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# FARMER'S SATISFACTION WITH INFORMATION SOURCES AND SERVICES : A STUDY ON FARMER'S OPINION

Ashish Kumar Sharma

Assistant Librarian, Central Library, Gurukul Kangri University,

Haridwar (U.K.)India.

ashish1077@ yahoo.co.in

## ABSTRACT

*Aims to ascertain the awareness and satisfaction of farmers with regards to the availability of existing agricultural information services and programs. There are three possible ways as personal contact, group contact and mass contact through which farmers use to get their required information. Here, an attempt via questionnaire-based survey has been made to evaluate the ways of most satisfactory mode to get required information by farmers. Satisfaction percentage can be measured through various scaling technique by using different parameters. In present study, three scale parameters as 'maximum', 'average' and 'below average' have been use to measure the satisfaction value. Data reveals that elders/family members (337, 84.25%) and friends/neighbors/relatives (209, 52.25%) are common sources of information for farmers. This indicates that farmers rely on their friends or relative to get farming information. It has been found that maximum farmers get below average satisfaction through minikit, meetings, field days and agriculture tours. Reveals that these sources of information are less effective for empowerment of farmers in agricultural sector. Survey reveals that radio and television are two important and effective sources for information to farmers under mass contact category.*

**KEYWORDS:** Farmers Information Sources, Personal Contact Sources, Group Contact Sources, Mass Contact Sources, Farmers Satisfaction, User Study.

## Introduction

India is a developing country with major agrarian society which basically depends on agricultural outputs. Agriculture sector have major contributing role in GDP of our country. It is necessary that technology trusts should be precise with easy transfer of scientific and technical information from research institutes to rural farmers. The present era of information technology has opened new vistas for transfer of methodology and technology between the producers and the users of information in

least possible time. Information technology has become a medium for communication of ideas and a resource necessary for the sustenance and promotion of the progress in agriculture and thus in GDP of country. Development of science and technology has given proliferation to scientific literature and information which is excellent for agriculture and allied sciences. Agriculture is a key sector for most developing countries like Brazil and India. It has a key role to play in enabling them to accomplish developmental goals including self-reliance, growth and equity. India is the second largest country in human population. Healthy food is an indispensable need for developing country. Increasing food production and storing them is the central issue in the field of agricultural development.

The profession of agriculture includes a wide diversity of practices and specialisations because it is vitally limited to the production of the fundamental necessities of man-derived food-stuffs from plants and animals. The government's effort and other organizations have been concentrated on increasing agricultural production through modern technology and applied research in agricultural sector. Vast amount of literature on different aspects of agriculture have been produced by Research workers, policy-makers, planners, extension workers in agriculture.

The research outcome flow from laboratory to land through the channels of communication which plays a decisive role not only to make the agricultural scientists and farmers abreast about the latest development but also makes the nation more prosperous and rich in food-stuff. Therefore, information transfer should be effective for both laboratory and land. Research scientist should use the existing information to generate new information and methods through their research output. On the other hand, the farmers or the farm landlords utilize the existing information to increase the agricultural products. Utilization of upgraded technology by the farmers, to a large extent, depends on the effective source of information and channels through which they expose directly or indirectly. Despite of the new technologies in agricultural sectors, farmers have to face the problem of proper channel media or resources to make them aware of current technologies within a period of time uses in agricultural practices. There is a tremendous gap between knowledge production and knowledge utilization by the farmers. Knowledge, on one hand, is increasing every day and on the other hand, its utilization is relatively slow. This gap is partly filled in village by information dissemination bodies. The present study is designed to study the mode of communication for utilization of scientific resources and technology by Indian farmers and their problem via questionnaire-based survey.

### **Review of Literature**

A few studies have been conducted in the recent past on the use of the information, needs and sources in the field of agriculture, important among them are:

Katunmoya (1992) advocates for public libraries providing community information services. He suggested that public libraries should establish community information departments with the aim of

providing information to rural community. Patel, Sharma and Dubey (1993) have suggested that in a developing country like India, dissemination of agricultural information and improved technology through the use of latest communication technology can play a great role in agricultural development. According to them, among the various communication sources, interpersonal sources and channels are more important than mass-media channels in the transfer of agricultural information. Musib (1997) in his survey for finding out the information needs and sources of information of persons engaged in cottage industry, observes that they collect information regarding raw material, improved technology, maintenance of their tools, marketing and pricing of their product from their friends, neighbors, relatives, family members, fellow professionals and local market. These people are found to be ignorant of the latest technology and relied primarily on traditional methods. But they show their willingness to use public library services by paying nominal charges if needed. The survey conducted by Wakle, Wattmwar and Khalge (1998) depict the utilization of different sources by farmers for seeking agriculture information. As per their observation in personal contact mode, the farmers prefer to contact in an informal environment with easily accessible persons instead of formal and remotely accessible contacts. In group contact media, most of the farmers use meetings and group discussions, while in mass contact mode, radio is the most favorite media. Veeranjanyulu and Sudha Rani (2000) are of the opinion that awareness of right to information is very essential for the socio-economic development of the rural people. Moreover, various information services such as current awareness service(CAS), extension service, publication, publicity, indexing, translation, reprographic service, reference service, reviews etc., have to be provided by the public libraries for the selection, production, organization, analysis, evolution, compression, consolidation and distribution of information so that least hurdles are faced in information access. Balaji, Rajamohan, Rajsekra, Pandey and Senthikumar (2000) conducted a survey on information requirements of rural people and concluded that petty local shopkeepers, market place and agri-input suppliers form the dominant sources for their information requirement. The survey conducted by Biradar (2000) reveals that the farmers use different sources of information at various stages of farming. Informal personal sources such as friends, neighbours, shopkeepers were the most favoured sources. Impersonal sources e.g. t.v., radio, newspapers, film shows, libraries and formal personal sources such as Gram Sevak and Agriculture Extension Officer were used only on fewer aspects. Mangi Ram (2002) stressed that in such a changing IT environment, the users needed specific training in the use of library services. According to Stefano, Handrisk, Stilwell and Morris (2005) farmers can access information in printed materials, either through their reading or in the case of illiterate or semi-literate farmers, through the assistance of a functionally literate member within their farmer group or through family members and neighbors. Intermediaries,

whom farmer trust and rely on for external information, could play a vital role in exposing farmers to alternative information channels and/or sources. Nair (2006) studied the agricultural information service for the farmers and public. His study revealed that information resources and services in agricultural sector are mostly restricted to scientists. It was found that within the limitations that existed village libraries contained substantial quantity of agricultural information materials in local language and script produced for the use of the farmers and non-specials.

Meitei and Devi (2007) conducted a survey on Information needs of the small scale industries in Manipur and suggested that State Institutes of Rural Development (SIRD) and Directorate of Industries and Commerce (DIC) should be strengthened, and National Institute of Rural Development (NIRD) is an apex and all the rural development libraries at the base should form a pyramidal structure of gril system. Further, all the educational institutions, research centre, public libraries, information centre and community information centers should also integrate their coordination and cooperation with the village libraries at the local level. This will build the infrastructure in the rural area and state as whole. Sharma and Sahoo (2008) have observed that farmers use different sources of information at various stages of farming. Information disseminated through personal contact is found to be most effective among the farmers. Elder/family members and RAEOs are the important source of information under personal contact categories. Sharma (2013 ) in his study has observed that village public libraries (CICs) are not well equipped to provide latest development relating to be the field of agriculture in Sagar District of Madhya Pradesh. Sharma (2013) reveals that the Public library or Community Information Centers are not so well equipped to able to provide latest developed information necessary for farmers in Madhya Pradesh. Sharma (2014) has conducted a study depicting that Public library play an important role in social development as it provides information, education and entertainment facilities ,which are very useful for the society. For most of the farmers, there were no public libraries available in their own locality. It was available only for 137(34.25%) farmers, whereas 263 (65.75%) were deprived of such facility.

### **Objectives of the Study**

The following are the core objectives of the study which aim at:

- To ascertain the awareness and satisfaction of the farmers with regard to the availability of the existing agricultural information services and programmes.
- To find out the various channels and sources through which information relating to agriculture is obtained by the farmers.
- To assess the role of the agricultural professionals in providing agricultural information to the farmers.

- To assess the role of existing public libraries and Community Information Centers (CICs) in providing agricultural information to the farmers.

### **Methodology**

The present study is based on survey method. A questionnaire was designed for the study. It was administered to draw information from a wide spectrum of respondents belonging to different cross sections. The questionnaire was designed in the local language of Hindi so that the literate farmers could be able to respond themselves, but for the illiterate ones, the surveyor had to meet them personally to collect data. However, interview was made with the respondents as and when necessary so as to avoid mismatch of the data collected through questionnaire.

### **Sample of Study**

Sagar district of Madhya Pradesh was chosen purposively for the study because of its rural cum tribal characteristics. Out of a total population of 20, 21,783, the rural folk are 14, 30,421(70.75%). The district has 11 blocks and only two blocks namely Sagar and Rahatgarh were selected on random sampling basis. The sample has a total population of 7, 99,324 comprising 6, 93,691 for Sagar Block and 1, 05,633 for Rahatgarh. A sample of 400 farmers (200 from each block) was drawn again by random sampling for the study. The sample size has been decided as per the formula of Krejcie and Daryle (1970).

### **Information Sources and Services Available/Accessible in Sagar and Rahatgarh Blocks**

The following are the main sources and services available/accessible in Sagar and Rahatgarh blocks:

#### **Information Sources**

The sources of information providing agricultural information/advises to the farmers in Sagar and Rahatgarh blocks have been grouped under there main categories like (i) Personal contact (ii) Group contact (iii) Mass contact.

#### **(I) Personal Contact as a Source**

Farmers can Develop Personal Contact with Different Persons to Collect Different Useful Information relating to agriculture. Such persons may be their own senior family members, relatives, neighbours, friends, other progressive farmers, Rural Agriculture Extension Officers/RAEOs (Gramsevaks), persons attached to Block Panchayat Office, Public Library/Community Information Centre, local leaders, and subject specialists.

#### **(ii) Group Contact as a Source**

Farmers can develop group contact with different sources to collect different useful information

relating to Agriculture. Such sources may be Minikit, meeting (arranged by Govt. Dept. /NGOs), group discussion, field days (fixed days of visit of the agricultural staff) and agriculture tours.

### **(iii) Mass Contact as a Source**

Under mass contact Farmers can develop mass contact with different sources to collect different useful information relating to Agriculture. Such sources may be Radio, TV, Motion Picture, Farmers Rallies and Exhibition/Kishan Mela.

### **Information Services**

The major services provided by the department of agriculture in Sagar and Rahatgarh blocks:

- Extension services for transformation of latest technologies from the university and research station to the farmers field.
- Distribution of all input like seed, plantation material, fertilizers, biofertilizers, implements etc.
- Technical know how regarding the various packages of practices.
- Subsidized distribution of implements, sprinkler and irrigation devices.
- Providing facility for soil testing in Sagar Blocks.
- Providing quality control facilities for seeds, fertilizer and plant protection chemicals.
- Providing subsidy on tube wells, electric pumps etc to the farmers for development of irrigation resources.
- Training to the farmers in various farm activities.
- Providing marketing facilities to the farmers for their products.

### **Satisfaction With the Services**

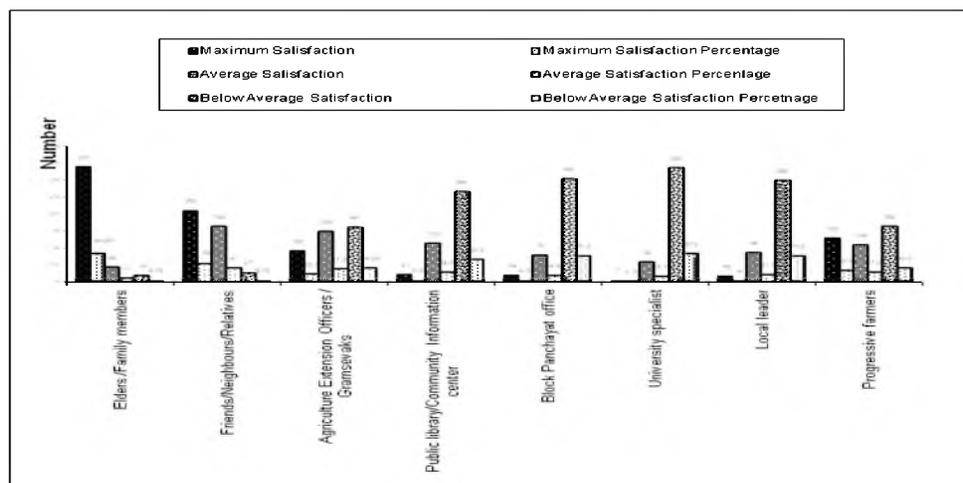
There are three possible ways like personal contact, group contact and mass contact through which the farmers are getting their required information. Here, an attempt has been made to evaluate the ways, which are the most satisfactory mode of getting required information. Amount of satisfaction can be measured through scaling technique by using some parameters. In this case, three scale parameters like 'Maximum', 'Average' and 'Below Average' are used to measure the amount of satisfaction. The responses given by the farmers are described separately for personal contact, group contact and mass contact sources under Table 1-3.

### **Rating of Satisfaction Obtained Through Personal Contact**

Table-1 indicates the rate of satisfaction of farmers relating to their information collection obtained through personal contact.

**Table-1 : Satisfaction through Personal Contact Sources**

Personal Contact as a Source	Satisfaction					
	Maximum		Average		Below Average	
	Response	Percentage	Response	Percentage	Response	Percentage
Elders /Family members	337	84.25	44	11.0	19	4.75
Friends/Neighbours/Relatives	209	52.25	416	41.0	27	6.75
Agriculture Extension Officers/ Gramsevak	90	22.5	149	37.25	161	40.25
Public library/Community Information center	21	5.25	113	28.25	266	66.5
Block Panchayat office	19	4.75	79	19.25	302	75.5
University specialist	7	1.75	59	14.75	334	83.5
Local leader	16	4.0	86	21.5	298	74.5
Progressive farmers	129	32.25	109	27.25	162	40.5



**Figure 1: Satisfaction through Personal Contact Sources**

**FARMER'S SATISFACTION WITH INFORMATION SOURCES  
AND SERVICES: A STUDY ON FARMER'S OPINION**

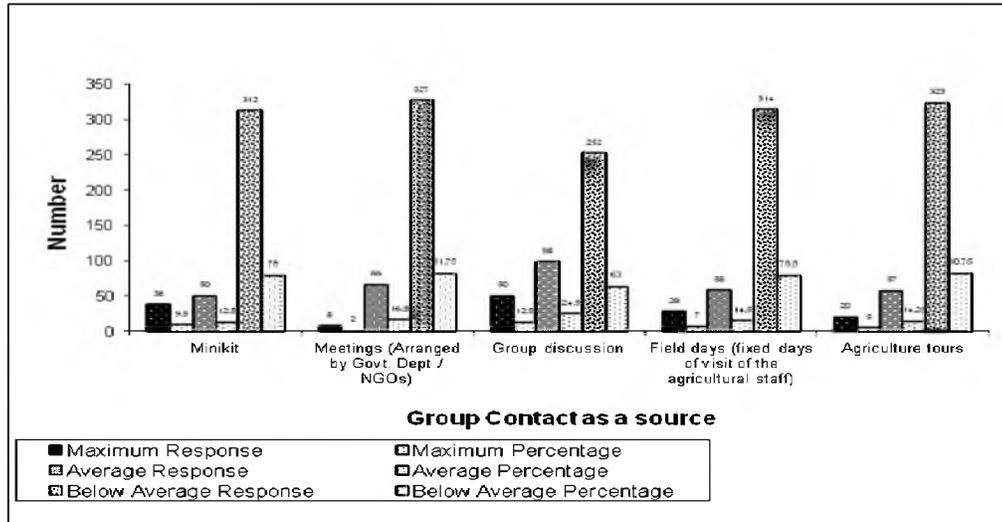
It is observed from Table-1 and Fig.1 that maximum farmers, i.e. 337 (84.25%) are most satisfied with the information obtained from their elders/family members. Only 44 (11%) get average satisfaction and 19 (4.75%) get below average satisfaction from their elders/family members. The rate of satisfaction obtained in getting information through friends/neighbours/relatives is 52.25 percent (maximum by 209 farmers), 41 percent (average by 164 farmers) and 6.75 percent (below average for only 27 farmers). Other sources like RAEO/Gramsevaks, Library/information centers, Block Panchayat Office, University specialists, local leaders and progressive farmers are not so useful as rate of satisfaction remains below average by maximum numbers of farmers like 161 (40.25%), 266 (66.5%), 302 (75.5%), 334 (83.5%), 298 (74.5%) and 162 (40.5%) respectively. Thus, it is observed that elders/ family members and friends/ neighbors/ relatives are two most important sources of information for farmers under personal contact category.

**Rating of Satisfaction Obtained Through Group Contact**

Table-2 indicates the rate of satisfaction of farmers regarding their information collection obtained through group contact.

**Table-2 : Satisfaction through Group Contact Sources**

Group Contact as a Source	Satisfaction					
	Maximum		Average		Below Average	
	Response	Percentage	Response	Percentage	Response	Percentage
Minikit	38	9.5	50	12.5	312	78.0
Meetings (Arranged by Govt. Dept / NGOs)	8	2.0	66	16.5	327	81.75
Group discussion	50	12.5	98	24.5	252	63.0
Field days (fixed days of visit of the agricultural staff)	28	7.0	58	14.5	314	78.5
Agriculture tours	20	5.0	57	14.25	323	80.75



**Figure 2 : Satisfaction Through Group Contact Sources**

It is revealed from Table 2 and Fig.2 that maximum farmers i.e. 312 (78.0%) get below average satisfaction with information obtained from minikit. Only 50 farmers (12.5%) get average satisfaction from the minikit. In case of meeting (arranged by Govt. dept./NGO's) as a source of information, the maximum farmer 327 (81.75%) get below average satisfaction, 66 (16.5%) farmers receive average satisfaction and only 8 farmers (2%) achieved maximum satisfaction. Regarding group discussion, 252 farmers (63%) procured below average satisfaction, 98 farmers (24.5%) secured average satisfaction where as 50 farmers (12.5%) were satisfied at maximum. In case of field days, 314 (78.5%) farmers got average satisfaction, 58 (14.5%) farmers got average satisfaction but only 28 (7%) farmers got maximum satisfaction similarly maximum 323 (80.75%) farmers receive below average satisfaction, 57 farmers (14.25%) received average satisfaction and only 20 (5%) farmers get maximum satisfaction from agriculture tours taking them as a source of information through Group contact. Thus, it is observed that maximum farmers get below average satisfaction, from minikit, meeting, field days and agriculture tours as the sources of getting information through group contact.

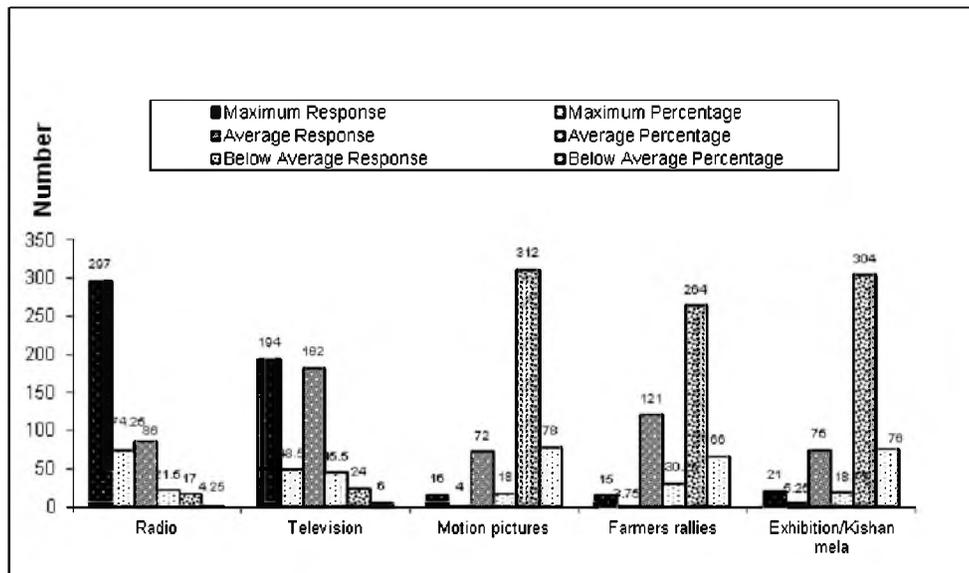
**Rating of Satisfaction Obtained Through Mass Contact**

Table3 indicates the rate of satisfaction of farmers relating to their information collection obtained through mass contact.

**FARMER'S SATISFACTION WITH INFORMATION SOURCES  
AND SERVICES: A STUDY ON FARMER'S OPINION**

**Table-3 : Satisfaction Through Mass Contact Sources**

Mass Contact as a Source	Satisfaction					
	Maximum		Average		Below Average	
	Response	Percentage	Response	Percentage	Response	Percentage
Radio	297	74.25	86	21.5	17	4.25
Television	194	48.5	182	45.5	24	6.0
Motion pictures	16	4.0	72	18.0	312	78.0
Farmers rallies	15	3.75	121	30.25	264	66.0
Exhibition/ Kishan mela	21	5.25	75	18.75	304	76.0



**Figure 3 : Satisfaction Through Mass Contact**

It is depicted from Table 3 and Fig.3 that maximum farmers 297 (74.25%) received maximum satisfaction with the information obtained from radio. 86 (21.5%) farmers got average satisfaction, whereas only 17 (4.25%) farmers got below average satisfaction from radio. In case of television as the source of information through mass contact, 194 (48.5%) farmers got maximum satisfaction, 182 (45.5%) got average satisfaction and 24 (6%) farmers got below average satisfaction. Regarding motion pictures 312 (78%) farmers achieved below average satisfaction, 72 (18%) farmers achieved average satisfaction and only 16 (4%) farmers got maximum satisfaction from motion pictures considering motion pictures as a source of information through mass contact. Similarly, from other sources like farmer rallies and exhibition/ Kishan mela, maximum number of farmers 264(66%) and 304 (76%) got below average satisfaction, 121 (30.25%) and 75 (18.75%) farmers get average satisfaction where as 15 (375%) and 21 (5.25%) farmers got maximum satisfaction respectively. Thus, it is cleared that radio and television are two most important and effective sources of information for farmer under mass contact category

### **Major Findings**

- The rate of satisfaction of farmers related to their information collection obtained through personal contact, group contact and mass contact has been analyzed on the basis of collected data. Data revealed that elders/family members (337, 84.25%) and friends/neighbors/ relatives (209, 52.25%) are two most important sources of information for farmers under personal contact category. This indicates that the farmers rely for information on their known persons.
- It is found that maximum farmers got below average satisfaction from public library/community information centre, minikit, meetings, field days and agriculture tours, as the sources of getting information through group contact. Thus, it can be concluded that these sources of information are not very effective.
- It is clear from the analysis that radio and television are two important and effective sources of information for the farmers under mass contact category as responded by (297, 74. 25%) and (194, 48.5%)respectively.

### **Suggestions**

Under suggestions, scholar has provided his views, which have been derived on the basis of the findings of the study:-

- It is required that Gramsevaks, librarians, block panchayat officers, university specialists, local leaders and progressive farmers need to be more approachable and project their services in such a way that the farmers can easily approach them for their information needs.

- Gramsevaks are not able to satisfy the farmer's information need due to two reasons, firstly the field area for a Gramsevak is so vast that he/she is not able to reach all the farmers in the area and secondly it is difficult for the Gramsevaks to keep abreast of latest technological advancements, new policies and market prices due to lack of an information network like internet or Gyandoot etc. Hence, there is a need to reduce the field area of Gramsevaks and to develop a network like Gyandoot to make latest information available to the Gramsevaks.
- Meetings, group discussions, field days and agricultural tours should be conducted in every village so that maximum farmers can attend and get benefit from the same.
- Motion pictures, farmers rallies and kishan melas/exhibitions need to be conducted more frequently in rural areas.
- As radio and television are found to be the most powerful channels of information, more importance should be given to these channels as well as better and effective agriculture related programmes should be broadcasted/televised.
- Agricultural universities and KVKs, Agricultural Research Centres should provide information about research developments to the village information disseminating bodies at the earliest so that this information can reach the farmers in time.
- Agricultural universities, KVKs and research centres should send current literature on agriculture related subjects to the public libraries, regularly and timely. This will help the public libraries to maintain an active collection. Public library network should be established and online information access facilities should be made available at each and every village library.
- One agricultural university should be established in Sagar District and agriculture as a subject should be introduced at school and college level.

### **Conclusion**

Agriculture development in India should be put on a fast track by making farmers aware of the new technological advancements and different sources of information in this field. It is concluded from questionnaire-based survey that the elder / family members and friends/ neighbors/ relatives are two most important and common sources of information for the farmers under personal contact category. This indicates that the farmers rely for information on their known persons. The study reveals that maximum farmers get below average satisfaction from RAEOs/ Gramsevaks, Public libraries/ Community Information Centers, Block Panchyat Offices, University Specialists, Minikits,

Meetings, Field days and Agriculture tours. It must be necessary that the above sources should be more approachable and project their services in such a way that the farmers can easily avail them for their needs accordingly. Radio and television are cheap, popular and common resource in rural India should be used as an effective means of dissemination of agricultural information. Thus improving our agricultural information systems will be helpful for our farmers to be well informed and to motivate them toward using current technology for agricultural benefits. This turn will lead to better agricultural production and improve economics status of the farmers and country.

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FARMER'S SATISFACTION WITH INFORMATION SOURCES  
AND SERVICES: A STUDY ON FARMER'S OPINION

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