Constraints Faced and Suggestions Provided During the Use of Advanced Communication Media by Extension Personnel of State Department of Agriculture in Nagpur District

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ABSTRACT

During the study conducted at Nagpur District of Maharashtra, the major constraints found during the use of advanced communication media were literacy level of end user (92.00 %), training (82.00 %), accessibility and networking (80.00 %). Over these constraints some suggestions that are given for improvement are proper training, immediate feedback, providing network connectivity and IT for rural areas *etc*. The respondents were suggested for providing network connectivity in rural areas (93.00 %) in addition with that appropriate training to extension personnel related to advanced communication media (83.00 %) and telecom and IT services for rural areas should also be provided.

Keywords: Constraints, Suggestions, Improvement, Advanced Communication Media, Extension Personnel.

INTRODUCTION

In this 'Age of Communication', information and wide access to it are considered as wealth. One of the keys to such a source lies in the application of information retrieval techniques which have contributed a lot to the emergence of new communication technologies. These technologies have been defined as a micro electronic system, incorporating computers and telecommunications. The new technologies or advanced communication media are those based on the silicon chip, the laser, fiber optics and a set of varying and diversified technologies. Over the last two decades, remarkable developments have taken place in communication technology. They constitute an important and inevitable component of written and oral communication media network and are acting as a powerful tool for transfer of technology in agriculture and social transformation. Modern communication technologies have the potential to bypass several stages and sequences in the process of development encountered in earlier decades as these technologies are not marred and obscured by thelimitations of old communication media in terms of accuracy, cost, speed, quality, quantity and timeliness. The availability of communication technologies calls for an early switch over to new communication technologies, i.e., advancements of information technology and telecommunications. It may be more appropriate to mention that new communication technologies or

advanced devices serve as an aid for speedy transmission, accuracy, etc. and not as a replacement of the human element as it tends to have equality, quantity, quality and economics. Equality means reaching to everyone, anywhere, particularly with reference to geographical and demographic limitations. Quantity stresses covering the quantity of population that should receive, understand and incorporate the message or innovation. Quality indicates improving the quality of subject matter to be transferred and accuracy in the quantity of message load which can be better handled by new technology. Economics considers reducing the cost of communication. The use of advanced communication technology can tackle some of the basic problems of pre-dominant old, manual and outdated communication technology involving over cost, time, lack of accuracy, inability to shoulder quantity of message loads. Thus, in this present era the search for alternative methods has led to a change in people's perception about communication technologies leading to innovations giving way to advanced communication media, namely computers, internet, audio and video cassettes recorder and player, geographic information system, management information system, telephone, mobile, smartphones, teleconferencing and video conferencing, interactive video disc and computer assisted instruction, etc. which are proving successful in transfer of technology in agriculture (Shirke, V.S. and Rahool M.T., 2013). These are acting as powerful analytical tools which can be used for transfer of

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technology in agriculture and planning of developmental activities. Thus, it can be said that in the twenty first century, it is necessary to use advanced communication media for rural and agricultural development in its proper perspective of message dissemination and feedback along with people's participation and contribution so as to meet the felt needs of the people living underdiverse socioeconomic conditions and hence, here an extension agent should act as a catalyst, teacher, trainer, facilitator, spokesman, action researcher and to top it all, as a dedicated social worker, villager in spirit and a leader in action (Kumar, 1995). This can be seen as in the present era, an epoch making revolution is taking place in the communication systems in rural India. The modern technological know-how are being utilised by the State Agricultural Universities and State Department of Agriculture for the purpose of rural and Agricultural development. Truly reviewing the present scenario, it is found that the advanced communication technologies are misappropriated and misunderstood. These new communication media are considered as highly advanced and too technical; while frankly speaking, these have the capacity of enabling people and rebuilding agricultural infrastructure at a greater pace. Though these are utilized in the field of extension and transfer of technology in agriculture, there is a sheer lack in research and documentation based information to evaluate this emerging panacea for transfer of technology in agriculture and social transformation. Hence, in this context a maiden attempt is made to study the use of advanced communication technologies as a weapon for rural and agricultural development.

METHODOLOGY

In this study an exploratory research design of social research was used. In sampling plan, the extension personnel working for transfer of agricultural technology from State Department of Agriculture, Zilla Parishad and in Agriculture Technology Management Agency (ATMA) from Nagpur district were selected and the data regarding use of advanced communication media were recorded with the help of structured interview schedule.

In all, total 100 extension personnel working at different levels in the State Department of Agriculture, Zila Parishad and ATMA of Nagpur district were selected by stratified sampling method and these were considered as a sample for the present study. The data collected were analysed and calculated with the help of statistical tools like mean, mode, median, correlation coefficient and standard deviation.

RESULTS AND DISCUSSION

Constraints faced by the extension personnel during the usage of advanced communication media. The constraints faced by the extension personnel during the use of advanced communication media were too many. A constraint can be defined as 'the circumstance or cause which prohibit or restrain the extension personnel to use the advanced communication media' (Tiwari, 2005). From the above table, it was found that, great majority of the extension personnel (92.00%) said that literacy level of the end user regarding the advanced communication media is the key constraint during the transfer of technology to them by using the advanced communication media and ranked as Ist constraint. Whereas 81.00 per cent of them responded that lack of quality training regarding the use of advanced communication media was the big constraint they had faced, it has been ranked as IInd. Similarly, it was also evident from the table that, other main constraint faced by extension personnel was the low accessibility and poor networking of these media (78.00 %) where they generally work for transfer of technology and ranked it as IIIrd. Majority of the extension personnel didn't get proper physical facilities (53.00 %) and they think that that was a constraint for them and ranked it as IVth. The suitability of the content with the media was also a major constraint faced by the respondents (31.00 %) during the use of advanced communication media and ranked as Vth. Financial problems were also the constraints of the media for some of the extension personnel i.e. 23.00 per cent ranked as VIth. Some other constraints were also reported by the 12.00 per cent respondents during the use of advanced communication media such as poor transportation facilities in the villages and irregular power supply and they ranked them as VIIth. Training on advanced communication media usage, functioning and technical details can make extension personnel to be skilful to utilise its extension work. It was seen that extension personnel prefer to utilise traditional media rather than making their discussion effective in rural settings by incorporating power point presentation or video equipments, etc. due to lack of skills and details in utilising them (Mali, 2004). Also, proper physical facilities in terms of infrastructure, i.e. proper building, space, power supply, etc. is needed. It is seen that the majority of the people living in villages are either illiterate or semi illiterate in computer literacy. Thus, it becomes very hard for them to understand the written messages conveyed and in these cases, extension personnel should support his statement with visuals, pictures and symbols and not words (Adetumbi, et. al. 2013).

Table 1: Constraints faced by the extension personnel during the usage of advanced communication media.

Constraints _	Respondents (n=100)		Rank
	Frequency*	Percentage	
Lack of physical facilities	53	53.00	IV
Financial constraints	23	23.00	VI
Lack of training	81	81.00	II
Literacy level of end users	92	92.00	I
Low accessibility and poor networking of advanced media	78	78.00	III
Suitability of content with the media	31	31.00	V
Any other (poor transportation, irregular power supply <i>etc.</i>)	12	12.00	VII

^{*}Multiple responses.

Suggestions for improvement

The above Table 2 it was observed that, majority of the extension personnel (93.00%) suggested that network connectivity in rural areas will improve the technology transfer in agriculture with the help of using advanced communication media, followed by 88.00 per cent of extension personnel suggested that, providing appropriate training regarding the advanced communication media to the extension personnel will improve the affectivity of the results. Nearly three fourth of extension personnel (74.00%) suggested that telecom and IT facilities for rural areas should be provided. One fourth of the extension personnel (25.00%) suggested that immediate feedback of the technology transferred to them should be provided for improvement of the linkage between farmer and extension system.

Table 2: Suggestions for improvement

Suggestion	Respondents (N=100)		
	Frequency*	Percentage	
Providing appropriate training to extension personnel	88	88.00	
Telecom and IT services for rural areas	74	74.00	
Network connectivity for rural areas	93	93.00	
Immediate feedback	25	25.00	

^{*}Multiple responses.

CONCLUSION

From the above study it was found that there were too many problems found during the use of advanced communication media namely - literacy level of end user (92.00 %), training (82.00 %), and accessibility and networking (80.00 %). Power supply was also one of the main constraint in the use of these media. Some improvements suggested are proper training, immediate feedback, providing network connectivity and IT for rural areas *etc*.

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