

**Information Needs and Gathering Habits among
Farmers in Rural Areas of Bundelkhand Region,
Uttar Pradesh: A Study**

Thesis

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Supervisor
Dr. M.P. SINGH
Head & Associate Professor

Submitted by
HARIOM
Research Scholar



**Department of Library and Information Science
(School for Information Science and Technology)
Babasaheb Bhimrao Ambedkar University
(A Central University)**

Vidya Vihar, Raebareli Road, Lucknow-226025, Uttar Pradesh

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Abstract

In the 21st century, we all of us have been living in the information age. Information has become one of the most significant tools of progress of contemporary society. Today everyone requires information to know everything even in his day to day life. Even a single day does not left without acquiring the information; the day begins up with information and ends up with it. Having awakened in the morning we require the newspaper, watching television news and listening to the radio etc., which give a lot of information if what is going on in our surroundings environment. All of these provide current information on the various aspect of government policies, environment, new technology & tools, politics, bank loan, medical, agriculture, job, and employability etc. At colleges, homes, offices we communicate to our friends, neighbors, relatives, through interaction to one another considering the present scenario of the society in the world about information which is continuously going on. Farmers are also integrally and organically linked with and affected by aforesaid basics needs. They have right to freely access and utilize information, as and whenever needed. Role of 'library and information center' sometimes also known as 'knowledge resource center' is to function as mediator between 'information and farmers'. In developing countries agriculture is getting more and more knowledge driven thereby necessitating continuous research and innovative development at the global as well as national or regional level.

India is known primarily as an agricultural country in the world, Indian economy is prominently based on agriculture sector which plays a pivotal role in development. For most Indian families, agriculture is the main occupation, almost seventy percent of Indian population, one or another way, depends on agriculture as source of their livelihood that is why India emerged as a leading country in the field of agriculture. With increased complexity

of agriculture systems, gaining access to relevant information in present competitive environment has become very important as it facilitates the adoption of technology and improves farm productivity especially in case of marginal and small agricultural land holders. Prevailing market price, latest agriculture technologies and techniques of farming etc. influence the farmers and their capability to access relevant information related to it empowers them to take correct decision. The use of information in agriculture sectors will help in enhancing farming productivity in number of ways like best practices in farming, giving information on weather trends and timely access to market information helps farmer to take correct decisions about what type of crops to planted and where to sell their product and buy inputs.

Information need of the farmers is basically focused to weather conditions, market price, availability of improved seeds and fertilizers, loaning policies, government support, improved production and farming techniques, Krishi Vigyan Kendra (KVC), Kisan Call Center (KCC) etc. In rural areas accessing information from KCC using mobile or cell phone is more convenient compared to computers because of its non- availability, long distance or connectivity.

Information needs during crop season are related to the acquisition of inputs, production planning, cultivation, harvesting, storage and packaging, transportation and selling etc. while off-farm income generation options and fluctuating government policies and regulations are other significant factors influencing the farmers about which information is asked for.

Information needs and gathering habits differ with varying farmer groups. Planners of educational and marketing strategies need to contemplate upon a group of farmers regarding their specific information needs and it's seeking behavior so that they can develop programs

suited to specific target groups. A success of extension programmes largely depends on these factors, neglect of which may lead to failure of public sector extension systems.

Thus, there is a necessity to focus on the present status of information needs and gathering habits of the farmers of the Bundelkhand region to help to improve the farmer's capability of searching information. Identification of the information needs of farmers and creating awareness towards using information sources is an important task. Hence, the present study has been undertaken to identify the information needs and gathering habits of farmers of the Bundelkhand region

OBJECTIVES OF THE STUDY

The following objectives of the study are as follows:

1. To identify the information needs of the farmers belonging to rural areas of Bundelkhand region
2. To explore various Government schemes/policies for agricultural development in the village
3. To examine the information communication channels and various sources used by the farmer
4. To explore the purpose and motives of gathering information, types of information sought after
5. To examine type of difficulty faced by the farmers in accessing the information
6. To describe the attitude and opinion of the farmers regarding concept of information/knowledge resource center of their villages
7. To study and evaluate existing information services and resources available at their villages provided by library/knowledge resource center, Govt. & N.G.O. etc.

HYPOTHESES OF THE STUDY

The following hypotheses have been formulated:

H1: It is presumed that majority of farmers used various type of information for their day to day life.

H2: Different channels of information communication and sources are being used by the farmers.

H3: There are various government schemes/policies exist for the development of the agriculture.

H4: Various obstacles/ difficulty are faced by the farmers while accessing the information.

H5: A majority of farmers does not have positive attitude and opinion regarding the concept of information centers/knowledge resource centers for their villages.

SCOPE OF THE STUDY

The term scope refers to limitations or extent of the study. It mainly involves the coverage area of the study.

The study basically deals with Bundelkhand region, south-west part of Uttar Pradesh- comprising of seven districts namely Jhansi, Mahoba, Lalitpur Banda Jalaun Hamirpur and Chitracoot-falling. But due to security, improper transportation and unsuitable connectivity to rural areas with urban areas, only three districts – **Mahoba, Jhansi and Lalitpur**- were be covered in this study. The study will cover information canters/knowledge resource centers e.g. KVK (Krashi Vigyan Kendra), seed and fertilizers centers, Kisan Seva Kendra, community centers, Public library, sub division offices, common services center etc. used by the farmers. The study will highlight the agricultural status and background of the farmers in this district.

Research Methodology:

Research Methodology is a way to solve the research problem systematically. It may be understood as a science of studying how research is done scientifically. To fulfil the objectives of the study, the study was adopted survey and observation method for data collection with help of tools interview, schedule and personal diary. **Schedule** is the important tools or instruments for data collection from the respondents, while interview is conducted. The investigator had designed a set of schedule in Hindi & English for the present research work which is based on the structured pattern and is in definite order and form. Total 29 questions are included into schedule. In which some of the questions are open ended as well closed ended along with the some feasible statement were given on a **Likert type scale**.

The study adopted stratified random sampling method for selecting sample of farmer in rural area of, Jhansi, Mahoba, Lalitpur district, and Bundelkhand region. According to stratified random sampling the Districts divided in to sub-divisions (Parts), and 10% villages selects to each sub divisions, due to large population of farmers in the villages, only 10 farmers randomly select from each selected villages i. e. 860 farmers from Jhansi District, 520 farmers from mahoba and 740 farmers from lalitpur District, total **2120** farmers took as sample size for filing schedule through interview, out of that only 1657 responses were got from the farmers and 463 farmers, didn't response due to unawareness, fearless and illiteracy reasons. The response received from the farmers on the schedule be analyzed with the help of appropriate statistical tools like SPSS Software and excel, such as descriptive and content analysis, presented in tables, graphs charts and the **Chi Square Test was applied for hypothesis testing** .

Chapterization

CHAPTER 1: INTRODUCTION

This chapter gives the introduction about the topic. It includes Concepts of information and its other areas. It further gives statement of the problem, relevance of the study, Objectives, Hypotheses, Scope, Research Methodology and at last bibliographical references

CHAPTER 2: REVIEW OF RELATED LITERATURE

It will provide an overview about the related studies conducted on the research study. It enables to avoid duplication of research work and broadens the understanding of the research problem under study

Chapter 3: PROFILE OF THE BUNDELKHAND REGION WITH SPECIAL REFERENCE TO JHANSI, MAHOBA & LALITPUR DISTRICT

This chapter provides complete overview of the profile of the surveyed region undertaken Jhansi Mahoba and Lalitpur District. In overview there describe history, geographical background, agricultural, educational and sex ratio, type of information center availed in rural area.

CHAPTER 4: AGRICULTURAL ORGANISATIONS / INSTITUTIONS/ BODIES: AN OVERVIEW

The chapter deals with data, information, knowledge, information need , and role of various agricultural organizations / institutions like radio and television , role of library information center in agriculture, KCC, KVK,NGOs, it also discuss type Govt. scheme and Policy exist in agriculture etc..

CHAPTER 5: ANALYSIS AND INTERPRETATION OF DATA

The chapter 5th deals about the statistical analysis and interpretation of the data and graphical presentation of the various factor and analytical method used for description of the study.

CHAPTER 6: FINDINGS, CONCLUSION AND SUGGESTIONS

This chapter presents the findings of the study and feasible suggestions in the form of recommendations along with the conclusion of the entire research study. Finally, references are accumulated and listed at the end in an alphabetical order so as to enable the future researchers to get an idea of volume and variety of the literature published in the field.

SUMMARY OF THE FINDINGS

The major findings of the study based on the outcomes of results are follows: -

- On the basis analysis of data it is found that overall responses of the farmers were 78.16 %, the highest responses rate was received from Lalitpur District. Sub-division wise responses, the highest responses rate received from farmers of Talbehat Sub- Division (TBT) and Tahrauli Sub-Divisions (THL) on other hand a low responses rate received from the farmers Jhansi Sub- division and Lalitpur Sub-Division.
- In order to education level of respondents of Bundelkhand region, it was found that 70.04% respondents were literate and 29.96% respondent illiterate. In the level of literate, most of the respondent were intermediate, while the only few respondent were higher educated (U.G and P.G.).
- On the opinion of Acquiring land it is explore that most of farmers belong to small Scale category (below 10 hectares) and marginal Scale category (10-20 hectares), while few farmers belong to big scale category
- It is shown in afore said that farmers were highly aware with the community center, Kishan Seva Kendra, as well as with library, while farmers were not aware with of these type of information center, their mostly visited fortnightly. However, a

significant number of farmers also visited weekly for getting their information and few farmers daily visited to the information centers.

- The study explore that agricultural oriented information are regarding Govt. policies, seed, plants, disease and pest management are mostly required to the farmers. While information on Modern Cultivation System and Manure & Fertilizer Management related information required on low level.
- Farmers were more familiar and preferred as information source to Kishan Seva Kendra, farmer meeting .There is found a significant difference among farmers to preference of Kishan call center, Kishan Mitra, and agricultural colleges/university in various Districts. One major thing it is seen that most of farmers don't want prefer/ consult any issues to library, agriculture scientist, extension agent of bank / NGOs.
- In order to other type of sources such as Newspaper, Local Dealers/ sales man of agricultural products and Neighbour farmer are more preferred by them for getting agricultural information in almost all areas of the study. There is a significant difference between Lalitpur, Jhansi and Mahoba District regarding the use of T.V. as sources of information preferred by respondents. The preference of Magazine, leaflet Brochure mobile phone, radio and community leader were very less among them.
- The study observed that Rabi, Kharif and Zaid crops were producing in Bundelkhand Region and most of the farmers required information mainly for Rabi crops, The Rabi crops is the basic necessity of food of farmers living life in rural areas.
- The main aim of the gathering information by farmers is to increase quantity and qualitative production of crops. Another aims of the farmers were to care and cure

form disease infects the crops time to time, and know about the market price of the concern agricultural crops. I respect of agricultural scheme & policies achieve sustainability and community education was not focussed by them.

- It is found from the study that maximum respondents were not aware with the e-governance services and rest of respondent who belong Jhansi district were more aware comparison of other district.
- Kishan Call Center programme is based on to answer queries on agriculture through telephone calls. The result show that half majority of respondents were not aware of KCC as well as its common dial-up Number 18001801551), in aware their most of the farmers said to it was going on too-much Engaged, and sometimes it is not full fill his/ her desired information on at the time.
- The farmers were facing various problems, difficulties during the information access/ seek from various sources, channels etc.. The majority of farmers are unable to access suitable channel/ sources due to the ignorance of Govt. responsibilities, very less limited irrelevant availability of information. Another problem is associated with the farmer's i.e. inadequate transport facility, poor electricity. There are some of who respondents feel that they are not getting information at right time because of the unwillingness of information and unavailability of the library as well such type of information center at the village level. The lack of awareness of ICT was another problems among them by which a huge information gap exists between information services provider and farmers in rural areas.
- The low level of education of farmers was a major factor by which they faced various problems. With the help of data analysis it is found out that majority of farmers gather information due to unawareness of latest technology, the availability of information of Lack of Library and other Information helping centers is another

factor by which their lack of awareness of new information sources & technology cannot be in hand.

- With reference to farmers attitude towards govt. policies, Programmes activities etc... It is found out that majority of farmers have a positive opinion these but they are not happy or not satisfied with the real implementation of these at zero level.
- In respect of the opinion of respondents regarding various information centers. It is analysis that the majority of farmers express their very negative (poor) views specially Kishan Seva Kendra, community center and knowledge center, while they have very positive opinion regarding library, common services center and respondent also had given no views on community center .
- The analysed of data depicts that less than half majority of respondents were satisfied with the relationship between information officers and their self, followed by some of the respondents had poor relationship and some respondents did not-comments on that

Result of Hypothesis Test

H 1: Majority of Farmers Used Various type of Information for their Day to Day Life Regarding Agriculture or Generally

The results of Table H1.also indicates the overall representation 65.11% of farmers agreed that they were using various type of information for agricultural purposes , while only 34.88% of farmers were using various types of information for general purposes. Therefore, it has been observed that information related to agricultural is primly concern for a large majority of farmers.

Result of Chi Square Test: The chi square test has also been applying to test above hypothesis shown in table. The above distribution of test statics is chi square with (2-1) (3-1)

= 2 D. F. based on cross table formula. Therefore critical value at 0.005% level of significance is 10.579, which is smaller than calculated table value of 6.65 and hypothesis has been accepted. The results of chi square indicate that there is no statistically significance difference of farmers' opinions of different districts on the statement of that "Majority of farmers used various type of information for their day to day life regarding agriculture or generally". We conclude that majority of farmers from different districts agreed on that they were using various types of information for their day to day life regarding agriculture. More details shown by table No. 5.4. A and 5.4.B

H2. Different channels of information communication and sources are being used by the farmers

Results of Chi Square Test: The distribution of test statics is chi square with $(2-1)(3-1) = 2$ d. f. Therefore critical value at 0.005% level of significance is 10.579, which is greater than calculated table value of 0.24895 and hypothesis has been accepted. The results of chi square indicate that there is no statistically significance difference of farmers' opinions of different districts on the statement of that "farmers uses various (more than 3) channels of information communication and sources for information gathering". We conclude that majority of farmers from different districts were using various sources of information gathering. More details given under the table number 5.5

H3 There are various government schemes/policies exist for the development of the agriculture.

Results of Chi Square Test: The distribution of test statics is chi square with $(2-1)(3-1) = 2$ d. F based on cross table formula. Therefore critical value at 0.005% level of significance is 10.579, which is smaller than calculated table value of 13.8233 and hypothesis has been rejected. The results of chi square indicate that there is a statistically significance

difference of farmers' opinions of different districts about the statement of that "**various government schemes/policies exist for the development of the agriculture**". We conclude that majority of farmers from different districts were not accepted that various government schemes/policies exist for the development of the agriculture. The further explanation has given in by table. No 5.12

H4 Various obstacles/ difficulty are faced by the farmers while accessing the information

Results of Chi Square Test: The distribution of test statics is chi square with (2-1) (3-1) = 2 d. F based on cross table formula. Therefore critical value at 0.005% level of significance is 10.579, which is higher than calculated table value of 1.7047 and hypothesis has been accepted. The results of chi square indicate that there is no statistically significance difference of farmers' opinions of different districts on the statement of that "**Various obstacles/ difficulty are faced by the farmers while accessing the information**". We conclude that majority of farmers from different districts were accepted that they faced various obstacles/ difficulty while accessing the information. Type of obstacles/ difficulty are faced by the farmers while accessing the information are shown by Table 5.20, and 5.21

H5. Majority of Farmers do not have Positive Attitude and Opinion Regarding the Concept of Information Center's / Knowledge Resource Center's for their Villages

Analysis of table No. 25 reveals that farmers have a different attitude towards the concept of information and knowledge Center's in the districts under study. It is showing that regarding community Center's majority (i.e. 77.6%) of the farmers have negative opinions while they have also a negative frame of mind followed by 56.9% and 56.41% respectively. However, about the library and common service centers, they have positive opinion i.e. 54.42% and 78.2% respectively. It is shown that the farmers are aware of the importance of the library

and Common Service Center in the society. Similarly, there is a need to ensure the facilities of community centers and other facilities in the districts.

The table found that majority of farmers had a negative attitude towards community center knowledge center and Kishan Seva Kendra, the hypothesis has been proved and accepted,

Conclusion

In the light of the above study, it can be stated that it is very important to provide the relevant information to farmers in order to help them meet their agricultural information needs and in turn improve their livelihood. Nowadays, there is rapid change in the climatic conditions, due to which farmers face lots of ups and downs. ICT and multimedia technology can play a vital role in providing information to farmers regarding floods and storms so that they may prepare themselves to fight with the same. The farmers are adopting to new information technologies. The research institutions, information dissemination centers and the Government is working together to frame best policies & schemes to cater the needs & requirement of the farmers. As a result now the farmers have large number of tools and information sources that provide instant access to information. In order to help farmers, the information centers, government, and NGOs must be aware of the information needs of the farmers, they should know the causes, factors and obstacles in the agricultural development process. They should study the farmer's life closely and try to find out the reason behind farmers committing suicide or migrating to other places every year.

The study clearly indicates that male in the rural areas of Bundelkhand Region are concerned with agriculture while females support them indirectly. Most of the farmers studied till metric or higher secondary level, very few went for higher education and sadly, one third farmer population was found to be illiterate. Majority of farmers are "marginal, small scale and semi medium farmers" and very few belonged to medium or big scale categories. Farmers are

aware of the Kishan Seva Kendra (community center) but most of them are not aware of the library, common services center and the knowledge centers. They mostly visit these fortnightly or whenever they face some problems in farming or need some assistance.

Farmers generally required information related to current affairs, educational news and health. Nobody was interested in career guidance or job oriented information due to direct involvements in farming and agriculture. Very few responded that they need information related to entertainment, culture etc. Farmers primarily required information on seeds and Plants, government policies & schemes on agriculture, Disease and Pest management, crop storage, and modern cultivation systems regarding, while no one showed interest in information on weather, manure and fertilizers management, soil and water conservation, market price on crops weeding and thinning, and post- harvest techniques announcements etc.

Most of Farmers collect their desired information mostly from their neighbor farmers/ friends, Newspaper, farmer meeting, Kishan Seva Kendra, local dealer & sales peoples, Kishan Mitra and common services center, while very few connect to Kishan call center, extension agents of bank & NGOs, Library, agricultural scientist and Research Institute seed center, mobile phone, radios, leaf brochures and community leader etc., due to lack of awareness, availability or willingness to accept new avenues. Majority of farmers liked to get information in audio and print form as compared to video or verbal forms. Some farmers were even interested in the pictorial form as they were illiterate and can understand pictures easily. The basic purpose of farmers, looking for information, is for growing good crops, produce a quality product and product planning, to control pest and facing disaster problems. It was nice to find that few farmers also looked for information on government schemes and policies on agriculture, job employability and business during free periods. The government runs various programmes and activities for information sharing but most of farmers were

unaware of such avenues like seminars, farmers meeting, awareness programmes on T.V, financial assistant scheme and e-governance services. The reason behind it is the lack of ICT skills and lower level of higher education. Most of them were not aware of the Kishan call center (KCC) question and answer programme, and haven't used the toll free number ever for their queries. Some farmers mentioned that KCC takes lots of time, most of the time they find it engaged & don't get answers on time. Farmers basically face problems like inability to access formal channel and sources, ignorance of govt. responsibility, irregularity of NGOs in rural areas, information telecast on T.V. and radio in odd hours. They are also affected by lack of awareness about new communication technology, availability of library and Information center in rural areas, proper guidance, and lower education level & illiteracy of farmers etc. The results of the study stressed that 75% of the farmers are not computer and internet literate, farmers own android phone, but they are not aware of video- conferencing, e-chaupal, and Krishi apps.

To do the evaluation of any service or source, it's very important to know that, what the farmer's opinion on these services is. This study concludes that farmers strongly agree that they were aware as to where to look for information but they have little access to information through various sources discussed above. While some farmer also somewhat agreed to the fact that many a times, they need to put lot of effort to search desired information and sometimes they need assistance from others in searching and selecting information due to lack of their ICT skills.

The government and NGOs conduct various programmes & activities for the farmer, the data showed that farmer have this realization that government makes good policies, but its implications through organized programmes & Activities is very poor. Some farmers are pessimistic. According to some respondents, the Knowledge Center, Library, and Common services are very good & excellent in information dissemination but Kishan Seva Kendra was

poor and majority of farmers did not comment on community center's usefulness in fulfilling their information needs. Half of the farmers were partially and moderately satisfied with information they could access, while the rest one-fourth farmers were not at all satisfied. A good percentage of farmers were having good relationship with the information officers while 30% farmers had poor relations with them due to caste system, illiteracy. Farmers suggested that one information center or Library must be established in each village at nyay panchayat or sector level providing useful magazines, newspapers and books to the farmers. Seminar hall with T.V. facilities should be there at these library and information centers. Few farmers also suggested for developing training courses to make farmer's computer and internet literate.

Further area of the Research:

- The role of ICT as a tool for changing environment for rural community development
- Role of Government and Non- Government Organization in information dissemination among farmers of rural areas
- Impact of libraries on rural community development
- Role of digital technology for development of Agriculture Sector
- Digital literacy among the farmers.
- Impact of cashless economy among farmers in Bundelkhand region
- Factors Influencing to the Information gathering habits among farmers in digital environment