Information Requirements for Farmers and Search Behavior: A Case Study at Manda Upazila, Naogaon

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ABSTRACT

In recent scenarios, information is badly necessary for daily life. Information is essential in every part of the daily job. Information can be obtained or retrieved from a variety of places. This article focuses on the information needs of farmer groups in rural areas. This research paper fulfills basic required information of rural farmers. This study was conducted using the questionnaire approach, and it revealed that practically all farmers are aware of agricultural facts, as this paper demonstrates. This paper also demonstrates that a greater number of sources use to inform the farmers mainly human assistance. But there have some limitations to reaching information, general to all search groups, were lacking of authenticity and timeliness. The findings show that tailoring agricultural information delivery to farmers' diverse information search patterns is an important consideration for extension programs.

Keywords: Information needs, Farmers, Rural areas, Agricultural, Search behavior, and Daily life.

INTRODUCTION:

Truly speaking, the current time is called information age. For changing our society definitely information plays a vital role. According to Kemp “information has been defined as the fifth need of man ranking after air, water, food and shelter”. Even in his day-to-day existence, everyone is keeping an eye out for information about everything (Nitin, 2012). Information needs assessments can be used by program designers to construct interventions that target users with specific information needs. Information requirements can be categorized using the "agricultural cycle" (Mittal et al., 2010) or the “agricultural value chain” (de Silva and Ratnadiwakara, 2008; Hossain et al., 2019; Ali and Kumar, 2011).

Both methods operate through the various stages of decision-making that a farmer must go through during a cropping season: input procurement, production planning, growing, harvesting, packaging as well as storing, transporting, and selling. Aside from production-related information, there are prospects for off-farm income generating and changes in regulations have ramifications that necessitate new information (Van den Ban, 1998), in addition to data on management of natural resources that is together sustainable and long-term (Swanson, 2008). A farmer may indicate a significant information need based on his or her wants and interests during an information needs calculation, but this approach will not disclose unfelt or ignored needs (Carter and Batte, 1993). Nonetheless, the significance of conducting an information needs assessment and engaging directly with information users should not be underestimated. Farmers may share experiences and best practices linked to their farm business in a two-way process, incorporating their knowledge base as well (De Silva and
Ratnadewakara, 2008). An assessment of information needs should serve as a starting point for building programs, allowing for the creation of contextually relevant content (Chapman and Slaymaker, 2002; Gereziher & Shiferaw, 2020; Roman & Colle, 2003).

The research's goal is to discover the rural farmers' information needs in the Manda upazila of Naogaon district, as well as some methods and means by which the information may be transmitted to promote the empowerment of the remote farming community through knowledge and economics.

**Statement of Problem**

Despite the fact that rural farmers have an active role in manufacturing of food, processing, and selling, economic and societal restrictions have limited their expertise of science and technology. Rural farmers have greater agriculture information access than urban farmers, but they face numerous challenges in obtaining information to meet their demands. Agricultural extension activities frequently connect with rural farmers when they visit rural regions to discuss improved technology or access to additional inputs. In a study of farmers in rural areas, in information needs, it found that rural farmers have inadequate access to information need. Rural farmers face inadequate money for cultivating food production which is the main problem in rural farmers (Okwu and Umoru, 2009). The above situation with regard to rural farmer’s agricultural information needs and their access to information needs that even more research. The following questions are this research's main emphasis: what are the present information essentials of rural farmers in Naogaon’s Manda Upazila? Which sources do they prefer most in seeking information? What are their information seeking attitudes?

**Need of the study**

Naogaon is a district which socio-economic characteristic depends on agriculture. Many people of this area produce agriculture production for living. In order to carry out their daily farming tasks, the rural farmer’s community requires numerous forms of information. Farmers' contributions to agricultural production over the year’s progress have been acknowledged, and it is required to make proper information available to them in order to improve their productivity. However, the district's rural sections lack adequate information and service centers. Farmers in rural areas lack access to the at the appropriate time with the correct knowledge, which results in a delayed progress of the rural farmer community in terms of agricultural development that is long-term. In the Naogaon district, an information support system for the rural farmer's community is a requirement for long-term agricultural development. Rural development can play a significant part in national development in a district like Naogaon, which has an agro-based rural economy. As a result, for the development of rural areas, quick and Information is easily accessible is critical (Ashfaqur and Moyazzem, 2013) because of the present agricultural information system's failure, and the lack of a rural information center/ village knowledge center in the villages of Naogaon, it is critical to consider the diverse information demands of farmers who live in remote places in order to meet the information requirements of villages and farmers to help them better their situation the rural community's socio-economic, cultural, and overall prosperity in way to construct information or knowledge centers.

**Objectives**

The study's main goal is to determine agricultural information requirements of farmers in rural locations of Naogaon, as well as the socio-economic aspects that sway their information access. The Specific objectives of the study are:

a) To learn more about the farmers are looking for several forms of information.

b) Finding the informational resources that farmers prefer

c) To ascertain the information seeking attitude of farmers.

**METHODOLOGY:**

The farmers of Manda Upazila in Naogaon district, has been determined here as the study’s population. A total of 38 respondents were selected from all the farmers of Manda upazila which was taken care of as the study's sample size. For primary data collection, a structured questionnaire with several items was created and utilized as instruction. Age, marital status, educational level, types of information sought, sources of information consulted, information seeking attitudes, and other socioeconomic factors of farmers were considered for the objective of the study.

The data was gathered from the respondents via a questionnaire. The analyzed data is using descriptive statistics such as frequency counts and percentages.
Literature Review

Babu et al. (2011) conducted a study on “Farmers’ Information Needs and Search Behaviors”. In this study, Farmers’ knowledge requirements and search behavior, and even the factors that can affect both search behavior and willingness to pay for information, were investigated in two districts in South India. Diseases and pests control, pesticide and fertilizer administration, seed variety, and seed treatment have all been highlighted as significant information needs for rice. For the low search group, rice production procedures and Credit information was more important. Poor dependability and timeliness were important barriers Diseases and pest’s ropes. The findings demonstrate that customizing agricultural information delivery to farmers’ various information search patterns is critical for extension programs to consider. Naveed et al. (2012) have jointly conducted a study on “Information looking for by Pakistani farmers: A review of published research” For getting agricultural information, Pakistani farmers have faith in heavily on interpersonal interactions with neighbors, acquaintances, relatives, associate or advanced farmers according to the findings of these research. The usage of print and electronic media, as well as expected, there were fewer agricultural extension agents than expected due to a lack of information sources. The findings point to the necessary for a Infrastructure for information based on need for Pakistani farmers Nitin Bhagach and Bachhav, (2012) has conducted a case study on “Information Rural Farmers’ Needs: A Study from Maharashtra, India: A Survey”. The information demands of the farmer community in rural areas are depicted in this study. According to the findings of the poll, 71 (40.58 percent) farmers demand information on a daily basis for various agricultural chores. Farmers’ primary sources of information are also discovered to be their colleagues or fellow farmers, followed by newspapers and government institutions Kashem et al. (2010) have conducted a research on “the complementary roles of information and communication technology in Bangladesh agriculture” The agriculture industry accounts for around 20.60 percent of the country’s total GDP, according to this research.

However, the majority of Bangladeshi farmers still lack modern agricultural understanding. They have depicted the current state of ICT in agriculture in order for future consumers of agricultural information (policymakers, other activists include reseachers, professors, and students) to collaborate. This research presents a database approach that can be used to effectively supply agricultural information in digitally separated geographic areas via Services that are based on your location. The proposed system will aid the government in providing services and access to appropriate digital content to Farmers aren’t the only ones that are active in this sector; researchers and others are as well.

Data Analysis and Findings

The collected data were analyzed, classified, and tabulated. The questionnaire based on a set of questions was implied to collect data. In this section, the investigation has been completed only those questions which are essential to conduct the objectives of the study. The study has been shown in different angles through both Tables.

Personal Information

Table 1: Respondents by sex.

| Gender     | Number of Respondents | Percentage |
|------------|-----------------------|------------|
| Male       | 38                    | 100%       |
| Female     | 0                     | 0%         |
| Total      | 38                    | 100%       |

The above Table 1 depicts 38 responded returned their questionnaire out of 38 questionnaires delivered with a response rate of 100%.

Table 2: Respondents by age.

| Age group     | No. of Respondents | Percentage (%) |
|---------------|--------------------|----------------|
| Under 20      | 1                  | 2.63%          |
| 21-25         | 3                  | 7.89%          |
| 26-30         | 8                  | 21.05%         |
| 31-35         | 7                  | 18.42%         |
| 36-40         | 12                 | 31.57%         |
| 45 Years & Above | 7                | 18.42%         |
| Total         | 38                 | 99.98%         |

The Table 2 shows the result: Age ranges of the respondents have been classified into following six pre-defined category in which it is visible that majority percent respondents (31.57%) under survey belongs to the age group of 36-40. By the Table it is clear that there are few researchers aged belongs to 21-25 (in percentage 7.89%). Highest the number of people that responded (31.57%) consists of the age range of 36-40.

The Table 3 shows the result: Here, the highest percentage (86.84%) of individuals is married followed by single (13.15%), and there is no widowed & separated person.
Table 3: Marital status by respondents.

| Marital status | No. of Respondents | Percentage (%) |
|----------------|--------------------|----------------|
| Single         | 5                  | 13.15%         |
| Married        | 33                 | 86.84%         |
| Widowed        | 0                  | 0%             |
| Separated      | 0                  | 0%             |
| Total          | 38                 | 99.99%         |

Table 4: Educational qualification by respondents.

| Education       | No. of Respondents | Percentage (%) |
|-----------------|--------------------|----------------|
| Illiterate      | 5                  | 13.15%         |
| Primary school  | 15                 | 39.47%         |
| Secondary school| 14                 | 36.84%         |
| Higher secondary| 4                  | 10.52%         |
| Graduate        | 0                  | 0%             |
| Post Graduate   | 0                  | 0%             |
| Total           | 38                 | 100%           |

The details of the result shows in the following Table 4. Here, Maximum numbers of respondents (39.47%) have Primary school education background which is followed by Secondary school (36.84%). While a good number of respondents are illiterate (13.15%) and have secondary school education background (10.52%). Important to notice that among the respondents there is no graduate and post graduate education background.

Table 5: Main Profession by respondents.

| Main Profession | No. of Respondents | Percentage (%) |
|-----------------|--------------------|----------------|
| Service         | 0                  | 0%             |
| Teaching        | 0                  | 0%             |
| Agriculture     | 38                 | 100%           |
| Business        | 0                  | 0%             |
| Day Labor       | 0                  | 0%             |
| Jobless         | 0                  | 0%             |
| Other           | 0                  | 0%             |
| Total           | 38                 | 100%           |

The Table 5 shows the result: Important to notice that they have idea about education but they have no higher education background. Here, maximum number of person’s income source is agriculture (100%). They are not involved in service, teaching, business, day-labor, and jobless.

Majority of the respondent’s main occupation is Agriculture Every respondent have exact sector of agriculture (39.47%) respondents have cultivation, (15.78%) respondents have Animal Husbandry, (7.89%) respondents have Tree farming, (7.89%) - have Dairy farming, (5.26%) respondents have Horticulture, (13.15%) respondents have Fishing (5.26%), respondents have Poultry farming and (5.26%), respondents have Mixed farming (Table 6).

Table 6: Exact sector of agriculture by respondents.

| Exact sector | No. of Respondents | Percentage (%) |
|--------------|--------------------|----------------|
| Cultivation  | 15                 | 39.47%         |
| Animal Husbandry | 6               | 15.78%         |
| Tree farming | 3                  | 7.89%          |
| Dairy farming| 3                  | 7.89%          |
| Horticulture | 2                  | 5.26%          |
| Fishing      | 5                  | 13.15%         |
| Carpenter    | 0                  | 0%             |
| Blacksmith   | 0                  | 0%             |
| Potter       | 0                  | 0%             |
| Poultry farming| 2                | 5.26%          |
| Mixed farming| 2                  | 5.26%          |
| Other        | 0                  | 0%             |
| Total        | 38                 | 99.97%         |

The following Table 7 shows the details result: Besides the core occupation some respondents (63.16%) have involve some other sector of agriculture 18.42% respondents have involved in Animal husbandry beside main occupation. 26.31% respondents have involved in Tree farming. 15.78% respondents have involved in Fishing 2.63% respondents have involved in Poultry farming.

Table 7: Other sector of occupation beside main one by the respondents.

| Other sector     | No. of Respondents | Percentage (%) |
|-----------------|--------------------|----------------|
| Animal husbandry| 7                  | 18.42%         |
| Tree farming    | 10                 | 26.31%         |
| Fishing         | 6                  | 15.78%         |
| Poultry farming | 1s                 | 2.63%          |
| Total           | 24                 | 63.14%         |

Information-seeking Behaviors

Table 8: Information need by the respondents.

| Types of respond | Number of Respondent | Percentage (%) |
|------------------|----------------------|----------------|
| Yes              | 38                   | 100%           |
| No               | 0                    | 0%             |
| Total            | 38                   | 100%           |

The Table 8 shows the result: Respondents were asked if they had needed any assistance any information or not. All of the respondents (100%) gave answer “yes”.

Here is the details result: Those who possess answered to the previous question “yes” are asked again to specify the information seeking frequency. In fact out of 38 respondents, they're all having answered...
that they need information regarding their profession. For their convenience they were given three options viz. ‘Always’, ‘Sometimes’, and ‘Seldom’ 44.73% respondents have felt information need ‘always’ while 55.26% respondents indicated that they need information ‘sometimes’. And no one has given answer to information seeking frequency as ‘seldom’ (Table 9).

Table 9: Information seeking frequency.

| Information seeking frequency | No. of Respondents | Percentage (%) |
|-------------------------------|--------------------|----------------|
| Always                        | 17                 | 44.73%         |
| Sometimes                     | 21                 | 55.26%         |
| Seldom                        | 0                  | 0%             |
| Total                         | 38                 | 99.99%         |

This Table 10 shows the details result. Every farmer involvement agricultural work. So he/she is looking for information for the agriculture.

Table 10: More interesting topic to search by the respondents.

| Types of Information            | No. of Respondents | Percentage (%) |
|---------------------------------|--------------------|----------------|
| Crops production                | 32                 | 84.21%         |
| Horticure                       | 5                  | 13.15%         |
| Fish farming                    | 13                 | 34.21%         |
| Poultry farming                 | 2                  | 5.26%          |
| Animal husbandry                | 21                 | 55.26%         |
| Apiculture                      | 0                  | 0%             |
| Tree farming                    | 11                 | 28.94%         |
| Pottery                         | 0                  | 0%             |
| Carpentry                       | 0                  | 0%             |
| Other                           | 0                  | 0%             |

Here, 84.21% respondents involve crops production. 13.15% respondents involve horticulture. 34.21% respondents involve Fish farming. 5.26% respondents involve Poultry farming. 55.26% respondents involve Animal husbandry. 28.94% respondents involve Tree farming.

Table 11: Types of Information and usage frequency searched by respondents.

| Types of Information          | Frequency |
|-------------------------------|-----------|
|                               | Always    | Sometimes | Rarely  | Never   |
| Farming method                | 24 (63.15%) | 13 (34.21%) | 1 (2.63%) | 0 (0%) |
| Field Preparation             | 13(34.21%)  | 24(63.15%)  | 1(2.63%)  | 0(0%)  |
| Harvesting                    | 6(15.78%)   | 29(76.31%)  | 4(10.52%) | 0(0%)  |
| Disease Management            | 31(81.57%)  | 12(31.57%)  | 16(42.10%)| 0(0%)  |
| Integrated Pest management    | 18(47.36%)  | 20(52.63%)  | 0(0%)    | 0(0%)  |
| Production Cost               | 8(21.05%)   | 26(68.42%)  | 2(5.26%)  | 0(0%)  |
| Fertilizer & alike application| 6(15.78%)   | 29(76.31%)  | 3(7.89%)  | 0(0%)  |
| Market & Price of Products    | 6(15.78%)   | 29(76.31%)  | 3(7.89%)  | 0(0%)  |
| Irrigation Management         | 24(63.15%)  | 26(68.42%)  | 3(7.89%)  | 0(0%)  |
| Pesticide Application         | 13(34.21%)  | 23(60.52%)  | 2(5.26%)  | 0(0%)  |
| Seed Verities/Qualities       | 21(55.26%)  | 17(44.73%)  | 0(0%)    | 0(0%)  |
| Best Agricultural Practice    | 12(31.57%)  | 26(68.42%)  | 0(0%)    | 0(0%)  |
| Weather forecasting           | 8(21.05%)   | 23(60.52%)  | 7(18.42%) | 0(0%)  |
| Machinery & equipment         | 7(18.42%)   | 24(63.15%)  | 7(18.42%) | 0(0%)  |
| Consumer                      | 8(21.05%)   | 25(65.78%)  | 5(13.15%) | 0(0%)  |
| Transport                     | 10(26.31%)  | 26(68.42%)  | 2(5.26%)  | 0(0%)  |
| Distribution                  | 7(18.42%)   | 23(60.52%)  | 8(21.05%) | 0(0%)  |
| Storage                       | 9(23.68%)   | 23(60.52%)  | 6(15.78%) | 0(0%)  |
| Best time of farm             | 10(26.31%)  | 25(65.78%)  | 3(7.89%)  | 0(0%)  |
| Agriculture Training oriented | 5(13.15%)   | 33(86.84%)  | 0(0%)    | 0(0%)  |

The majority of those who responded have given answer ‘always’, ‘sometimes’, ‘rarely’. But they not gave answer about ‘never’. This situation can comprehended by the Table 11 63.15% respondents got farming method related information always while 34.21% got it sometimes and 2.63% got this information rarely. About field preparation 34.21% respondents got information always, 63.15% respondents got sometime, 2.63% respondents got rarely. About harvesting respondents got information 13.15% always, 76.31% sometime 10.52% rarely. About Disease Management respondents got information 81.57% always, 18.42% sometime. About Integrated Pest management respondents got information 81.57% always, 42.10% sometime 42.10%. About Production Cost respondents got information maximum 68.42% sometime. About Irrigation Management respondents got information maximum 68.42%. About Seed Verities/Qualities respondents got information maximum 55.26%.
Table 12: Sources of Information and its usage frequency, rating of reliability and satisfaction mentioned by Respondents.

| Sources of Information | Frequency of Information | Reliable Rating | Satisfaction Rating |
|------------------------|--------------------------|-----------------|---------------------|
|                        | Always                  | Sometime        | Rarely              | Never               |
|                        |                         |                 |                      |                     |
| A. Human Assistance    |                         |                 |                      |                     |
| i) Other farmers       | 28 (73.68%)             | 10 (26.31%)     | 0 (0%)              | 0 (0%)             |
|                       | 23 (60.52%)             | 15 (39.47%)     | 0 (0%)              | 0 (0%)             |
| ii) Field Worker       | 11 (26.94%)             | 27 (71.05%)     | 0 (0%)              | 0 (0%)             |
|                       | 17 (44.73%)             | 21 (55.26%)     | 0 (0%)              | 0 (0%)             |
| iii) Fertilizer agent  | 1 (2.63%)               | 36 (94.73%)     | 1 (2.63%)           | 0 (0%)             |
|                       | 4 (10.52%)              | 34 (89.47%)     | 0 (0%)              | 0 (0%)             |
| iv) Agriculture officer| 0 (0%)                  | 37 (97.36%)     | 1 (2.63%)           | 0 (0%)             |
|                       | 15 (39.47%)             | 23 (60.52%)     | 0 (0%)              | 0 (0%)             |
| v) Upazilla chairman   | 0 (0%)                  | 8 (21.05%)      | 27 (71.05%)         | 3 (7.89%)           |
|                       | 0 (0%)                  | 16 (42.10%)     | 19 (50%)            | 0 (0%)             |
| vi) Agriculture specialist | 1 (2.63%) | 36 (94.73%) | 1 (2.63%) | 0 (0%) |
|                       | 25 (65.78%)             | 12 (31.57%)     | 1 (2.63%)           | 0 (0%)             |
|                        |                         |                 |                      |                     |
| B. Organization oriented |                       |                 |                      |                     |
| i) Agriculture office  | 0 (0%)                  | 37 (97.36%)     | 1 (2.63%)           | 0 (0%)             |
|                       | 9 (23.68%)              | 28 (73.68%)     | 1 (2.63%)           | 0 (0%)             |
| ii) Upazilla           | 0 (0%)                  | 16 (42.10%)     | 27 (71.05%)         | 1 (2.63%)           |
|                       | 0 (0%)                  | 29 (76.31%)     | 8 (21.05%)          | 0 (0%)             |
| iii) NGO               | 0 (0%)                  | 4 (10.52%)      | 23 (60.52%)         | 11 (28.94%)         |
|                       | 0 (0%)                  | 21 (55.26%)     | 6 (15.78%)          | 0 (0%)             |
| iv) Library            | 0 (0%)                  | 0 (0%)          | 21 (55.26%)         | 17 (44.73%)         |
|                       | 0 (0%)                  | 16 (42.10%)     | 5 (13.15%)          | 0 (0%)             |
| v) UISC                | 3 (7.89%)               | 33 (86.84%)     | 2 (4.26%)           | 0 (0%)             |
|                       | 24 (65.34%)             | 4 (10.52%)      | 0 (0%)              | 0 (0%)             |
|                        |                         |                 |                      |                     |
| C. Technology Oriented |                         |                 |                      |                     |
| i) Govt. Agriculture service | 0 (0%) | 15 (39.47%) | 12 (31.57%) | 11 (28.94%) |
| ii) Mobile Agriculture service | 0 (0%) | 7 (18.42%) | 14 (36.84%) | 17 (44.73%) |
| iii) Internet/Website | 0 (0%)                  | 3 (7.89%)       | 13 (34.21%)         | 22 (57.89%)         |
|                       | 2 (5.26%)               | 7 (18.42%)      | 7 (18.42%)          | 0 (0%)             |
| iv) Radio Program      | 0 (0%)                  | 30 (78.94%)     | 7 (18.42%)          | 1 (2.63%)           |
|                       | 2 (5.26%)               | 25 (65.78%)     | 10 (26.31%)         | 0 (0%)             |
| v) TV Agri-program     | 0 (0%)                  | 31 (81.57%)     | 1 (2.63%)           | 0 (0%)             |
|                       | 2 (5.26%)               | 29 (76.31%)     | 1 (2.63%)           | 0 (0%)             |
|                        |                         |                 |                      |                     |
| D. Print media         |                         |                 |                      |                     |
| i) Newspaper           | 0 (0%)                  | 31 (81.57%)     | 7 (18.42%)          | 0 (0%)             |
|                       | 4 (10.52%)              | 26 (68.42%)     | 18 (21.05%)         | 0 (0%)             |
| ii) Agri-pamphlet      | 0 (0%)                  | 3 (7.89%)       | 18 (47.36%)         | 17 (44.73%)         |
|                       | 0 (0%)                  | 11 (28.94%)     | 10 (26.31%)         | 0 (0%)             |
| iii) Agri-Newsletter   | 0 (0%)                  | 1 (2.63%)       | 16 (42.10%)         | 21 (55.26%)         |
|                       | 0 (0%)                  | 10 (26.31%)     | 0 (0%)              | 0 (0%)             |
| iv) Farm Magazines     | 0 (0%)                  | 0 (0%)          | 18 (47.36%)         | 20 (52.63%)         |
|                       | 0 (0%)                  | 15 (39.47%)     | 0 (0%)              | 0 (0%)             |
| v) Agri-Book           | 0 (0%)                  | 12 (31.57%)     | 18 (47.36%)         | 8 (21.05%)          |
|                       | 2 (5.26%)               | 16 (42.10%)     | 10 (26.31%)         | 0 (0%)             |

*The numeric figure in cell indicates number of the respondents and percentage is mentioned within parenthesis.

A question was posed to the participants to identify the sources of data they used from where they got information whenever they feel the need of information. They were given four basic sources of information i.e. Human assistance sources of information, Organization oriented sources of data, Technology

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Oriented sources of data and Print media sources of data. Within these broader sources of data they were given some other sources of data. They were asked to indicate the usage frequency of sources of data, their reliable rating and satisfaction rate. They were given four options in the case frequency of information viz. always, sometimes, rarely, never. The options for reliable ratings were for them are, reliable, moderate, less reliable and unreliable. Again the options for satisfaction ratings were, fully satisfied, partially satisfied, less satisfied and unsatisfied.

73.68% respondents always got information from others farmers 60.52% respondents under survey treated this source of information is quite reliable and 81.57% respondents are fully satisfied with this sources of data 28.94% respondents got information from field workers always and 44.73% information was reliable and 44.73% respondents were fully satisfied 97.36% respondents sometime got information from agriculture office. 73.68% respondents think that information is reliable and 71.05% respondents are partially satisfied 36.82% respondents rarely got information from mobile agriculture service. 7.89% respondents were less reliable and 7.89% respondents were less satisfied 81.57% respondents sometime got information from Newspaper 68.42% respondents were moderate and 78.94% respondents were partially satisfied (Table 12).

Table 13: Most important information sources reckoned by respondents.

| Sources of information      | Effective Rating |
|----------------------------|-----------------|
|                            | Most effective  | Effective | Less Effective | Ineffective |
| Human Assistance           | 36 (94.73%)     | 2 (5.36%)  | 0 (0%)         | 0 (0%)      |
| Organization oriented      | 13 (34.21%)     | 24(63.15%) | 1(2.63%)       | 0 (0%)      |
| Print media                | 0 (0%)          | 28(73.68%) | 10 (26.31%)    | 0 (0%)      |
| Technology Oriented        | 2 (5.36%)       | 32(84.21%) | 4 (10.52%)     | 0 (0%)      |

Out of four sector most of the respondents dependent on human assistance. Other sectors are also important as sources of data reckoned by respondents. Four sectors are shown above the Table 13 94.3% respondents under survey think that human assistance as sources of data most effective.

Table 14: Attitudes of respondents towards information.

| Information Attitude criteria       | Strongly Agree | Agree | Somewhat Agree | Disagree |
|-------------------------------------|----------------|-------|----------------|----------|
| Search a lot for information        | 12 (31.57%)    | 26 (68.42%) | 0 (0%) | 0 (0%)    |
| Compare information from different sources | 19 (50%)      | 19 (50%)     | 0 (0%) | 0 (0%)    |
| Selecting source is important       | 14 (36.84%)    | 24 (63.15%)  | 0 (0%) | 0 (0%)    |
| Little access to information        | 4 (10.52%)     | 34 (89.47%)  | 0 (0%) | 0 (0%)    |
| Difficult to find right information | 22 (57.89%)    | 16 (42.10%)  | 0 (0%) | 0 (0%)    |
| Take a lot effort to search information | 7 (18.42%)    | 30 (79.84%)  | 1 (2.63%) | 0 (0%)    |
| Hard to decide where to look        | 5 (13.15%)     | 33 (86.84%)  | 0 (0%) | 0 (0%)    |
| Hard to decide which information to trust | 8 (21.05%)     | 29 (76.31%)  | 1 (2.63%) | 0 (0%)    |
| Feel confused by information available | 11 (28.94%)  | 26 (68.42%)  | 1 (2.63%) | 0 (0%)    |
| Should spend more time searching    | 11 (28.94%)    | 27 (71.05%)  | 0 (0%) | 0 (0%)    |
| Beneficial to search for information | 25 (65.78%)    | 13 (34.21%)  | 0 (0%) | 0 (0%)    |
| More self-confident than others     | 20 (52.63%)    | 27 (71.05%)  | 0 (0%) | 0 (0%)    |
| Helpful to others who search information | 17 (44.73%)  | 21 (55.26%)  | 0 (0%) | 0 (0%)    |
| Willing to pay for right information | 6 (15.78%)    | 32 (84.21%)  | 0 (0%) | 0 (0%)    |
| Consult enough sources before taking decision | 4 (10.52%)  | 31 (81.57%)  | 3 (7.89%) | 0 (0%)    |
| Prefer same source as in past       | 7 (18.42%)     | 30 (79.84%)  | 1 (2.63%) | 0 (0%)    |
| Illiteracy is problem to seek right information | 29 (76.31%)  | 9 (23.68%)   | 0 (0%) | 0 (0%)    |
| Training on searching information is effective | 30 (78.94%)  | 8 (21.05%)   | 0 (0%) | 0 (0%)    |
| Unaware on information need         | 9 (23.68%)     | 29 (76.31%)  | 0 (0%) | 0 (0%)    |
| Knowledge on information need is essential | 7 (18.42%)   | 30 (78.94%)  | 1 (2.63%) | 0 (0%)    |
| Unbiased information is important    | 2 (5.26%)      | 36 (94.73%)  | 0 (0%) | 0 (0%)    |
| Cooperation of agricultural service center is must | 7 (18.42%) | 31 (81.57%) | 0 (0%) | 0 (0%) |
This Table 14 shows most of the respondents give answer ‘strongly agree’, ‘agree’ about information attitude. Some people give answer ‘somewhat agree’. This analysis can be understood from the following Table 31.57% respondents reported that they have strongly agreed regarding searching for a lot of information while 68.42% respondents are agrees in searching for a lot of information 50% respondents agree out of the 38 respondents compare information. 57.89% respondents strongly agree difficult to find right information. 44.73% respondents were strongly agree and 55.26% respondents were agree helpful to other who search information.

**Major Findings**

The main findings of the study are:
1) 100% respondents had information needs.
2) 100% respondents needed information about agriculture.
3) 55.26% respondents needed information sometime.
4) Highest number of respondents 31.57% belongs to the age range of 36-40
5) 84.21% respondents seeking information about crops production.
6) 73.68% respondents always got information from other farmer.
7) 94.3% respondents under survey think that human assistance as sources of information most effective.
8) 57.89% farmers have no idea about Internet / website.

**CONCLUSION AND RECOMMENDATIONS:**

The responder uses information on purchasing agricultural land, variety of seeds, pesticides, fertilizer, equipment, weather, harvest, credit, facilities, post-harvest, food technology, and market information preservation technologies, according to the study's findings. Information support is also necessary for farmers in rural areas to carry out a variety of activities. As previously stated, the majority of rural farmers lack access to the majority of needed agricultural information. As a result, the use of an ICT-based agricultural information support system is critical for the benefit of the rural farmer community. The following recommendations may be considered by the policy planners -
1) Construction of agricultural club.
2) To set up Govt. fund and donation for the farmer.
3) To establish of agricultural library and resource center in remote area.
4) Arrangement of workshop on agricultural information literacy.
5) Developing regional farmer’s community.
6) Adaption Technology is gating Agricultural information.
7) Mass media should regularly disseminate information to farmer’s community.
8) To increase necessary information on production technology that involves cultivating, fertilizing, pest control, weeding and harvesting.

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**CONFLICTS OF INTEREST:**

The researcher has stated unequivocally that there are no potential conflicts of interest in the investigation, data collecting, data analysis, or writing and publishing of his current work.

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