CONSTRAINTS FACED BY FARMERS IN INFORMATION SEEKING IN BUNDELKHAND REGION OF UTTAR PRADESH

Abstract

This research was conducted with the objective of studying the constraints faced in information seeking by farmers in the Bundelkhand region of Uttar Pradesh. A sample of 210 respondents was randomly selected, and data were collected through a structured and pre-tested interview schedule. The gathered data were analyzed and tabulated to identify constraints related to information seeking in the study area. The findings highlighted various challenges faced by farmers, including issues such as the absence of information in the local language, lack of training, financial constraints, limited educational qualifications, restricted access to computers and information sources, insufficient electricity and internet availability, infrastructure deficiencies, inadequate community facilities, disorganized social structures, and the presence of an inferiority feeling. The study underscores the multifaceted nature of status of constraints faced by the farmers of Bundelkhand in Uttar Pradesh regarding accessing sources of information

Introduction

India, a nation marked by its rich diversities, exhibits a pronounced contrast among its agricultural communities, ranging from the well-organized and resourceful farmers of Punjab to the landless tribal farmers of Bundelkhand. Facilitating the transfer of improved technological information from research stations to farmers holds paramount importance in fostering the development of these diverse farming communities.

Effective transfer of farm innovations and their practical application to the field situation is key to the economic development of India. Extension service in the country has a huge network of professional extension workers at national, state, district, block and village level (**Singh & Burman, 2019**). Even though various programs assist farmers in adopting new technologies nationwide, there's still a considerable gap between researchers' innovations and their use on farms. Communication plays an important role in dissemination of useful information and thus diffusion of the improved technologies as well bring desirable changes the attitudes (**Das, 2013**). This process facilitates early and faster adoption of innovations. Use of appropriate communication media or channels can

create appropriate impact on farmers. With faster penetration of internet and fast increasing tele-density, use of Information and Communication Technology (ICT) is also increasing and ICT is being used in implementation of various development schemes.

An Information Source is anything that might inform a person about something or provide knowledge to somebody by any means. Agricultural information system is a system, in which agricultural information is generated, transformed, transferred, consolidated, received and fed back in such a manner that these processes function synergistically to underpin knowledge utilization by agricultural producers **(Roling, 1988)**. Major components (subsystems) of an agricultural information system are, information related processes (generation, transformation, storage, retrieval, integration, diffusion and utilization), system mechanisms (interfaces and networks) and system operations (control and management) (Tiwari, 2022). It is an essential input to agricultural education, research and development and extension activities. Different kinds of information are required by different kinds of users for different purposes. The agricultural information can be useful for state line staff, government decision-makers, policy-makers, planners, researchers, teachers and students, program managers, field workers and farmers (**Zaman, 2002**).

In the agrarian landscape of the Bundelkhand region in Uttar Pradesh, farmers play a pivotal role in sustaining not only their livelihoods but also contributing to the broader agricultural sector of the state (Gulati et al., 2021). However, the efficacy of farming practices is often hindered by various challenges, among which the accessibility and utilization of crucial information stand out as significant barriers. The present research delves into the multifaceted constraints faced by farmers in their pursuit of pertinent information, examining how these limitations impact agricultural productivity and overall well-being in the Bundelkhand region.

The agrarian communities of Bundelkhand grapple with an intricate web of challenges ranging from erratic climatic conditions to economic uncertainties. In this context, the ability of farmers to access and apply relevant information becomes paramount for sustainable and resilient agricultural practices. Understanding the intricacies of information seeking in this region is essential for devising targeted interventions that can empower farmers and foster agricultural development.

Effective communication of improved farm practices to farmers is crucial for the advancement of agriculture. However, numerous obstacles can hinder this process, posing challenges to successful implementation. These obstacles may stem from various sources, ranging from logistical and infrastructural issues to socio-economic and cultural factors. A successful communicator should identify the constraints and also should make remedial measures to overcome the constraints.

The availability and proper utilization of information sources is very much needed to enhance farmers' livelihood and productivity of their farming system. Thus present study was done to assess the status of constraints faced by the farmers of Bundelkhand in Uttar Pradesh regarding accessing sources of information.

Research Methodology

The current research was purposefully conducted in the Bundelkhand region of Uttar Pradesh, focusing on seven districts, namely Lalitpur, Jhansi, Jalaun, Hamirpur, Mahoba, Banda, and Chitrakoot. Among these districts, Jhansi and Banda were selected randomly for in-depth investigation. From both districts, seven villages were selected for the study. Subsequently, a comprehensive list of farmers in the selected villages was prepared with the help of gram pradhan, and 30 respondents were selected from each village byproportionate random sampling method to represent different land holding category farmers of each selected village, resulting in a total sample size of 210 respondents.

An Ex-Post facto research design was used to provide a retrospective analysis of the chosen variables. The primary data collected by the investigator with the help of an interview schedule. To ensure the reliability of the instrument, a pretest was conducted on 35 farmers in nearby villages. The data gathered through the interviews were carefully scored, compiled, tabulated, and analysed. Descriptive statistics, including frequency, percentage, and means, were used to present a comprehensive overview of the data. Additionally, inferential statistics such as standard deviation and rank were employed to derive deeper insights. The systematic approach adopted in the research process aimed at ensuring the credibility and validity of the results, ultimately contributing to a meaningful interpretation of the agricultural dynamics in the Bundelkhand region.

Result and Discussion

The farmers were facing various types of constraints which were limiting their information seeking behavior.

Table 1: Constraints analysis by frequency and impact levels

Sr. No.	Constraints	Frequency	Marginal	Small	Medium	Big	Total
1.	Lack of educational qualification	Rarely	9.41	1.96	10.91	36.84	10.48
		Occasionally	41.18	39.22	34.55	31.58	38.10
		Always	49.41	58.82	54.55	31.58	51.43
2.	Lack of training	Rarely	1.18	0.00	1.82	0.00	0.95
		Occasionally	18.82	3.92	14.55	36.84	15.71
		Always	80.00	96.08	83.64	63.16	83.33
3.	Finance problem	Rarely	2.35	0.00	3.64	15.79	3.33
		Occasionally	36.47	33.33	29.09	63.16	36.19
		Always	61.18	66.67	67.27	21.05	60.48
4.	Infrastructure problem	Rarely	30.59	21.57	21.82	57.89	28.57
		Occasionally	58.82	62.75	56.36	42.11	57.62
		Always	10.59	15.69	21.82	0.00	13.81
5.	Lack of computer and information sources	Rarely	5.88	3.92	12.73	31.58	9.52
		Occasionally	54.12	29.41	38.18	47.37	43.33
		Always	40.00	66.67	49.09	21.05	47.14
6.	Shortage of electricity and internet	Rarely	7.06	3.92	7.27	15.79	7.14
		Occasionally	57.65	23.53	49.09	63.16	47.62
		Always	35.29	72.55	43.64	21.05	45.24
7.	Lack of community facilities	Rarely	41.18	29.41	36.36	42.11	37.14
		Occasionally	43.53	60.78	43.64	52.63	48.57
		Always	15.29	9.80	20.00	5.26	14.29
8.	Unorganized social structure	Rarely	70.59	49.02	56.36	52.63	60.00
		Occasionally	24.71	45.10	36.36	47.37	34.76
		Always	4.71	5.88	7.27	0.00	5.24
9.	Inferiority feeling	Rarely	72.94	50.98	61.82	73.68	64.76
		Occasionally	24.71	43.14	36.36	26.32	32.38
		Always	2.35	5.88	1.82	0.00	2.86
10.	Subject matter not in local	Rarely	0.00	7.84	3.64	5.26	3.33
		Occasionally	0.00	1.96	3.64	15.79	2.86
		Always	100.00	90.20	92.73	78.95	93.81

The data incorporated in table 1 reveal that "Lack of educational qualification" was consistently a crucial hurdle, with nearly 51.43% of respondents reporting this constraint always affecting them. Training emerges as a crucial need, with a striking 83.33% expressing a continuous demand for training opportunities, indicating a high impact on their information-seeking endeavors. Inadequate availability of education and skill

training was ranked first reported by Gautam & Jha, (2022). Financial constraints are prevalent, particularly when respondents always face economic challenges, as reported by 60.48% farmers. Infrastructure problems, although less frequently reported suggest that addressing issues related to infrastructure could contribute to a more conducive environment for information seeking, with 57.62% facing these issues occasionally, similar problem of infrastructure was also reported by Sankhala et. al., (2016). "Lack of computer and information sources" was a notable concern, with over 47.14% facing this constraint always, while 43.33% occasionally."Electricity and internet shortages" were consistently reported challenges, since 35.29% farmers always face this constraint while 47.62% farmers reported to faced this constraint occasionally."Lack of Community Facilities" presents a persistent challenge, with 48.57% of respondents occasionally and 37.14% rarely reporting this constraint. "Unorganized Social Structure" was identified rarely by 60.00% and by 34.76% occasionally. The psychological aspect of challenges was reflected in "Inferiority Feeling", reported to be always faced by 64.76% of respondents always and by 32.38% occasionally. "Subject Matter Not in Local Language"emerged as a unanimous challenge, as reported always by 93.81%, consistent with the findings of Managuli et. al., (2022), our results demonstrate similar constraints. This finding underscores a critical gap in information accessibility, hindering effective communication and knowledge dissemination within the community. The high percentage suggests that a substantial majority of the population faces difficulties accessing information due to language barriers. This issue not only hampers the inclusive exchange of knowledge but also limits the community's ability to engage with essential information, potentially impacting various aspects of daily life, education, decision-making processes, and farming. This data sheds light on the persistent and varied nature of constraints faced by farmers in the Bundelkhand region, necessitating targeted and continuous interventions. Some of these constraints were more in case of small and marginal farmers compared to medium and big farmers, mainly due to lack of resources and access.

Table 2: Constraints Faced by Farmers in Information Seeking (weighted mean and rank).

Sr. No.	Category	Marginal	Small	Medium	Big	Total	Rank
1.	Lack of educational qualification	2.40	2.57	2.44	1.95	2.41	IV
2.	Lack of training	2.79	2.96	2.82	2.63	2.82	II

3.	Finance problem	2.59	2.67	2.64	2.05	2.57	III
4.	Infrastructure problem	1.80	1.94	2.00	1.42	1.85	VI
5.	Lack of computer and information sources	2.34	2.63	2.36	1.89	2.38	V
6.	Shortage of electricity and internet	2.28	2.69	2.36	2.05	2.38	V
7.	Lack of community facilities	1.74	1.80	1.84	1.63	1.77	VII
8.	Unorganized social structure	1.34	1.57	1.51	1.47	1.45	VIII
9.	Inferiority feeling	1.29	1.55	1.40	1.26	1.38	IX
10.	Subject matter not in local language	3.00	2.82	2.89	2.74	2.90	I

The data presented in table 2 provides valuable insights into the weighted mean and rank of constraints faced by farmers in various categories. "Subject matter not in local language" emerged as the most critical constraint, securing the top rank with a weighted mean of 2.90. The unavailability of subject matter in local language mean value of 2.28 reported by Kanasiya et. al., (2018). Similarly "Lack of locally relevant content", as well as "Lack of content in local languages", excludes users from accruing the benefits provided by public access to ICT (Gomez et al., 2009; Islam and Hasan, 2009). Following closely by the constraint "Lack of training" ranked second with a weighted mean of 2.82. "Finance problem" is identified as the third most significant challenge, with a weighted mean of 2.57, signifying the impact of economic barriers on farmers' resources and operations. "Lack of educational qualification" ranked fourth with the weighted mean of 2.41, Shortage of electricity and internet and Lack of computer and information sources both were ranked fifth with a weighted mean of 2.38. Similarly lack of computer and other media" mean value of 2.35 reported by Kanasiya *et. al*., (2018). Other challenges include "Infrastructure problem" ranked sixth (1.85) "Lack of community facilities" ranked seventh (1.77), "Unorganized social structure" ranked eighth (1.45), and "Inferiority feeling" ranked ninth (1.38). These constraints, though perceived with varying impact levels, collectively point to the multifaceted nature of challenges faced by farmers. Addressing these constraints requires a comprehensive approach that considers linguistic accessibility, targeted training programs, financial support, and the enhancement of educational and technological resources. As the agricultural sector plays a pivotal role in sustaining communities, overcoming these challenges is essential for fostering sustainable development and improving the overall well-being of farmers.

Suggestive measures

The farmers revealed various constraints. Their opinion was also taken on suggestive measures to improve use of various communication channels.

Table 3: **Suggestive measures**

Suggestion	Importance	Category				Total
		Marginal	Small	Medium	Big	
Provision of training facilities	Most important	100.00	100.00	100.00	100.00	100.00
Facilities should be available to all	Most important	100.00	100.00	100.00	100.00	100.00
Solve network and electricity problem	More important	0.00	0.00	1.82	0.00	0.48
	Most important	100.00	100.00	98.18	100.00	99.52
Facilities should be available at panchayat level	More important	2.35	0.00	0.00	5.26	1.43
	Most important	97.65	100.00	100.00	94.74	98.57
Subject matter in local language	More important	0.00	0.00	1.82	5.26	0.95
	Most important	100.00	100.00	98.18	94.74	99.05

The data in table 3 revealed unanimous agreement among farmers across different categories on the critical importance of certain suggestive measures. Both the “Provision of training facilities” and “Facilities should be available to all” were deemed "Most Important"by 100%and “Addressing network and electricity problems” by 99.52%, The proposal for facilities at the Panchayat level becomes a pivotal measure was considered "Most Important," garnering strong agreement by 98.57%. Similarly, the idea of presenting subject matter in the local language gains widespread recognition as "Most Important," with 99.05% support. Sangada *et al.,* 2016, suggested that agricultural information centre should be established at village and required information should be available at co-operative societies. Further, the increasing literacy rate and easy accessibility of the mass media channels resulted in increased utilization of these media and information by the farmers.

Conclusion

This research highlights the multifaceted constraints faced by farmers in the agricultural sector. Notably, the major constraint identified across marginal, medium, and large farmers was subject matter not being in the local language. Additionally, the lack of training emerged as a significant constraint, ranking as the second most reported constraint. Financial problems, lack of educational qualification, limited access to computers and information sources, shortage of electricity and internet, infrastructure issues, inadequate community facilities, unorganized social structures, and an inferiority feeling collectively constitute a complex web of challenges.

Most important corrective measures suggested were provision of training facilities, community facilities should be available to all, solve network and electricity problem, facilities should be available at *panchayat* level, subject matter should be in local language.

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