

ASSESSMENT OF INFORMATION NEEDS OF FARMERS REGARDING AGRICULTURE

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ABSTRACT

Introduction: Information has become a vital and integral part in agriculture which contributes in enhancing the agriculture production and productivity. Its role is to supports and contributes to the social and economic change by facilitating agricultural and rural development. In this present era of scientific development, as the world is changing fast and new ideas pop up every day and it is essential to transmit this knowledge and information to those ultimate users who requires it in shortest period of time.

Objective: Present study was intended to assess the agriculture information needs of farmers.

Methodology: Present study was undertaken in Jaipur district of Rajasthan.75 farmers were selected randomly for the study. And descriptive research design was used for the study.

Results and conclusions :Findings of the study revealed that majority of farmers were have information needs mainly on various techniques of organic composting (88%), improved storage techniques (82.66%), market availability to sell agriculture products (78.66%) and on farmers beneficial government schemes (76%).Further results of the study indicated that age, education, farm size, and farming experience were found not significantly associated with information needs of farmers regarding agriculture.

Key words: *Information Needs, Farmers, Agriculture*

INTRODUCTION

Presently we are living in information era, where information play a vital role in the development of a nation. It is considered as the basic tool for knowledge development and acts as a resource for informed citizens, thus becoming a key instrument for the development of a society. Kamba (2009) reported that community development is not possible without

knowledge and a community can only be knowledgeable if information is recognize and use as their basic resource for development.

Every person requires information in their daily and professional life. Farmers constitutes a specific group of users whose information requirements are distinct .They have need of various information regarding their agricultural activities. Jalaj and Kala (2015) reported that farmers have information need on seed availability (96.18%), crop production (90.7%), insecticide availability (80.91%), government schemes (62.59%), loan facility (54.96%), marketing information on agriculture (25.95%) and transport facility (18.32%).Relevant and timely information helps farmers to take right decision for sustainable growth of agriculture activity. Farming productivity can be enhancing in number of ways by utilization of information's in a proper way. Providing right information at right time to the farmers on various aspects of agriculture helps farmers make correct decisions regarding their farming activities such as buy of inputs, planting and selling of crops, etc. Demiryurek et al, (2008) stated that Information plays an important role in the lives of the farmers as it helps them become more knowledgeable with best agriculture practices which help them in improving their production levels and prevents them from making wrong decision that may in turn affect the welfare of their agriculture.

In Indian economy, agriculture is the most significant sector. This sector accounts for 18 percent of India's gross domestic product (GDP) and provides employment to 50% of the countries workforce. Agriculture is the main source of income, it is known as backbone for Indian economy. Theretofore information is a powerful resource in addressing the agriculture needs and if it is used properly it could change nations economic. (Madhusudhan 2015).So, to provide right information in right form and at right time to the farmers, it is important to study the agriculture information needs of farmers.

METHODOLOGY

Present study was conducted in one purposively selected gram panchayat "Mundiyagarh" in Sambhar panchayat samiti, Phulera tehsil, Jaipur district Rajasthan. A total number of **75** farmers were selected by random sampling method as a sample for the study .Data collection was accomplished with structured interview schedule by personal interview method at their residence. After data collection, data were tabulated and analyzed by the application of statistical measurements such as mean, percentage and correlation coefficient etc. Information

need was selected as dependent and age, education, farm size and farm experience were selected as independent variables to assess the relationships between the same.

RESULTS AND DISSCUSSION:

Table 1: Socio- economic profile of the respondents (N=75)

| Characteristics | Category | Frequency | Percentage |
|---------------------------|----------------------------------|-----------|------------|
| Age | 31-40 year | 13 | 17.33% |
| | 41-50 year | 23 | 30.66% |
| | 51-60 year | 28 | 37.33% |
| | 61-70 year | 11 | 14.66% |
| Cast | OBC | 73 | 97.33% |
| | General | 0 | 0 |
| | SC | 2 | 2.66 |
| | ST | 0 | 0 |
| Family type | Joint | 56 | 74.66% |
| | Nuclear | 19 | 25.33% |
| Education | Illiterate | 14 | 18.66% |
| | Primary to 8 th class | 18 | 24% |
| | Secondary Education | 23 | 30.66% |
| | High Secondary Education | 18 | 24% |
| | Graduation | 2 | 2.66% |
| Annual income | 1 lakh to 2 lakh | 7 | 9.33% |
| | 2 lakh to 3 lakh | 15 | 20% |
| | 3 lakh to 4 lakh | 20 | 26.66% |
| | More than 4 lakh | 33 | 44% |
| Farming experience | 5 to 15 years | 15 | 20% |
| | 15 to 25 years | 18 | 24% |
| | 25 to 35 years | 18 | 24% |
| | More than 35 years | 24 | 32% |

| | | | |
|------------------|----------------|----|--------|
| Farm size | 0-20 Bigha | 12 | 16% |
| | 20-40 Bigha | 16 | 21.33% |
| | 40-60 Bigha | 13 | 17.33% |
| | 60-80 Bigha | 17 | 22.66% |
| | 80 Bigha above | 17 | 22.66% |

Data regarding personal socio economic attributes like Age, cast, educational status, family type etc. are given in table 1. Table depicts that majority (37.33%) of the respondents belonged to 51-60 year age group, followed by 41-50 year age group (30.66%). Further majority (97.33%) of the respondents belonged to other backward caste category. Three fourth (74.66%) of the respondents were from the joint families. Table also depicted that majority (30.66%) were having secondary level of education and data regarding annual income showed that maximum number of respondents (44%) were in above Rs.4 lakh income category followed by 26.66% having annual income between Rs.3 to 4 lakh. Table 1 also revealed that similar number of respondents (22.66%) was in both 60-80 Bigha and in 80 Bigha above farm size categories. It was also observed that majority (32%) of the respondents were having farming experience of more than 35 years.

Various Aspects wise Information Needs of Farmers regarding Agriculture

Table 2: Information needs on seeds(N-75)

| S. no. | Information needs | Frequency | Percentage |
|---------------|--------------------------|------------------|-------------------|
| 1 | Improve seeds | 56 | 74.66% |
| 2 | Variety of seed | 37 | 49.33% |
| 3 | Treatment of seed | 38 | 50.66% |

Table 2 Reveals that majority (74.66%) of the farmers were have information's need regarding improved seeds followed by 50.66 percent required information's on treatment of the seeds and 49.33 percent respondents were have need on variety of seeds. These findings are similar with the findings of Kumar and Swain (2017), Mohammad et al. (2014) and Babu et al. (2011).

Table 3: Information Needs on Crop Diseases and Treatment (N=75)

| S. no. | Information needs | Frequency | Percentage |
|--------|------------------------------|-----------|------------|
| 1 | Type of disease | 39 | 52% |
| 2 | Type of pesticide | 34 | 45.33% |
| 3 | Quantity regarding pesticide | 38 | 50.66% |
| 4 | Procedure of treatment | 36 | 48 % |

Table 3 showing information needs of farmers regarding type of disease and their treatment. It depicts that more than half (52%) of the respondents were required information on types of crop diseases followed by 50.66 percent were have needs on quality of pesticides and least (48%) were have needs regarding procedure of treatment and type of pesticide (45.33%). The results are in accordance with the results of Mohammad et al. (2014), Meitei and Devi (2009) and Babu et al. (2011).

Table: 4 Information Needs on Improved Crop production Technologies (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|--------------------------------|-----------|------------|
| 1 | Sowing related | 38 | 48% |
| 2 | Weeding related | 35 | 46.66% |
| 3 | Fertilizer spraying techniques | 33 | 44% |
| 4 | Irrigation techniques | 36 | 50.66% |
| 5 | Crops cutting technology | 38 | 50.66% |
| 6 | Storage techniques | 62 | 82.66 % |

Table 4 Shows that information needs regarding improved crop production technologies. It was found that majority (82.66%) of respondents were have information need of improved storage techniques followed by (50.66%) required information's on crop cutting and on irrigation technologies. Forty eight percent respondents were found to have need on sowing technologies and least needed information's were: weeding and fertilizer spraying technologies by 46.66% and 44 percent of the respondents respectively.

Table 5: Information Needs on Fertilizer/Pesticide (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|---------------------------------|-----------|------------|
| 1 | Cost of fertilizers | 32 | 42.66 |
| 2 | Type of fertilizers | 35 | 46.66% |
| 3 | Sources to purchase fertilizers | 37 | 49.33% |
| 4 | Use of fertilizers | 39 | 52% |

Table 5 presented that majority (52%) of the farmers required information regarding use of fertilizers followed by 49.33% farmers who have need about sources to purchase fertilizers because of limited number of fertilizers shops in their area. 46.66% and 42.66 percent were have needs regarding type of fertilizer and cost of fertilizers respectively .

Table 6: Information Needs on Organic Composting (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|---|-----------|------------|
| 1 | Process of making organic compost by various techniques | 66 | 88% |
| 2 | Utilization and benefits of compost | 52 | 69.33% |
| 3 | Source to get training on organic composting | 45 | 73.33% |
| 4 | Costing and material requirement for composting | 55 | 60% |

Table 6 Revealed that majority (88%) of the respondents required information's regarding process of making organic compost by various techniques. 77.33 percent were needed information on sources to get training on organic composting. Furthermore 69.33% need to know use and benefits of compost and 60 percent farmers wanted information's about costing and material requirements for composting.

Table 7: Information Needs on Irrigation (N-75)

| S.no. | Information needs | Frequency | Percentage |
|-------|-------------------------------|-----------|------------|
| 1 | Various methods of irrigation | 35 | 46.66% |

| | | | |
|---|--|----|--------|
| 2 | Techniques of water saving | 37 | 54.66% |
| 3 | Subsidy schemes on irrigation Technology | 41 | 49.33% |

It is presented from the data of table 7 that majority (54.66%) of farmers were in need of information's regarding various techniques of water saving because of water scarcity has a huge impact on crop production ,without water crops are not grow ups. Subsidy schemes on irrigation technology (49.33%) and 46.66% of respondents were have need regarding various methods of irrigation.

Table 8: Information Needs on EnvironmentAspect (N-75)

| S. no | Information needs | Frequency | Percentage |
|-------|---------------------|-----------|------------|
| 1 | Rain related | 39 | 52% |
| 2 | Temperature related | 37 | 49.33% |
| 3 | Climate related | 40 | 53.33% |

Data of Table 8 indicatedthat climate related aspectwas found as most information needed aspect by the respondents (53.33%). Followed by (52%) of the respondents were required information ofrain aspect and only (49.33%) of the respondents required information on environment temperature.

Table 9: Information Needs on Soil Aspect (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|------------------------------|-----------|------------|
| 1 | Type of soil | 38 | 50.66% |
| 2 | PH level of soil | 55 | 73.33% |
| 3 | Soil Erosion control methods | 34 | 45.33% |
| 4 | Soil treatment | 39 | 52% |

Data observed from the table9depictedthat majority (73.33%) of the farmers required information regarding PH level of soil followed by 52% percent farmers need information about soil treatment. Type of soil (50.66%) and least number of respondents 45.33 percent

were have information needs regarding soil erosion control methods. These findings are in accordance to the findings by Chandrakant et al. (2017).

Table 10: Information Needs on Agriculture Marketing (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|--|-----------|------------|
| 1 | Rate of agriculture produced products in market | 42 | 56% |
| 2 | Transportation facilities | 37 | 49.33% |
| 3 | Markets availability to sell agriculture products like various Mandies | 59 | 78.66 % |

Table 10 showed that three fourth (78%) of the farmer required information regarding markets availability to sell agriculture products followed by 56% farmers wanted to know about rate of agriculture products in market and least were have need regarding transport facilities that was by 49.33% of respondents. These results are in line with the results of Chandrakant et al. (2017) and Jalaja and Kala (2015).

Table 11: Information Needs on Loan Procedure (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|---|-----------|------------|
| 1 | Organizations/ societies providing loan (Bank, NGO/ Cooperative society etc.) | 50 | 66.66% |
| 2 | Loan procedure and documents requirement | 45 | 60% |
| 3 | Interest rate, number and duration period of Installments | 37 | 49.33% |
| 4 | Penalty charges | 35 | 46.66% |

Data in Table 11 highlighted that majority (66.66%) of the respondents required information regarding organizations/ societies (Bank, NGO, Cooperative society etc.) which provides loan followed by 60 percent farmers needed information about procedure and documents requirement for loaning. 49.33 percent respondents wanted to know about interest rate, number and duration period of installments and 46.66% want to satisfied their need regarding penalty charges if they will be unable to deposit installment timely. These findings are supported by the findings of Meitei and Devi (2009).

Table 12: Information Needs on Government Schemes/ programme (N-75)

| S. no. | Information needs | Frequency | Percentage |
|--------|--|-----------|------------|
| 1 | Agriculture Schemes and programmes for benefits of farmers | 57 | 76% |
| 2 | Eligibility criteria and documents requirements to avail benefits of schemes | 37 | 49.33% |
| 3 | Sources/offices to contact for a particular scheme | 40 | 53.33% |

The result in above table 12 showed that only 76 percent of the respondents were have information need on farmers beneficial schemes/programme followed by 53.33 percent were required information on sources/offices to contact for a particular scheme whereas only 49.33 percent respondents were have information's needs on eligibility criteria and documents requirements to avail benefits of schemes.

Table 13: Over all information need level of farmers on Agriculture (N=75)

| S.no | Level | N | Percent |
|------|----------------|----|---------|
| 1 | High (29-42) | 24 | 32% |
| 2 | Medium (15-28) | 49 | 65.33% |
| 3 | Low (0-14) | 2 | 2.66 % |

Data in table 13 revealed that majority (65.33%) of the respondents were in the medium level of information need category followed by 32% were in high level of need category and only 2.66% farmers were in low level of need category regarding agriculture.

Table 14: Relationships between Independent Variables and Information Need

| Category | T value | r-value |
|--------------------|---------|-----------|
| Age | -0.505 | -0.059 NS |
| Education | -0.981 | -0.114 NS |
| Farm size | -0.306 | -0.036 NS |
| Farming experience | 0.423 | 0.049 NS |

NS- Non significant

Critical examination of the data depicted in table 14 reveals that calculated correlation coefficient (r) value is less than tabulated (T) value in all selected demographic variables. Hence there is non significant association between the information need of farmers regarding agriculture and the selected demographic variables. Table also presented that age, education, farm size were negatively and farming experience was positively non significantly associated with information needs of farmers respectively.

CONCLUSION

It can be concluded that majority (65.33%) of the respondents were in the medium level of information need category. Study revealed that most needed information of the farmers were: information on various techniques of organic composting, improved storage techniques, information on marketing aspect of agriculture, various government schemes for farmers and least needed information were information on fertilizer spraying techniques, types of pesticide, soil erosion control methods and information on cost of fertilizers. Study further indicated that there was non significant association between selected demographic variables (age, education, farm size, farming experience) and information need of the farmers regarding agriculture.

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