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ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS OF FARMERS: TRIANGULATING RELIABILITY OF STANDARDIZED INFORMATION NEED INDEX

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ABSTRACT

Agriculture, pivotal to India's economy, hinges on timely and relevant information for sustainable practices and rural livelihoods. This study delves into the intricate fabric of farmers' information needs across diverse demographics and regions to craft targeted strategies for information dissemination and capacity building. Employing an ex-post facto research design, this study surveyed 90 respondents from Sitapur district, Uttar Pradesh. Utilizing a structured interview schedule, respondents' information needs were assessed using a modified information need index. Reliability testing via reliability triangulation using Spearman-Brown, Guttman split-half coefficients and Cronbach's alpha affirming the robustness standardised information need index (SINI). The prioritized information needs unveiled Integrated Disease/Pest Management as paramount (SINI = 91.94), reflecting concerns about crop health and yield preservation. Market-related information (SINI = 87.22) and credit accessibility (SINI = 84.44) followed closely, underscoring the importance of profitability and financial support. Weather forecasting and government schemes, placed at fourth and fifth ranks with the SINI score 78.61 and 73.33 respectively, signifying risk mitigation and support avenues for farmers. These findings offer critical insights for policymakers and extension services to tailor interventions, enabling informed decision-making, fostering sustainable agricultural practices, and advancing rural development.

Keywords: *cochran's test, cronbach's alpha, guttman split-half coefficient, information needs, reliability triangulation*

INTRODUCTION

Agriculture, as the backbone of Indian economy, plays a pivotal role in sustaining global food security and supporting rural livelihoods. The success of agricultural practices is intricately linked to the availability and dissemination of timely and relevant information to farmers (Shukla *et. al.,* 2022). Indian farmers face a myriad of challenges, ranging from unpredictable monsoons and land fragmentation to market uncertainties and evolving pest dynamics. The information needs of Indian farmers extend beyond traditional agricultural practices to encompass sustainable farming techniques, efficient water management, market access, government schemes, and the integration of technological innovations (Meitei and David and Olofinsawe, 2015a; Lwoga *et al.,* 2010; Adeola and Ayoade, 2011; Babu *et al.*, 2012; Bachhav, 2012).

Modern farmers seek knowledge on sustainable farming practices, climate-smart agriculture, technological innovations, financial management, and government policies that impact their operations. Livestock farmers need updated animal health care information like diseases management, vaccination, insurance, sources of financing and government policies, new technologies, milk processing, marketing of milk and milk products (Elly and Epafra, 2013; Raksha, 2016; Basunathe, 2017). The rapid advancement of technology, coupled with the ever-changing agricultural landscape, necessitates a comprehensive understanding of the information needs of farmers (Akanda and Roknuzzaman, 2012). Using updated agricultural information farmers may make technical improvements, know the correct time for planting, which crop and variety should be grown, how they should manage disease and pest of their crops, and which animals should be rear and where to market their goods. It also suggests famers to make choice for selecting institution from where they can borrow loans, which source has to be utilized by the farmers for gathering inputs, in which market should be chosen to sell their produce for getting best possible price, can take the benefits of various government schemes. The knowledge of farmers information requirement will hell to extension agency like Krishi Vigyan Kendra to provide tailor made services (Singh *et. al.,* 2022; Singh *et. al.,* 2023). The present study aims to delve into the intricacies of farmers' information needs. By understanding the unique requirements of farmers across different regions and demographics, we can develop targeted strategies for information dissemination, extension services, and capacity building. Such insights will not only empower farmers with the knowledge needed for better decision-making but also contribute to the sustainable development of agriculture and rural communities as a whole.

OBJECTIVE

To assess the agricultural information needs of the farmers.

METHODOLOGY

This study employed an ex-post facto research design conducted since 2020.Sitapur district of Uttar Pradesh was selected as locale of research purposively. From the selected district, there were two blocks, namely Biswan and Maholi, were selected randomly. There was total six villages randomly selected from each selected block. Furthermore, 15 respondents from each selected village have been selected through simple random selection method. Thus, a total sample size constituted 90 respondents for the final data collection in present study. Data were gathered through conducting one-on-one interviews with respondents using a structured interview schedule.

The information need operationalised as requirement of information pertinent to agricultural practices for achieving higher productivity and profitability from agricultural. The measurement of information needs of the respondents was done by using an information need index developed by Oinam *et. al.* (2019) with appropriate modifications as relevant in study area. To maintain the authenticity of adopted index, its reliability was tested. These information needs were measured by using Standardized Information Need Index (SINI) score. The information need index constituted 16 different information needs typically related to agricultural activities. The essentiality of various information needs was determined by four continua scale namely 'strongly needed', 'highly needed', 'needed' and 'less needed' and scored as 4, 3, 2 and 1 respectively. SINI score was calculated for all information needs and ranks were allotted as higher the SINI score, better the rank and vice-versa. The procedure for computing SINI score illustrated as followed:

Step - I: Computation of frequencies: Frequencies of each continuum were calculated for various information needs separately.

Step - II: Computation of Information Need Index (INI) score: Frequency of each continuum were multiplied by its respective score, and later obtained value summed up. Though, total number of respondents were 90, so, the range between minimum INI to maximum possible INI could be 90 to 360. The actual obtained INI was computed by using formula that had been illustrated below:

$$INI = (fs \times 4) + (fh \times 3) + (fn \times 2) + (fl \times 1)$$

Where;

INI = Information Need Index

*f*s = frequency of strongly needed information

*f*h = frequency of highly needed information

*f*n= frequency of needed information

*f*l= frequency of less needed information

Step - III: Computation of Standardized Information Need Index (SINI) score: This was obtained by converting INI into SINI using the method given below. SINI of each of the dimension ranged from 0 to 100.

$$SINI = \frac{\text{Computed INI}}{\text{Maximum INI}} \times 100$$

RESULTS AND DISCUSSION

Reliability of agricultural information needs index and its triangulation

Lal *et al.* (2016a) introduced the concept of reliability triangulation which was further elaborated by Lal, (2017). To assess the reliability of an index measuring farmers' preferences, a new group of 34 farmers from different regions were presented with a set of 16 statements. Specifically, in Sitapur district of Uttar Pradesh, two villages were randomly selected from non-sampling area. Then, 17 farmers from each chosen village were included randomly to evaluate reliability.

The reliability was computed using the Spearman (1910) and Brown (1910) formula i.e.,

$$r_{SB} = \frac{2r_{hh}}{1+r_{hh}}$$

specifically, by determining the Pearson's correlation between odd and even statements. Traditionally, the split-half Spearman-Brown procedure was a standard method for four decades but faced criticism for not providing equivalent information as correlations between different forms given at separate times (Cronbach, 1946). Consequently, Cronbach's alpha (α) emerged as a more widely accepted measure for evaluating internal consistency (Cronbach, 1951). Cronbach's alpha (α) was calculated using the formula:

$$\alpha = \frac{K}{K-1}\left(1 - \frac{\sum_{i=1}^{i=k}\sigma^2 y_i}{\sigma^2 x}\right)$$

where:

K=Number of items in the scale

$\sigma^2 y_i$= the variance of item i for the current sample of respondents

σ^2 x= the variance of the scale.

To interpret Cronbach's alpha (α) values, George and Mallery (2003) provided guidelines as α > .9 – Excellent, α > .8 – Good, α > .7 – Acceptable, α > .6 – Questionable, α > .5 – Poor, and α < .5 – Unacceptable.

Table 1 : Case processing summary

		n	%
Cases	Valid	34	100.0
	Excluded[a]	0	.0
	Total	34	100.0
a. Listwise deletion based on all variables in the procedure.			

Additionally, another reliability test, the Guttman split-half coefficient, was computed using the 20th version of SPSS software. The correlation coefficient between odd and even scores at 0.829, while the Guttman split-half coefficient was observed to be 0.828, as presented in Table 2. Both the values were observed significant at the 1% level, reinforcing the reliability of the index. This reliability was further confirmed by Cronbach's alpha, yielding a value of 0.801, which falls within the 'good' range according to George and Mallery's (2003) guidelines.

Table 2 : Triangulation of Reliability statistics of agricultural information needs of index (n=90)

Reliability Statistics				Value
Cronbach's Alpha		Part 1 Value	.601	
		N of Items	8[a]	
	Part 2	Value	.707	
		N of Items	8[b]	
	Total N of Items		16	
Cronbach's Alpha based on standardized items				.801
Correlation Between Forms				.708
Spearman-Brown Coefficient		Equal Length		.829
	Unequal Length		.829	
Guttman Split-Half Coefficient				.828
ANOVA with Cochran's Test	101.056			.000***
a. The items are: S6, S7, S8, S9, S10, S11, S12, S13. b. The items are: S14, S16, S15, S1, S2, S3, S4, S5.				

Schmitt (1996) highlighted four caveats concerning the appropriate utilization of the Cronbach alpha coefficient. One of these caveats emphasizes that solely presenting alpha values isn't adequate when discussing relationships among multiple measures. It's imperative to complement alpha values with inter-correlations. In this context, ANOVA with Cochran's test was employed to determine the significance level of various reliability values (Lal *et. al.,* 2016b) and the results, as indicated in Table 2, were found to be significant.

Agricultural information needs of respondents

The observations of research depicted in table 3, with the help of Standard Information Need Index/SINI and revealed priority information requirements vital for performing agriculture-related activities, were ordered from higher to lesser priority.

Table 3 : Information needs of respondents (n=90)

Sr. No.	Information Need	SINI	Rank
1	Integrated Disease/ Pest management	91.94	I
2	Market/Price related information	87.22	II
3	Credit (KCC)	84.44	III
4	Weather forecasting	78.61	IV
5	Govt Scheme /Govt. Subsidies/ Crop insurance	73.33	V
6	Livestock rearing/ Dairy/ Veterinary/ Poultry	71.39	VI
7	Soil testing	69.72	VII
8	Soil and water conservation	66.94	VIII
9	ICT Tools for Agriculture	64.72	IX
10	Agriprenureship training	63.61	X
11	Integrated Nutrient Management	58.06	XI
12	Integrated farming System	51.94	XII

Sr. No.	Information Need	SINI	Rank
13	Kisan Call Centre (KCC)	48.33	XIII
14	Post-harvest technique	42.22	XIV
15	Input and input sources (Tool and implement)	39.72	XV
16	Improved varieties/seed	36.11	XVI

*SINI – Standard Information Need Index

The need for information about Integrated Disease/ Pest management was ranked first. Currently, agricultural production undergone a huge loss due to infestation of insect pests, diseases and weeds. Prior studies suggested that pests result in a 25% loss in rice, 5-10% in wheat, 30% in pulses, 35% in oilseeds, 20% in sugarcane, and 50% in cotton (Dhaliwal and Arora, 1996). To escape crops from pest and disease attack, farmers moving towards integrated disease and pest management. This indicates a significant concern for preserving crop health and yields. Farmers highly prioritize information related to managing diseases and pests in their crops. The market information placed second rank with 87.22 SINI score. Understanding market dynamics and prices is crucial for farmers to make informed decisions about selling their produce. Agricultural prices are volatile in nature and varying market to market and time to time for the same commodity. It suggests a keen interest in maximizing profits and market awareness. Need for credit was observed at third most important rank with 84.44 SINI score. Typically, small and marginal farmers were suffering most for timely collecting farm inputs due to the lack of finance resulting disturbed agricultural operation schedule. Access to credit, particularly through initiatives like Kisan Credit Cards (KCC) was enabling farmers to borrow directly from banks on reasonable interest rate vis-à-vis save them from a high rate of interest loan from money lenders, indicating a need for financial support and resources. Weather and climate play a pivotal role in agriculture. The changing climatic conditions in the present era causing unprecedented variation in weather parameters resulting huge losses in agricultural production (Lal, *et. al.,* 2022). Hence, farmers essentially needed information on weather forecasting which perceived fourth most important need by the respondents with 78.61 SINI score. Weather is extremely volatile, so, its significant prediction may escape the farm produce which is going to damage due to uncertain weather. Farmers value accurate weather forecasts to plan their farming activities and mitigate potential risks.

Rest information needs of respondents assigned succeeding ranks with a decreasing rate of SINI score. These were Government schemes, subsidies, crop insurance, Livestock information, Soil testing, Soil and water conservation, ICT Tools for Agriculture, Agriprenureship training, Integrated Nutrient Management, Integrated farming System, Kisan Call Centre (KCC), Post-harvest techniques, Input and input sources and last but not least, Improved varieties/seed with SINI scores78.61, 73.33, 71.39, 69.72, 66.94, 64.72, 63.61, 58.06, 5194, 48.33, 42.22, 39.72 and 36.11, respectively. Due to uncertainty of weather, human induced and natural disasters prohibit the risk bearing ability of the farmers especially small and marginal farmers. They required to know the additional external sources of financial assistance for performing succeeding activities without economic hindrance even in lean period of agriculture. So that, to support farmers in such circumstances, usually, Governments announce schemes, make available subsidies on various agricultural inputs, facilitate crop insurance compensating crops against loss due to uncertain weather and natural calamities. Farmers seek information on government initiatives, subsidies, and crop insurance, highlighting a desire for support and risk management options. Livestock rearing was the integral component for diversified agriculture and serves an additional source of income generation. That's why farmers need information related to proper nourishment of their animals, veterinary information needed for the safeguard of their animals to health-related issues, knowledge about dairying for milk processing in order to get better price of milk-products. This indicates a need for information on animal husbandry and related practices, emphasizing the importance of diversified farming. Indiscriminate use of fertilizers causes an adverse effect on physio-chemical properties soil. This resulted the problems of yield reduction as well as mal nutrition in different crops. Farmers' understanding about soil quality and composition is crucial for optimizing crop yield. This suggests the farmers for soil testing and target-based application of fertilizers in order to improve soil fertility and productivity. Scarcity of water is becoming a mega challenge not merely for Indians rather an entire world suffering in day-to-day life. Though water on earth's surface makes up approximately two-third part of it, only 3% of it is fresh. Merely 0.5% of total available water can be used for different purposes like domestic, agricultural, industrial usage (retrieved from www.usbr.gov). Major sources of irrigation in India are tube-wells which accounts for nearly 46%. Due to tremendous depletion in groundwater level, failing tube-wells water uptake making irrigation costly. Therefore, farmers were inclined towards sustainable practices, focusing on conserving soil and water resources, vital for long-term agricultural viability. It was also an important need in itself to know about the affordable resources and mediums to get maximum information by farmers. In such a situation, the understanding of the ICT technology of the farmers, it was helpful in getting low cost and getting agricultural information as required in a short time. Interest in utilizing technology for agriculture, indicating a desire for modern tools and methods to enhance productivity. The

traditional agriculture became less remunerative. Farmers were interested in entrepreneurial opportunities and training programs, showcasing a willingness to explore new avenues in agriculture. From decades, indiscriminate use of fertilizers spoiled soil health and agriculture sustainability. Balancing and managing nutrients in farming practices is a concern for farmers aiming to optimize crop growth. Exploring integrated farming methods that combine various agricultural activities for increased sustainability and efficiency. Farmers required to know the alternative ways of diversifying agricultural enterprises suited to their agro-climatic conditions. An interest in accessing information and support through dedicated farmer helplines like Kisan Call Centre. Lack of proper storage and transport infrastructure, along with post-harvest wastage, significantly adds to substantial food losses in the country. The fragmented supply chain, involving multiple intermediaries, exacerbates this problem, leading to food wastage at various stages. Understanding methods to preserve and handle produce after harvesting, reducing post-harvest losses. Farmers seek information on tools and implements, emphasizing the importance of efficient agricultural equipment. Access to high-quality seeds and improved crop varieties for better yields and resilience in farming. These findings have worth in research locale and also supported by some other studies by Chatterjee and Dasgupta*.,* 2016; David and Olofinsawe, 2015b; Verma *et al.*, 2019, Das et al., 2023; Anusha et al., 2023; Khodifad et al., 2023.

Understanding these priorities allows policymakers, agricultural extension services, and stakeholders to tailor their support programs, information dissemination, and resource allocation. By addressing these specific needs, it's possible to empower farmers, improve agricultural practices, and foster sustainable rural development.

CONCLUSION

The study's comprehensive exploration into Indian farmers' information needs, anchored in reliability triangulation and the Standardized Information Need Index (SINI), serves as a cornerstone for informed policy-making and agricultural development strategies. By scrutinizing the reliability through multiple statistical measures like Spearman-Brown, Guttman split-half coefficients, and Cronbach's alpha, this research assures the credibility of the information needs index, enhancing the trustworthiness of its findings. The prioritized information needs, evident from the SINI scores, unveil crucial areas vital for agricultural activities. Integrated Disease/Pest management emerged as the foremost concern, underlining the pressing need to address crop health and yields. Market-related data, credit accessibility, and weather forecasting follow suit, showcasing farmers' interest in optimizing profits, financial support, and risk mitigation. Understanding these priorities allows policymakers and stakeholders to gain valuable insights for tailored interventions, empowering farmers through targeted information dissemination, extension services, and resource allocation.

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CONFLICT OF INTEREST

I hereby state that there are no conflicts of interest within the research team.

REFERENCES

Adeola, R. G., & Ayoade, A. R. (2011). Extension agents' perception of the information needs of women farmers in Oyo State, Nigeria. *Global Journal of Human Social Science*, 11, 32-36.

Akanda, A. E., and Roknuzzaman, M. (2012). Agricultural Information Literacy of Farmers in the Northern Region of Bangladesh. *Information and Knowledge Management, 2*(6): 1-11.

Anusha, V. V. S. S., Patel, S. R. and Vinaya Kumar, H. M. (2023) Unlocking agricultural information networks: A social network analysis approach. Guj. J. Ext. Edu. 36(2):104-111. https://doi.org/10.56572/gjoee.2023.36.2.0019.

Babu, S. C., Glendenning, C. J., Okyere, K. A., and Govindarajan, S. K. (2012). Farmers' information needs and search behaviours: Case study in Tamil Nadu*, India* (No.1007-2016-79468).

Bachhav, N. B. (2012). Information Needs of the Rural Farmers: A Study from Maharashtra, India: A Survey. *Library Philosophy and Practice*.

Basunathe, V.K. and Tripathi, H. (2017). ICT using behaviour and perceived information needs of the livestock farmers in aAQUA and Warana Wired Village ICT Projects in Maharashtra State. *Indian Research Journal of Extension Education*. 17 (Spl. issue): 89-96.

Brown, W. 1910. Some experimental results in the correlation of mental abilities. *Brit. J. Psychol.*, 3(1): 296–322.

Chatterjee, K. and Dasgupta, S. (2016). Literature review of information seeking behaviour of farmers in India. *International Journal of Humanities and Social Sciences,*5(5) :163-182.

Cronbach, L. J. 1946. A case study of the split-half reliability coefficient. *J. Educ. Psychol.,* 37(1): 473-480.

Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika,* 16(3): 297-334.

Das, Shaktiranjan and Mohapatra, Sayan Sagnika (2023) Tribal farming dynamics: Investigating the influence of socio economic and psychological attributes on agricultural information management practices. Guj. J. Ext. Edu. 36(1):57-60. https://doi.org/10.56572/gjoee.2023.36.1.0010.

David, O., and Olofinsawe, A. A. (2015, April)a. Access and use of Agricultural Information Resources by Rural Women of Akure North and South Local Government areas of Ondo State Nigeria. *International Journal of Academic Library and Information Science, 3*(4):132-138.

David, O., and Olofinsawe, A. A. (2015, April)b. Access and use of Agricultural Information Resources by Rural Women of Akure North and South Local Government areas of Ondo State Nigeria. *International Journal of Academic Library and Information Science, 3*(4):132-138.

Dhaliwal, G.S. and R. Arora. (1996). Principles of insect management. Commonwealth Publishers, New Delhi. https://krishi.icar.gov.in/jspui/bitstream/123456789/800/1/wsp11.pdf

Elly, T., and EpafraSilayo, E. (2013). Agricultural information needs and sources of the rural farmersin Tanzania: A case of Iringa rural district. *Library review*, *62*(8/9): 547-566.

George, D. and Mallery, P. 2003. SPSS for Windows step by step: A simple guide and reference. 4th Ed, Allyn & Bacon, 11.0 update Boston, pp. 1-218.

Khodifad, P. B. and Solanki, A. V. (2023) Utilization of information and communication technologies by the farmers. Guj. J. Ext. Edu. 35(2):122-126. https://doi.org/10.56572/gjoee.2023.35.2.0024.

Lal, S. P., Mohammad, A., Ponnusamy, K., & Kale, R. B. (2016)b. A methodological pathway to quantify perception of the participants in animal fairs with relevance to national dairy mela at NDRI Karnal, India. *Journal of Animal Research*, *6*(3), 437-444.

Lal, S. P., Mohammad, A., Ponnusamy, K., and Kale, R. B. (2016)a. A methodological pathway to quantify perception of the participants in animal fairs with relevance to national dairy mela at NDRI Karnal, India. *Journal of Animal Research*, *6*(3), 437-444.

Lal, S.P. (2017). Critical Appraisal of Farmers Mental Health Vis-A-Vis Agricultural Sustainability in Green Revolution Belt in India. Ph.D. Thesis, Division of Dairy Extension National Dairy Research Institute (ICAR) Karnal-132001 (Haryana), India. https://books.google.co.in/books/about/Critical_Appraisal_of_Farmers_Mental_Hea.html?id=fZUaxQEACAAJ&redir_esc=y

Lal, S.P., Shukla, G. and Jha, R.K. (2022). Perceived Impediments faced by farmers vis-à-vis adoption of Zero tillage machine for sowing of field crops in Indo-Gangetic plain of India: PCA based Construct Validation. *Agricultural Mechanization in Asia, Africa and Latin America*. 53 (6): 7909-7918. URL: https://www.shin-norinco.com/article/perceived-impediments-faced-by-farmers-vis-a-vis-adoption-of-zero-tillage-machine-in-indo-gangetic-plain-of-india-pca-based-construct-validation

Lwoga, E. T., Ngulube, P., and Stilwell, C. (2010). Information needs and information seeking behaviour of small-scale farmers in Tanzania. *Innovation: journal of appropriate librarianship and information work in Southern Africa*, 40: 82-103.

Meitei, L. S., and Devi, T. (2009). Farmers information needs in rural Manipur: an assessment. Annals of Library and Information Studies, Vol. 56, March 2009, pp. 35-40.

Oinam, T.; Chauhan, J.K.; Josmi, R.K. and Singh, Ram (2019). Corollary of Mobile Phone Applications on Rural Youth Farmers' Information Needs and Seeking Behaviour, *Indian Research Journal of Extension Education*, 19(2): 89-94. https://seea.org.in/uploads/pdf/2019-60-89-94.pdf

Raksha, R. (2016). Information needs of the rural women involved in livestock sector: A study form Jharkhand. *Indian Research Journal of Extension Education,* 14 (4): 70-74.

Schmitt, N. 1996. Uses and abuses of coeffi cient alpha. *Psychol. Assessment*, 8: 350–353.

Shukla, G., Ansari, M. N., Lal, S. P., & Bandhavya, M. (2022). Information seeking behaviour of farmers through mobile: An innovative ICT tool. In *Biological Forum–An International Journal*. 14(1): 586-590).

Singh, P., Jirli, B., & Maji, S. (2022). Perception of KVK Professionals towards Principles of Extension Education and Different Components. *Indian Research Journal of Extension Education*, *22*(5), 142-145.

Singh, P., Jirli, B., Ghadei, K., Roy, P., & Kumari, J. (2023). Objectives of extension education: An analysis of perception of KVK professionals. *Indian Journal of Extension Education,* 59(2), 74-78.

Spearman, C.C. 1910. Correlation calculated from faulty data. *Brit. J. Psychol.*, 3(1): 271–295.

Verma, R. K., Wason, M., Singh, P., Sarkar, S., and Bhowmik, A. (2019). Information Need, Perceived Credibility of Information Sources Among Rural Women. *Indian Journal of Extension Education*, *55*(2): 42-46.

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