



The Socio-Economic Factors Affecting Farmers Access to Agricultural Information

Smriti Yadav ^{a++*} and Vijay Kumar Yadav ^{b#}

^a Department of Agri-Business, Management, C.S.A.U.A&T, Kanpur, India.

^b C.S.A.U.A&T, Kanpur, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JSRR/2024/v30i51972

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/115079>

Original Research Article

Received: 16/01/2024

Accepted: 22/03/2024

Published: 29/03/2024

ABSTRACT

The aim of study was to examine the factors of socio-economic characteristics which effects the farmers of Lakhimpur-kheri on their access to agricultural information. The role of information in agricultural development is very important. It is an essential component for increasing agricultural production and improving marketing and distribution strategies. 200 participants were selected from the farmers of Lakhimpur-Kheri, Uttar Pradesh. Data were collected with the help of a pre-tested and validated questionnaire and analyzed using descriptive statistics such as simple frequencies, percentages, mean etc. were used. Results showed that print media, mobile phones and fellow farmers were the main sources of information for farmers. The results further indicated that education and landholding size had a significant positive association with access to agricultural information while age and agricultural experience had a non-significant association.

Keywords: Socio-economic characteristics; land holding; farming experience; strategies; Lakhimpur-Kheri.

⁺⁺ M.B.A. (Agribusiness Management);

[#] Senior Wheat Breeder;

^{*}Corresponding author: E-mail: smritiyadav0437@gmail.com;

1. INTRODUCTION

Agriculture in India is the means of livelihood of almost two-thirds of the workforce in the country it has always been India's most important economic sector. India ranks second worldwide in farm output and as per the Indian economic survey 2021-22, agriculture employed more than 50% of the Indian workforce and contributed 20.2% to the country's GDP Agriculture is the predominant occupation in rural India accounting for about 52% of employment is still the largest economic sector and plays a significant role in overall social economic development of India [1]. In shaping of the modern agriculture technology role of information has been a vital component of it. Quality inputs such as seeds, chemicals, irrigation measures, fertilizers, pesticides and genetic engineering have played a major role in raising yields [2,3]. Farmers now have a better access and wide range of these inputs these steps include problem recognition information search alternative evaluation purchase decision and post purchase evaluation [4,5,6].

The role of information in agricultural development is very important, it is essential for increasing agricultural production and improving marketing and distribution strategies [7,8,9]. The dissemination of information turns into a whole lot simpler though greater complicated, this is because of information messages need to be disseminated to the farmers in the manners and methods, which is appropriate, and satisfactory aid its recipient [10,11].

Socio-economic characteristics is a way of describing people based on their education, income, age and type of job. It also analyses how the community progress stagnate or regress because of their regional economy [12,13]. Socioeconomic status is usually described as low, medium, and high. Farmer with a lower socioeconomic status usually have less access to financial, educational, social, health resources and farm related information than those with a higher socioeconomic status. As a result, they have less information related to new techniques of agriculture and new marketing options available in the market [14,15].

The study was specially focused on the some aspects of the socio-economic characteristics i.e., Age, Education, Land Holding and Farming Experience of lakhimpur-kheri farmers along with their relationship associated with the factors which influence their agricultural information.

2. LITERATURE REVIEW

Saravan R. et al [16] carried the study on information pattern and information need of the tribal farmers in Arunachal Pradesh indicate that most of the farmers need information on various topics such as pest management, disease management.

Tologbonse D, et al. [17] carried the study of information need of rice farmers community in Niger state disclosed that majority of farmers (89.9%) need information about the crop production

Meitei & Devi [18] conducted the study of farmer's community in Manipur (India) to find the information need of the rural farmer's community in Manipur state. This study shows that majority of farmers did not access to information for their activities. Further they emphasize that ICT based agricultural information support systems should be developed.

Achugbue & Anie [19] carried the study in Delta State, Nigeria on Rural Female farmer's information need and importance of ICT in delivering information needs of female farmers.

Babu et al. [20] carried the study on farmers' information needs and search behaviors in Tamil Nadu found that the major constraints to information access for the farmers is poor availability, poor reliability, lack of awareness of information sources available among farmers and untimely provision of information.

Akanda & Roknuzzaman Md [21] surveyed agricultural information literacy of 160 farmers in the northern region of Bangladesh. The survey shows that farmers need information for various purposes of agricultural activities, and they use different sources and media for access to such information

3. METHODOLOGY

The descriptive research method was chosen with an objective to gather maximum possible information that would be helpful in analysing the farmers socio-economic condition and its influence on their agricultural Information. Primary data were collected from the farmers of Lakhimpur-kheri district of Uttar Pradesh by telephonic conversation with the help of authenticated and specialist assessed questionnaire and informal interviews was

thoroughly organized and tabulated using simple statistical method, tables and percentage. Secondary data were collected from websites general periodicals and internet. Total of 200 farmers socio-economic characteristics were observed through proper set of questionnaires. The farmers for the study were selected by using convenience sampling technique.

4. RESULTS AND INTERPRATION

Table 1 indicates that maximum farmers belong to the middle age category and only one fifth of the farmers belongs to the old age category. While barely more than one fifth of the respondents belonged to young age group of the farmers. Table 1 also suggests that majority of the farmers had education above primary class and more than half of the farmers are educated to high school or more than that. Also, it appears from the table that about fifty eight percent of the respondents had farm land holding more than 5

ha and 67% of farmers are having experience of more than 10 years in farming.

Farmer's reach to the agricultural/farm information is an important aspect, which can be influenced by socio economic characteristics like age, educational qualification, land holding, experience of farming [22,23,24]. In this study farmers access to agricultural information was analyzed on the basis of there access to mobile phone, radio, print media, television, other farmers or relatives from low to high on different parameters of farmer's socio economic characteristics and it can be shown in the below Tables 2-5.

Data in Table 2 show that the age of the farmers had non-significant relationship with their access to agricultural information. The relationship reveals that access to agricultural information was unlikely to be influenced by farmer's age.

Table 1. Socio-economic characters of Farmers of Lakhimpur-Kheri, Uttar Pradesh

Age of Farmers	No of Farmers	Percentage
Young Age (Below 30 years)	45	22.5%
Lower Middle Age (30-45 years)	90	45%
Upper Middle Age (45-60 years)	40	20%
Old Age (60 years above)	25	12.5%
Educational Status of Farmers		
Up to High School	72	36%
High School	43	21.5%
Intermediate	60	30%
Graduation & above	25	12.5%
Land Holding		
Marginal (less than 01 ha)	19	9.5%
Small (1-2 ha)	20	10%
Small Medium (2-4 ha)	45	22.5%
Medium (4-10 ha)	106	53%
Large (More than 10 ha)	10	5%
Farming Experience		
1-10 years	66	33%
11-20 years	58	29%
More than 20 years	76	38%

Table 2. Relationship Between age of farmers and their access to agricultural information

Age of Farmers	Access to Agricultural Information			Total
	Low	Medium	High	
Young Age (Below 30 years)	15	24	6	45
Lower Middle Age (30-45 years)	28	49	13	90
Upper Middle Age (45-60 years)	20	15	5	40
Old Age (60 years above)	19	4	2	25
TOTAL	82	92	26	200
Percentage	41%	46%	13%	100%

Table 3. Relationship Between education of farmers and their access to agricultural information

Educational Status of Farmers	Access to Agricultural Information			Total
	Low	Medium	High	
Up to High School	76	34	5	115
Intermediate	12	44	4	60
Graduation & above	3	17	5	25
TOTAL	91	95	14	200
Percentage	45.5%	47.5%	7%	100%

Table 4. Relationship Between land holding of farmers and their access to agricultural information

Land Holding	Access to Agricultural Information			Total
	Low	Medium	High	
Marginal (less than 01 ha)	12	5	2	19
Small (1-2 ha)	11	5	4	20
Small Medium (2-4 ha)	26	14	5	45
Medium (4-10 ha)	27	66	13	106
Large (More than 10 ha)	2	6	2	10
TOTAL	78	96	26	200
Percentage	39%	48%	13%	100%

Table 5. Relationship Between farming experience of farmers and their access to agricultural information

Farming Experience	Access to Agricultural Information			Total
	Low	Medium	High	
1-10 years	25	33	8	66
11-20 years	17	31	10	58
More than 20 years	26	38	12	76
TOTAL	68	102	30	200
Percentage of farmers	34%	51%	15%	100%

The data in Table 3 shows that as the education farmers increases the growth in the access of information si very mild as we can see that when the farmers are educated up to the intermediate the percentage of having medium access of information is approx. 73% whereas when it increases there is not as much growth in the access of the information as expected.

The data in Table 4 reveals that there is a significant relationship between size of the land holding of the farmers and their access to agricultural information. The values in the table indicates a positive association between the variables; which shows that with an increase in the size of land holding of the farmers, there was an increase in their access to agricultural information.

The data in Table 5 explains that there is a non-significant relationship between the farming

experience of the farmers and their access to agricultural information. The table shows that when the farming experience of the farmers are up to the 20 years the percentage of having medium access to information is approx. 51% whereas when it increases there is not as much growth to access to the information is observed and remains approximately constant throughout the table.

5. CONCLUSION

From this study it can be concluded that most of farmers are of middle age, are having educational qualification above intermediate, farming experience more than ten years and most of the farmers belongs to medium category on the basis of land holding. In current situation print media and mobile phones had been the major sources of agricultural information and the other sources of information are Kisan melas,

Government/NGOs organized programs, other fellow farmers, television etc. Farmer's educational qualifications as well as size of land holding had been discovered to persuade their access to agricultural information, while age and farming experience have non-significant influence on their access to information related to agriculture techniques, crops or any other information related to agriculture.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Government of Madhya Pradesh. Economic Survey. Directorate of Economics and Statistics; 2005.
2. Besley T, Burgess R. Land reform, poverty reduction and growth: Evidence from India. *Q J Econ.* 2000;115(2):389-430.
3. Giovannucci D. Evaluation of Organic Agriculture and Poverty Reduction in Asia. Rome: IFAD Office of Evaluation; 2005.
4. Brown J, Goolsbee A. Does the Internet Make Markets More Competitive? Evidence from Life Insurance Industry. *J Polit Econ.* 2002;110(3):481-507.
5. Banerji A, Meenakshi JV. Millers, Commission Agents and Collusion in Grain Auction Markets: Evidence From Basmati Auctions in North India. *Delhi School Econ Work Pap.* 2004;129.
6. Anupindi R, SivaKumar S. Supply Chain Re-engineering in AgriBusiness A Case study of ITCs e-Choupal. In: Lee HL, Lee CY, eds. *Building Supply Chain Excellence in Emerging Economies.* New York: Elsevier-Springer. 2006;265-307.
7. Malhan IV, Rao S. Agricultural Knowledge Transfer in India: a Study of Prevailing Communication Channels. *Libr Philos Pract.* 2007.
8. Chen H-K, Wu Y-C. Investigation and Analysis of Farmer's Information Service: Take Yingshan County of Hubei Province as an Example. *China Popul Resour Environ.* 2009;19:169-172.
9. Butt TM, Hassan MZY, Sahi ST, Mehmood K, Mashood-ul-Subtain, Hassan N. Working Effectiveness of Dissemination Channels as Perceived by Potato Growers. *Int J Agric Manag Dev.* 2011;1: 1-6.
10. Krell NT, Giroux SA, Guido Z, Hannah C, Lopus SE, Caylor KK, et al. Smallholder farmers' use of mobile phone services in central Kenya. *Clim Dev.* 2021;13(3):215–227.
11. Naveed MA, Hassan A. Sustaining agriculture with information: An assessment of rural citrus farmers' information behavior. *Inf Dev.* 2021; 37(3):496–510.
12. Clay J. *World Agriculture and the Environment: a commodity-by-commodity guide to impacts and practices.* Washington, DC: Island Press; 2004.
13. Burgess R, Pande R. Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment. *Am Econ Rev.* 2005;95(3):780-795.
14. Bardhan P. *The Economic Theory of Agrarian Institutions.* Oxford: Oxford University Press; 1989.
15. Li Q, Baoguo D. Study on Agricultural Information Service System—Analysis Based on Farmer's Demand of Guangdong. *Guangdong Agric Sci.* 2011;38:229-231.
16. Saravan R, Raja P, Tayeng Sheela. Information input pattern and information need of Tribal Farmers in Arnuchal Pradesh, *Indian Journal of Extension Education.* 2009;45 (1&2):51-54.
17. Tologbonse D, Fashola O, Obadiah M. Policy issues in meeting rice farmers agricultural information needs in Niger State. *J Agric Extension.* 2008;12(2):84-94.
18. Meitei LS, Devi TP. Farmers information needs in rural Manipur: an assessment. *Ann Libr Inf Stud.* 2009;56(2):35-40.
19. Achugbue EI, Anie SO. ICTs and information needs of rural female farmers in Delta State, Nigeria. *Libr Philos Pract.* 2011 Jan 1;10:12-7.
20. Babu SC, et al. Farmers' information needs and search behaviors: Case study in Tamil Nadu, India.
21. Akanda AKM, Roknuzzaman Md. Agricultural Information Literacy of Farmers in the Northern Region of Bangladesh.
22. Tadesse G, Bahiigwa G. Mobile Phones and Farmers' Marketing Decisions in Ethiopia. *World Dev.* 2015;68:296-307. Available:<http://dx.doi.org/10.1016/j.worlddev.2014.12.010>
23. Perera GD, Sivashankar P, Mahaliyanaarachchi RP. Mobile phone-

- based agricultural information for farming decisions: Evidence from up country vegetable farmers in Sri Lanka. *Int J Agric Innov Technol Global*. 2021;2(4):300–317.
24. Aparo NO, Odongo W, De Steur H. Unraveling heterogeneity in farmer's adoption of mobile phone technologies: A systematic review. *Technol Forecast Soc Change*. 2022;185:122048.

© Copyright (2024): Author(s). The licensee is the journal publisher. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:

<https://www.sdiarticle5.com/review-history/115079>