

# Agricultural Communication and Satisfaction Perception of model farmers about agricultural department's role in Andhra Pradesh

<sup>1</sup>Dr. G. Anita & <sup>2</sup>Dr. Madineni Sreeramulu

<sup>1</sup>Coordinator, Dept of Journalism and Mass Communication, Acharya Nagarjuna University, Guntur, Andhra Pradesh (India)

<sup>2</sup>Academic Consultant, Dept of Journalism and Communication Yogi Vemana University, Kadapa, Andhra Pradesh (India)

---

## ARTICLE DETAILS

### Article History

Published Online: 07 June 2018

### Keywords

Agricultural Information, Dissemination, Determinants of Satisfaction of Communication

### \*Corresponding Author

Email: [sivaramchowdary2010\[at\]gmail.com](mailto:sivaramchowdary2010[at]gmail.com)

---

## ABSTRACT

Rapid advancement in electronic and communication technologies has opened up new and more effective channels for agricultural information dissemination. The government's role in providing information has also assumed significance as it spends large amount on human resources and activities. This study was carried out to analyze the determinants of satisfaction of communication in the delivery of agricultural information to model farmers in Guntur district of Andhra Pradesh by the government department. Data were collected by means of a structured questionnaire administered to 300 farmers randomly selected from Guntur district. The data were analyzed using descriptive and inferential statistics. Results of the analysis showed that half of the respondents grow paddy followed by Chilli and Cotton. In terms of the frequency of reception of information three fourths receive occasionally and the rest regularly. Regarding satisfaction half of them are somewhat satisfied and the rest are somewhat dissatisfied. It is advised that a general improvement in the level of production of messages, renewed pattern of dissemination such as campaigns might be taken up for improving the levels of satisfaction among the farmers.

---

## 1. Introduction

Indian agriculture sector has been found to use multiple sources to satisfy information needs. They range from traditional print and radio to modern resources such as ICTs. Since 18th century print continues to support the farmers with their vast coverage. Print media especially newspapers and magazines were the first to provide information to the farmers. The use of radio as mass communication tool for agricultural development has long been recognized. Radio has been used as a tool for learning and community address system (Bereh, 2002). Farmers also use their local or community radio stations to voice their own views. Television adds a second dimension to radio broadcasting, thus increasing the range of methods available to extension workers. Apart from these the agricultural extension agent can present a whole series of result demonstrations through pictures thus emphasizing differences over time. Bogunjoko (1983), while working on the use of television in the rural areas reported that agricultural programmes seek to disseminate information on dry season farming, livestock husbandry, water management and general farming problems. Television is particularly important in dissemination of information about new research findings as it combines the power of two senses, hearing and seeing. The diversity and large number of possible applications of new communication technologies are very promising.

## 2. Review of Literature

Byamugisha, *et al.* (2008) in a study on information seeking and use among urban farmers in Kampala district, Uganda point out the challenges encountered by farmers when searching for agricultural information as lack of cooperation from fellow farmers in sharing agricultural information and language barriers.

Various tools of agricultural communication have their impact on the farmers. Nazari and Hassan (2011) study in Kohgiluyeh va Buyer Ahmad province, Iran revealed that mass media are effective channels for communicating agricultural messages, which can increase knowledge and influence behavior of audience members.

Ndagi, *et al* (2013) study on effectiveness of information sources on improved farm practices among cowpea farmers in Oyo state revealed that 42.22% and 40% of the farmers use farm services and village extension agents' service very often respectively. Among the sample 26.67% depend on village leaders and 17.78% listen to radio very often.

Benard, *et al*, (2015) in a study on preference of sources of information used by Seaweeds Farmers in Unguja, Zanzibar found that (93.0%) of the respondents used neighbours and or friends as a source of agricultural information, 87% used radio, 83% used family/parents and personal experience, 79% of the respondents consulted village leaders, 64% of the respondents used agricultural input suppliers and 63% used television while 4% of the respondents use internet as source of agricultural information. The same study found that greater proportion 93% of the respondent preferred Television as their source of agricultural information, 91% preferred radio, 77% preferred agricultural input suppliers, 71% prefer mobile phones and the least source from newspapers, magazine and brochures.

Siyao (2012) in a study on barriers in accessing agricultural information in Tanzania with a gender perspective: the case study of small- scale sugar cane growers in Kilombero district reported the challenges facing farmers in accessing agricultural information include long distance from rural residential areas to sources of information, costs associated with usage of

information, limited information services and poor information infrastructure.

The recent expansion of ICTs has also made their mark of farmers. But it seems to be in a budding stage and a host of problems are encountered in their utility. Mtega and Benard (2013) studied the state of rural information and communication services in Tanzania and found that poor/ unreliable information infrastructure, high illiteracy level, low income, lack of electricity and high cost of ICTs have limited the accessibility of information services in rural areas.

### 3. Objectives of the Study

1. To identify the frequency of reception of information.
2. Measure the extent of use of various sources of information.
3. To assess the level of satisfaction of farmers with regard to the information provided by the agricultural department of Government.

In view of these objectives, the following hypothesis has been formulated for examination. The farmer's satisfaction towards agriculture department staff's inputs depend on the types of crops grown by the farmers as whenever farmers grow new crops they look forward for more and more support from sources like agriculture department staff. To establish the hypothesis model farmers were studied as they in turn influence a large number of other farmers on the lines of opinion leaders. Survey method was executed to examine the conditions, situations or value-appraise; to query (someone) in order to collect information about some aspect of a group or area; to view or consider comprehensively and to inspect, scrutinize the prevailing system. The research setting of the study, Guntur District offers a wide scope due to its vast diversity of crops where different Agricultural and Horticultural crops are being raised. For the present study multi stage sampling method was adopted and 300 farmers were selected for the study. The data collection was taken up by a structured questionnaire. A total of 290 questionnaires were received by the researcher at the end of the data collection session among which twenty were rejected.

### 4. Research Methodology

With the growth of the new communication technologies such as cable television, computers, the Internet, satellites and telecommunications information dissemination have been increasingly influencing the Indian society (Singhal and Rogers, 2001:19). Consequently, the mass communication channels in India have been expanding and serving various sectors like agriculture with specialized message construction. On par with print other media like electronic media as well as new media has been growing from strength to strength and helping the farmers in acquiring information to the optimal level. Andhra Pradesh, in particular, has witnessed a media boom. Newspapers with chain editions, FM radio stations and new television networks continuously supply news and information about health, education, agriculture, business and related fields.

The newly formed Andhra Pradesh has been exploring the options for development of various prime sectors that need to

be encouraged. Agriculture is one sector which continues to contribute to the growth and the contemporary trends have been supporting it to sustain the growth. In the state of Andhra Pradesh earlier government identified model farmers and were provided necessary inputs of information about agriculture. These farmers who are progressive in thoughts and practice farming in a proactive manner in turn were expected to guide his fellow farmers in disseminating innovations. In this context the researcher took up the study to find out how the communication is supporting the government identified model farmers in disseminating information and how did they broaden the communication spectrum within less time and minimize the losses during the unfavorable conditions such as drought, floods, unhealthy market scenario and other times of crisis in the agriculture sector. The satisfaction of various tools is also ascertained by the researcher.

### 5. Survey method

Survey is executed to examine the conditions, situations or value-appraise; to query (someone) in order to collect information about some aspect of a group or area; to view or consider comprehensively and to inspect, scrutinize the prevailing system. Herbert Mc. Closky (1969) defined survey "as any procedure in which data are systematically collected from a population or a sample thereof through some form or direct solicitation, by means of face to face interviews, telephone interviews or mail questionnaires". Survey research is also defined as a method of descriptive research used for collecting primary data based on verbal or written communication with a representative sample of individuals or respondents from the target population. Kerlinger (1973) considered survey research as social scientific research and focuses on people, the vital facts of people, their beliefs, opinions, attitudes, motivations and behaviour. Parten (1950) clarified that the social scientific nature of the survey research is revealed by the nature of its variables which can be classified as sociological factors, opinions and attitudes.

### 6. Data analysis

The farmer's satisfaction towards agriculture department staff's inputs depend on the types of crops grown by the farmers as whenever farmers grow new crops they look forward for more and more support from sources like agriculture department staff. India is known for rich diversity of crops and same is the case with this state of Andhra Pradesh. Different geographical and climatic conditions determine the cropping pattern. Compared to other areas Guntur district has a unique pattern of cultivation which is well known for black cotton soil and commercial crops also exerts a wide range of crops from staple food grains, pulses, millets as well as commercial crops such as cotton, tobacco etc. The cropping pattern of the sample of the study also reflects the same. The district is home for commercial and staple crops such as Paddy, Cotton, Tobacco, Turmeric, Cotton, Chili, vegetables, fruits etc. Flowers are grown in small patches of land to big land holdings. Cotton board of India, Spices boards regional offices and Tobacco board of India's main office is located in the district is evident that agriculture is highly patronized. The sample model farmers of Guntur district grow an array of both staple and commercial crops across various regions. Among the respondents 45.1%, of

the sample has identified paddy as the main crop grown by them, followed by Chilli (26.7%), Cotton (19.2%), Maize (6.7%), Turmeric (1.5%), Tobacco and others 0.4% (Table 1). The data has shown that farmer's second preference is with the commercial crops rather than the staple ones. Unlike in many areas a rare combination of commercial and staple crops is grown here. These commercial crops also have such bigger markets that influence prices at national level. Especially Turmeric, Tobacco and horticulture plantations such as Curry leave and Drumstick have earned reputation in the commodities market. The comprehensiveness of the crops indicates the need for vast information sources and continuous dissemination.

**Table 1**  
Percentage distribution of the respondents according to the crops grown

S.No	Type of crops	fr	%
1	Paddy	122	45.1
2	Maize	18	6.7
3	Chilli	72	26.7
4	Turmeric	4	1.5
5	Tobacco	1	0.4
6	Cotton	52	19.2
7	Others	1	0.4
<b>Total</b>		<b>270</b>	<b>100</b>

Government also extends support to farmers in many areas. Apart from regular traditional sources farmers are supported by agricultural department also. The department which constitutes the Agricultural officers, extension staff and others supports farmers by providing necessary inputs in the form of material such as fertilizers, pesticides, crop loans, insurances in case of disasters and also about soil test, use of fertilizers etc. The above information is also provided to them on a timely basis. Here in this study almost the entire sample (98.52%) agreed that agriculture department personnel help them. Only 1.11%, answered in negative and 0.37% could not say concretely (Table 2).

**Table 2**  
Percentage distribution of the respondents as per reception of help about agricultural processes

S.No	Reception of help	fr	%
1	Yes	266	98.52
2	No	3	1.11
3	Can't say	1	0.37
<b>Total</b>		<b>270</b>	<b>100</b>

The periodicity of demand for information cannot be ascertained exactly in the field of agriculture. The need for information is felt round the year in one aspect or the other. Though it is season specific they may need information on certain occasions like natural disasters continuously at least for some time i.e. till the crisis is tide over. In the agriculture dept different categories of extension workers/ officers would be contacted by farmers. As it is a continuous activity farmer's look forward for information regularly. When the sample was asked about the frequency of requests put up to different categories of extension workers/ officers for information 75.2% said it is occasional and 24.8% would receive it regularly (Table 3). Since the sample is especially model farmers it would be a regular feature for the farmers as well as agriculture dept staff to interact with them.

**Table 3**  
Percentage distribution of the respondent's frequency of reception of information

S.No	Frequency of reception of information	fr	%
1	Regularly	67	24.8
2	Occasionally	203	75.2
3	Rarely	-	-
4	Never	-	-
<b>Total</b>		<b>270</b>	<b>100</b>

Due to failures in information dissemination in public sector extension systems the overall impact has been minimized (Anderson and Feder 2007; Anderson and Feder, 2004). Limited feedback and reach to farmers lead to poor relevance in the content. Farmers keep in touch with many sources for information to make agriculture highly productive and profitable. They need to be guided continuously to face the untoward situations like disasters, natural calamities and drought etc. Due to inadvertent market situations, unsupportive climatic conditions like torrential rains farmers are forced to experience losses and they need to get updated information with regard to sanctioning of crop insurances, loans, loan waiving and other financial matters. In this study only a small segment i.e. 10.0% are fully satisfied with information inputs followed by half of them who are somewhat satisfied and 40.7% are somewhat dissatisfied (Table 4).

**Table 4**  
Percentage distribution of the respondent's level of satisfaction with the information

S.No	Level of satisfaction	fr	%
1	Fully satisfied	27	10.0
2	Somewhat satisfied	133	49.3
3	Somewhat dissatisfied	110	40.7
4	Fully dissatisfied	-	-
<b>Total</b>		<b>270</b>	<b>100</b>

## 7. Discussion

The demand for information cannot be felt exactly in the field of agriculture. Though it is season specific they may need information on certain occasions like natural disasters that causes damages and farmers need information about issues like crop insurance and loan waiver at least for some time i.e. till the crisis is tide over. In the agriculture dept different categories of extension workers/ officers would be contacted by farmers. Since the sample is especially model farmers it would be a regular feature for the farmers as well as agriculture dept staff to interact with each other. Here in this study large number of the sample said that agriculture dept provides support occasionally but one fourth of the sample said that they would receive it regularly. Only a small segment are fully satisfied followed by half of them who are somewhat satisfied. The data is more or less on the lines of the study of Singh (2002) who reported that "Agriculture supervisor make very less number of visits to the farmers field", "model farmers hijack the agricultural information to be provided by extension agencies" and "Agriculture supervisors are not available at their head quarter when needed by the farmers".

Coefficient of correlation between types of crops grown by the model farmers and their opinion concerning satisfaction with

the information provided by the agriculture department staff is 0.041 which means that depending on the type of crops grown by the farmers the agriculture department staff provides information inputs. Hence the hypothesis is proved.

Here in this study almost the entire sample agreed that agriculture department personnel help them. Very few said that they do not get such support from the staff of agriculture department. Here in this study large number of the sample said that agriculture department provides support occasionally (Table 3). During many crises the farmers look for support from all possible sources. Since the end result is to get profitability it is very much essential to encourage accommodating others in the study. Farmers keep in touch with many sources for information to make agriculture highly productive and profitable. They need to be guided continuously to face the untoward situations like disasters, natural calamities and drought etc. Due to inadvertent market situations, unsupportive climatic conditions like torrential rains farmers are forced to experience losses and are forced to get updated information with regard to sanctioning of crop insurances, loans, loan waiving and other financial matters. In this study only a small segment are fully satisfied followed by half of them(49.3%) who are somewhat satisfied (Table 4).

## 8. Suggestions

Farmers who take-up agriculture would look up to various sources for necessary help. Since farming is a regular process people expect to support them at every step. Whether it is seed, fertilizers, loans or any related matter they look forward for support especially moral as well as decision making. The farmers also look forward for hard core business and they prefer the option of right source in right time. But the data shows

neither that nor much of the sample are aware about the support available which they can receive from the government. Since many of the samples grow Paddy, Cotton, Maize and vegetables the sample might need information support. From the data it is also evident that the staff approach them occasionally.

1. Hence, though various potential sources such as newspapers, radio and television channels disseminate information the government department as well as should take up the following measures.
2. It should try to identify the number of farmers that need continuous support. Especially for those who grow such crops that need continuous monitoring.
3. They should pass the information regularly to these identified farmers
4. Crop wise schedule and special modules for specialized crops should be planned and implemented by various agencies that participate in agricultural communication.
5. Regular follow-up on the dissemination of information sources such as media personnel, company sales representatives, government officers shall fill the gaps wherever necessary
6. The extension staff may also be given orientation about the new technologies and the advanced techniques in the cultivation practices.
7. The extension departments of the agricultural universities may also be strengthened.

## References

1. Benard, R., Silayo, G.F. & Abdalah, K. (2015). Preference Sources of Information Used by Seaweeds Farmers in Unguja, Zanzibar. *International Journal of Academic Library and Information Science*, 3 (4):106- 116.
2. Bereh, H. (2002). Connecting Farmers Worldwide through Radio. *Low External Input and Sustainable Agriculture (LEISA) July*. Vol 1 No. 2.
3. Bogunjoko, Isaac O. (1983) Sources of information of improved farm practices: a study of farmers in Giwa District of Kaduna State. *Nigerian Journal of Agricultural Extension*, 1 (2) 64-71.
4. Byamugisha, H.M, Ikoja-Odongo, R, Nasinyama, G.W and Lwasa, S. (2008). Information seeking and use among urban farmers in Kampala district, Uganda. *Agricultural Information and IT proceedings of IAALD AFITA*, 24 to 27 August 2008, Tokyo University, Japan.
5. Herbert Mc. C (1969). *Political inquiry: the nature and uses of survey research*, Holt, Rinehart and Winston.
6. Kerlinger, F.N. (1973). *Foundations of behavioral research* (2nd ed), New York.
7. Mtega, W. & Benard, R. (2013). The State of Rural Information and Communication Services in Tanzania: a Meta-analysis. *International Journal of Information and Communication Technology Research*, 3 (2): 64-73.
8. Ndagi, I., Oduwole, O., Taiwo, O., Muhammed, I. & Rahman, S. (2013). Effectiveness of Information Sources on Improved Farm Practices Among Cowpea Farmers in Oyo State. *American- Eurasian Journal of Agriculture and Environment Sciences*, 13 (6): 769-773.
9. Singh, V. (2002). "Information seeking behaviour of farmers in Piprali panchayat samiti of district Sikar of Rajasthan". M.Sc. Thesis RAU, Bikaner, Campus Jobner.
10. Singhal, A., & Rogers, E.M. (2001). *The Entertainment-Education Strategy in Campaigns*. In R.E. Rice and C. Atkins (eds.) *Public Communication Campaigns*. 3rd Edition. Thousand Oaks, CA: Sag.
11. Siyao, P.O.(2012). Barriers in accessing agricultural information in Tanzania with a gender perspective: the case study of small- scale sugar cane growers in Kilombero district. *EJISDC*, 51(6): 1-19.