or nations to adapt a new environment will be considerably reduced. Also, the new technologies or the advanced communication media are based on certain commands, technicalities and require specific formalities before operation, but still, they are increasingly utilized even in developing and developed countries at a faster pace due to their economicity, timeliness and message accuracy. Patnaik and Saravanan (1999) also supported the advanced communication network *i.e.* internet and its capability that makes it to be used for research purposes as it helps in faster exchange of information economically and also data are available in digitalised model. Now-a-days, the researchers around the world can use this medium to work together, exchange ideas and results and many even carry out joint experiments or simulations without being in the same space as it reduces the communication and distance gap through

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cheaper and faster interaction.

These pre-cyber and cyber world media of recent generations gifts are thus extensively utilized for the purpose of imparting training programme, field demonstration and field visit in the field of extension education and rural development to make extension /grass root workers; a highly tech savvy, modern, intellectual expert in his/her subject and outlook while a dedicated, motivated, goal oriented, philosopher, social worker in approach, mind set and from core of his/her heart. According to theory of "communication for development", the role of communication methods and media and information sources are very important in diffusion of innovation, but methods, media and sources needed to be effective to ensure impact (Melkot, 1998). Mudukuti and Miller (2002) suggested that in the information age, dissemination of information and applying this information in the process of agricultural and livestock production will play a significant role in development of farm families. However, there is abundance of methods and media for disseminating information which creates a need for extension and education to know the types of technology its audience owns and/or regularly uses (Orr, 2003). Various communication methods and media like extensional and educational bulletins, field demonstration, communication through contacting with livestock owners in the field and office, radio, television, training courses, and movie showing are involved in dissemination of knowledge and information regarding to dairy farming among livestock owners (Ministry of Jihad-E-keshaverzy, 2002). Also, the advanced communication media based on technological and scientific innovation of information technology can accelerate the process of socio-economic development if effectively used and implemented along with being people oriented and information provider (Raju and Takalkar, 1999).

Hence, the study is a comparative assessment to analyze the traditional and advanced communication media utilized for the purpose of off training programme, field demonstration and field visit.

METHODOLOGY

The present study was conducted in purposively selected Dharwad district of Karnataka state during 2004-2005 with a sample size of 132 extension personnel working at different levels of hierarchy in 5 government departments and 3 institutions, 3 non-government organizations, 4 institutions from University of Agricultural Sciences, Dharwad and 2 private institutions working for the rural development and rural masses. The research

instrument *i.e.* structured questionnaire was prepared by relevant literature and experts in the field as well as by making necessary modifications after pre-testing for its applicability and feasibility in a non-sample area. The advanced communication media were selected after relevant review of literature, getting suggestions and guidance of subject experts and also after evaluating the perception of organisations and their extension workers regarding communication media.. The selected advanced communication media were telephone, mobile, laptop, VCD, satellite communication, ICVT, videotext and teletext. The data were collected through personal interview with the respondents. The statistics employed for data analysis were frequency and percentage.

OBSERVATIONS AND DISCUSSION

The results are summarized below according to objectives of the study :

Traditional communication media used for training programme, field demonstration and field visit:

Extension and education provides an important linkage between farmers and extension personnel, and farmers have come to value the services they receive from extension (Singh *et al.*, 2001). The conventional communication media employed for training programme, field demonstration and field visit are television, radio, charts/posters, models, flip charts, specimens, etc.

The data recorded in Table 1 depict a brief scenario and sketch a clear picture of pattern of utilisation of traditional communication media by different organisations for the purpose of training programme, field demonstration and field visit. The data clearly indicated that leaflets/pamphlets, charts/posters were regularly utilised, respectively at 90.20 per cent and 81.10 per cent while films/3D films (75.80%), television (72.00%), bulletin boards (66.70%), exhibits (65.20%) and flip books (61.40%) were used occasionally for the purpose of training programme. The communication media which were least or not at all utilised for the purpose of training programme were newspaper and mock-ups with a percentage of 75.00 and 84.80, respectively (Table 1), Television (94.70%), charts and posters (87.90%), slides and filmstrips (86.40%), films/3D films (85.60%) and models (84.80%) were extensively preferred by extension personnel for on campus training.

Mostly leaflets and pamphlets with a percentage of 80.30 followed by charts and posters with 74.20 were utilised for off campus training programme (Table 1).

The communication media and tool commonly and

Sl. No.	Communication media	Control group			Experimental			Total		
		R	N	O	R	N	O	R	N	O
1.	Radio	6/ (8.5)	33 (25.0)	35 (26.5)	9/ (31.8)	16 (31.8)	38 (28.80)	9/ (17.20)	16 (27.6)	116 (87)
2.	Television	30 (22.70)	95 (72.00)	7 (5.3)	25 (9.7)	52 (39.7)	57 (43.20)	75 (56.8)	19 (11)	113 (85.6)
3.	Printed Media	2 (1.5)	100 (75.8)	30 (22.7)	113 (85.6)	59 (44.7)	1 (0.8)	85 (64.1)	12 (3.8)	90 (68)
4.	Magazines	11 (8.3)	5/ (0.9)	67 (50.8)	38 (28.8)	65 (49.2)	132 (100)	132 (100)	1 (3.0)	128 (97)
5.	Mobiles	18 (13.6)	99 (75.00)	15 (11.4)	112 (84.8)	92 (69.7)	9 (6.8)	27 (20.5)	2 (1.5)	130 (98.5)
6.	Newspapers	1 (3.00)	29 (22)	99 (75)	33 (25)	11 (2.9)	132 (100)	132 (100)	1 (3)	128 (97)
7.	Stamps/Posters	37 (28)	82 (62.1)	13 (9.8)	111 (86.1)	90 (68.8)	71 (53.8)	61 (46.2)	37 (28.8)	98 (74.2)
8.	Charterposters	107 (81.1)	13 (9.8)	12 (9.1)	116 (87.9)	98 (74.2)	171 (35.6)	18 (36.1)	11 (8.3)	77 (56.1)
9.	Spoken words and stamps	55 (41.7)	65 (49.2)	12 (9.1)	102 (77.3)	87 (65.6)	18 (36.1)	21 (15.9)	25 (18.9)	71 (53.8)
10.	Real objects	5/ (0.9)	50 (37.9)	28 (21.2)	87 (65.9)	82 (62.1)	13 (32.6)	63 (47.7)	38 (28.8)	13 (32.6)
11.	Mock ups	11 (8.3)	9 (6.8)	112 (84.8)	11 (8.3)	9 (6.8)	18 (13.6)	11 (8.3)	30 (22.7)	102 (77.3)
12.	Propels	15 (11.2)	19 (14.3)	38 (28.8)	85 (64.1)	69 (52.3)	19 (14.3)	66 (50)	11 (8.3)	102 (77.3)
13.	Real objects/propels	119 (90.2)	9 (6.8)	1 (3.0)	96 (72.7)	106 (80.3)	28 (21.2)	10 (30.3)	11 (10.6)	63 (47.7)
14.	Charter posters	76 (57.6)	12 (9.1)	1 (0.6)	105 (79.5)	92 (69.7)	36 (27.3)	57 (43.2)	1 (3.0)	97 (73.5)
15.	Printed propels	27 (20.5)	75 (56.8)	30 (22.7)	85 (64.1)	57 (43.2)	36 (27.3)	83 (62.9)	19 (14.3)	109 (82.6)
16.	Printed mobiles	16 (12.1)	81 (61.7)	35 (26.5)	88 (66.7)	53 (40.2)	11 (8.3)	79 (59.8)	19 (14.3)	113 (85.6)
17.	Books	26 (19.7)	86 (65.2)	20 (15.2)	95 (72)	66 (50)	8 (6.1)	60 (45.5)	8 (6.1)	127 (93.9)
18.	Charter posters	11 (8.3)	7 (5.3)	50 (37.9)	59 (44.7)	57 (43.2)	11 (8.3)	92 (69.7)	23 (17.4)	101 (76.5)
19.	Charter posters	10 (30.3)	5 (38.6)	1 (3.0)	87 (65.9)	16 (31.8)	37 (28.8)	98 (74.2)	1 (3.0)	128 (97.00)
20.	Spoken words	28 (21.2)	88 (66.7)	16 (12.1)	108 (81.8)	171 (35.6)	10 (7.6)	98 (74.2)	11 (8.3)	118 (89.1)

No. of Responses in parentheses indicate percentages
 No. of Responses, O. Oozharany, N. Nover

regularly utilised for the cause of extension work and for imparting knowledge and information to farmers and farmwomen through field demonstration were leaflets or pamphlets, specimens or samples, charts/posters and real objects with percentage of 48.50, 36.40, 35.60 and 32.60 respectively whereas for occasional use in certain conditions, slides or filmstrips (53.80%) and exhibits (48.50%) were employed. The communication media least supported and utilised for field demonstration were magazine (100%) and newspaper (100%) followed by mock-ups (86.40%).

In case of field visit, it was seen that communication media used to a lesser extent and very selective communication media were employed and that too, to a limited extent for communicating information and innovations. The communication media utilised for this purpose were real objects (28.80%), specimens or samples (18.90%) and illustrations (17.40%) as maximum while minimum rank was received by flash cards and flannel graphs each having 3.00 per cent as regular use.

For the occasional use during field visit, communication media adopted were specimens or samples (53.80%) as majority followed by leaflets or pamphlets (41.70%) as medium and least utilised were graphs or maps (3.00%).

According to the results presented in the Table 1, it is clear that leaflets/pamphlets, charts/posters were regularly utilised at 90.20 per cent and 81.10 per cent, respectively as compared to films/3 D films (75.80%), television (72.00%), bulletin boards (66.70%), exhibits (65.20%) and flip books (61.40%) were used occasionally for the purpose of training programme. The communication media which were least or not at all utilised for the purpose of training programme were newspaper and mock-ups with a per cent of 75.00 and 84.80, respectively in never use category (Table 1).

The findings are true to Indian conditions as the required material can be easily prepared, handled, operated and administered by even a layman who has very little skills in availing these media to convey message while as the cost as well as technicalities related to communication media usage increase, the frequency of its usage decrease. Thus, leaflet/pamphlet, charts/posters are mostly preferred choice of extension personnel for training programme in comparison to films/3D films, television, bulletin boards, exhibits and flip books.

Similarly, for on campus training programme, the first and foremost choice of extension personnel are television, charts/posters, slides and filmstrips, films/3D films and models whereas for off campus, the place is taken up by leaflets/pamphlets and charts/posters.

It is so, because television, slides, filmstrips and films/3D films require specific facilities, power connection and infrastructure for their installation and utilisation in training programme. This is possible only in training institutes of organisations and cannot be a reality in off campus training. Off campus trainings mainly involve the use of leaflets/pamphlets and charts/posters which can convey a lump sum of meaning to the required academic and provide quality training through visuals, pictures, symbols and written message by skilled extension personnel.

On the other hand, leaflets/pamphlets (48.50%), specimens/ samples (36.40%), charts/posters (35.60%) and real objects (32.60%) were the communication media and tools generally utilised for the field demonstration as a field demonstration requires a good deal of careful planning, a substantial period of time, proper guidance, time bound operations, adequate records and organisation of field days and these communication media are just used as an assistance by the personnel to clarify ambiguities, doubts and to provide a sound base to his explanation and improve self-confidence of target audience. The communication media are employed for field demonstration very specifically and to a limited extent.

Field visit is an intensive, teaching activity undertaken at an opportunate time for a brief period in an actual life like situation focussing attention in a concentrated manner on a particular problem so as to stimulate the widest possible interest in the community. The findings suggested that real objects (28.80%), specimens or samples (18.90%) and illustrations (17.40%) are the traditional communication media dominating the scenario as extension personnel in field visit tries to provide participants with real, actual, relevant, understandable and life like examples to prevent confusions and doubts.

Advanced communication media used for the purpose of training programme, field demonstration and field visit:

Advanced communication media such as Direct to home (DTH), VCD/VCP, Telephone, Mobile, Computers, Internet, Videotext, Teletext, Satellite communication, fax and pagers are the innovations of IT. Vasanthi and Hema (2003) revealed that computers are acting as a support system to improve the teaching learning process as it helps in teaching new skills or concepts, give remedial teaching, providing for enrichment of learning, creative thinking and problem solving along with its capability to provide instant response and its flexibility to suit the learner's needs and requirements through tutorial interaction and dialogue.

For training programme, advanced communication

media like telephone (85.60%) and computers (59.10%) were utilised to a greater extent showing that the progress can be achieved through telecommunication and information technology. Similarly, during training programme, it was observed seen that the video cassette disc or video cassette players (75.00%), fax machines or facsimile (56.80%), mobile (54.50%) and internet (51.50%) were regularly used. Videotext and teletext were never used or heard in a training programme.

It was noted from Table 2 that for on campus training programme, again telephone (95.50%), computers (80.30%), internet (83.30%), fax machines (87.10%) and on the other hand telephone (66.70%) and VCD (57.60%) were emphasized by trainers and extension personnel for off campus training programme.

For field demonstration and field visit, it was observed that the telecommunication based media *i.e.*, telephone was given most importance with a percentage of 28.80 and 22.70 for regular use and 39.4 and 65.9 per cent for occasional use, respectively.

The findings showed that telephone (85.60%) and computers (59.10%) were regularly used for training programme while videocassette players/records (75.00%), fax machines (56.80%), mobile (54.50%) and internet were occasionally used. Videotext and teletext were not at all utilised for training programme. Similar pattern was also seen in case of on campus training programme while telephone was only stressed for off campus training (Table 1).

On the other hand, for field demonstration and field visit; again telephone has achieved the rank of most useful communication media. This implies that new, advanced communication technologies and electronic media are utilized by organisations working for the rural masses to some extent to escalate the process of development. The organisations have also started understanding the role these media that can play in transfer of high-tech agriculture from global pockets to Indian farmers' field as well as in decreasing time lapse in the process of information delivery. Telephone, internet and fax machines are proving to be boon for official communication whereas video equipment being handy, manageable and compact can even be carried to remote rural areas for preparing and delivering location specific programmes and thus utilized extensively for training programme. Video is transforming itself from 'for training' to 'for education cum entertainment' equipment.

Conclusion:

Comparing the feasibility of application and utilization of traditional versus advanced communication media in Indian circumstances for the purpose of rural development,

Sr. No.	Communication media	On campus training		Off campus training		Field demonstration		Field visit	
		R	N	R	N	R	N	R	N
1.	Telephone	23 (71)	22 (67)	87 (65.9)	75 (37)	11 (8.3)	9 (6.3)	23 (71)	23 (71)
2.	VCD/VCR	11 (29)	9 (15)	16 (27)	16 (87.9)	76 (57.6)	25 (8.9)	07 (8.1)	09 (82.0)
3.	Facsimile	13 (85.6)	3 (9.8)	6 (5)	26 (95.5)	88 (66.7)	12 (3.8)	52 (99.1)	15 (100)
4.	Mobile	2 (5)	12 (37.5)	58 (39)	68 (92)	62 (77)	29 (22)	02 (11.3)	29 (22)
5.	Computers	18 (59.1)	37 (28)	17 (2.8)	106 (80.3)	16 (2.2)	22 (6.7)	90 (68.2)	19 (100)
6.	Internet	11 (35.6)	68 (5.5)	17 (2.9)	10 (83.3)	16 (2.1)	32 (27.2)	100 (75.8)	19 (100)
7.	Videotext			32 (100)				32 (100)	
8.	Teletext			32 (100)				32 (100)	
9.	Satellite communication	18 (3.6)	8 (6)	106 (80.3)	26 (97)		9 (6.3)	23 (93.2)	32 (100)
10.	Fax	37 (25.8)	76 (66.8)	23 (17)	107 (87)		33 (26.00)	99 (75)	13 (85.6)
11.	Others			32 (100)				32 (100)	

it is seen that traditional media with their superb features like being handy to prepare, plan, organize, eye catching and attractive for audience and viewers as well as not requiring lot of skills and special training in part of extension worker are approved and utilized extensively for the purpose of training programme, field demonstration and field visit while advanced communication media are considered highly technical ,modern ,scientific and hard to understand and operate. Thus, we can say that traditional media are still dominating the scenario of rural development while highly useful, potential tools of development, *i.e.*, advanced media are still lagging behind.

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