

TRIBAL FARMING DYNAMICS: INVESTIGATING THE INFLUENCE OF SOCIO-ECONOMIC AND PSYCHOLOGICAL ATTRIBUTES ON AGRICULTURAL INFORMATION MANAGEMENT PRACTICES

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ABSTRACT

Agriculture is the cornerstone of many rural communities worldwide. Tribal farmers play a vital role in preserving agricultural customs and ensuring regional food security. The efficient management of agricultural information is critical in modern farming operations, as it allows farmers to enhance production, make informed decisions, and adapt to changing environmental conditions. Information and Communication Technologies (ICTs) in agriculture include networks, mobile devices, services, and applications that aid in the processing, management, and exchange of data, information, or knowledge within the farming ecosystem. ICTs assist farmers through educational procedures in improving farming methods and techniques, increasing production efficiency and income, bettering their levels of living, and lifting the social and educational standards of rural life. The study was conducted in the Keonjhar district of Odisha. An ex-post facto research design was followed for carrying out the study. The research study was followed by both purposive and non-probability random sampling methods for the selection of district, block, gram panchayat, village, and respondents. 120 respondents were selected through disproportionate random sampling. The study revealed the relationship between some socio—economic and psychological variables and Agricultural information management behavior. From this correlation, it was observed that age is negatively correlated and other variables such as gender, education, income, family size, outward orientation, training program, and social participation are positively correlated with information-seeking sources. These variables are directly proportional to the information-seeking sources.

Keywords: agricultural information management, tribal farmers, ICT

INTRODUCTION

Agriculture is the cornerstone of many rural communities worldwide. Tribal farmers, in particular, play a vital role in preserving agricultural customs and ensuring regional food security. The efficient management of agricultural information is critical in modern farming operations, as it allows farmers to enhance production, make informed decisions, and adapt to changing environmental conditions. Understanding the “Agri Information Management Behavior of Tribal Farmers” is essential to comprehend how tribal societies utilize and reap the benefits of agricultural information.

Tribal farmers confront difficulties in managing their agricultural resources since they frequently live in isolated and ecologically diverse places. In addition to having inherited customs and knowledge from previous generations, they also must deal with the challenges presented by contemporary farming methods. Tribal farmers’ capacity to increase yields,

lessen vulnerabilities, and improve their standard of living is largely dependent on their ability to obtain, share, and apply agricultural information.

Examining the actions and methods used by tribal farmers to manage agricultural data is crucial in this situation. The purpose of this study is to shed light on the several facets of information management, such as knowledge sources, decision-making procedures, technology adoption, and the blending of traditional knowledge with modern agricultural science.

Tribal farmers’ welfare must comprehend how they organize their information, but it also has wider ramifications for sustainable farming, rural development, and the preservation of traditional knowledge. To help tribal farmers meet the challenges of a fast-changing agricultural landscape while maintaining their cultural history and traditions, this study will offer insightful information.

OBJECTIVE

To investigate the relationship between the Agricultural information management behavior of tribal farmers and their socioeconomic and psychological characteristics

METHODOLOGY

For this study, an ex-post facto research design was used. Both purposive and non-probability random sampling methods were employed to select the district, block, gram panchayat, village, and respondents. The study was conducted in the Keonjhar district of Odisha during the 2018-19 period. Keonjhar is a landlocked district located in the northern part of Odisha. The district was selected purposively due to the research study’s focus on behavioral approaches to Agri-information management among tribal people. Keonjhar district consists of 13 blocks, 10 of which are tribal-dominated and have come under the PESA Act (Panchayat Extension to the Schedule Area) since 1996. From these 10 blocks, the study was conducted in two blocks, Ghatgaon and Harichandanpur, which were selected based on easy accessibility of transport facilities from the Keonjhar district headquarters. Ghatagaon block has 27 panchayats, out of which two panchayats were selected. For the research study, two panchayats, namely Mukundapurpatna and Balipokhari, were selected out of the 25 panchayats in the Harichandanpur block. From each of the selected gram panchayats, one village was chosen. Four panchayats were surveyed, and four villages were selected for the study: Banachakulia from Mukundapurpatna Gram panchayat, Dhangadidih from Balipokhari Gram panchayat, Tangiriapal from Tangiriapal Gram panchayat, and Rasola from Rasola Gram panchayat.

At the beginning of the study, a preliminary survey was conducted on the selected villages, which included 12% of farm families. The sample size was 120 respondents, who were selected using disproportionate random sampling.

RESULTS AND DISCUSSION

(1) Gender and agricultural information management behavior

Gender is an important factor that relates with information seeking sources of the respondents. Table 1 revealed that gender is positively correlated with information seeking sources. The study observed that male respondents were involving themselves in collecting information from various sources.

Table 1 : Correlation between selected socio-economic and psychological variables with Agricultural information management behavior.

(n=120)

Sr. No.	Variables	‘r’ value
X ₁	Gender	.114NS
X ₂	Age	-.015NS
X ₃	Education	.935**
X ₅	Income	.934**
X ₆	Family size	.688*
X ₇	Land possession	.825**
X ₈	Outward orientation	.825**
X ₉	Training programme	.821**
X ₁₀	Social participation	.817**

NS- Nonsignificant

*Significance at .01 level and .05 level of probability

(2) Age and agricultural information management behavior

The above table determined the negative relationship of age with the source of information. Younger respondents are receiving information from various sources. Age is inversely proportional to the source of information. So older respondents are receiving less information. They have a lack of interest in collecting information from different sources. Similar findings had been reported by Khurana (2004)

(3) Education and agricultural information management behavior

Education is the most important factor that brings desirable changes in the knowledge, skill, attitude, and behavior of an individual. Education is positively correlated with the source of information. Education is highly significant with the source of information. It is easy for an educated person to receive information from different sources. Similar findings were reported by Kumaran *et.al* ((2004)

(4) Income and agricultural information management behavior

Income is the most important factor of an individual that makes an individual economically strong. Income is positively correlated with the source of information. Table 1 identified the high significance of income with the source of information. An individual of good economic status gets the opportunity to go outside and collect information from various sources. These findings have been in line with that of Prameela and Ravichandran (2004)

(5) Family size and agricultural information management behavior

Table 1 revealed that family size is positively correlated with the source of information. It is mentioned as a .01 significance level. Family size belongs to a large family in which there is good coordination between family members. So, it is easy to collect information regarding agri-allied practices followed by the family members for their livelihood. These findings have been in line with that of Singh *et.al* (2007)

(6) Land possession and agricultural information management behavior

It is observed from the above table that the source of information is positively correlated with the land-holding areas of the respondents. The above table mentions a significant level of land possession. The respondents having large land areas receive information about conducting their agri-allied practices to improve their economic status. These findings have been in line with those of Singh *et.al* (2007)

(7) Outward orientation and agricultural information management behavior

Table 1 revealed the positive correlation between outward orientation and source of information. It was found to be of a highly significant level. Source of information possessed by outward orientation. The respondents who are cosmopolite receive information from different sources. The cosmopolitaness is mainly based on outward orientation. Similar findings were reported by Prameela and Ravichandran (2004), Vinaya and Shivamurthy (2021), Bariya *et al.* (2022), Jegoda *et al.* (2022) and Patrick *et al.* (2022).

(9) Training program and agricultural information management behavior

It revealed that the training program is highly significant, and it is positively correlated with the source of information. The training program plays a vital role in case of seeking information. So participation in the training program is the most important strategy for the respondents to receive information from different sources. Similar findings were reported by Prameela and Ravichandran (2004)

(10) Social participation and agricultural information management behavior

It is observed from the above table that social participation is positively correlated with the. It is highly significant at the .01 level. The respondents who have participated with different institutions can easily seek information for their agri-allied activities. Similar findings

were reported by Niva Bora and Singh (2004) and Parmar (2021).

CONCLUSION

According to the study, there is a relationship between various socioeconomic and psychological variables and the sources people use for seeking information. The study found that age is negatively correlated with the use of information-seeking sources, while other variables such as gender, education, income, family size, outward orientation, training program, and social participation are positively correlated with the use of such sources. In other words, these variables are directly proportional to the amount of information people seek from different sources.

This study has revealed the intricate network of factors that impact the way tribal farmers manage their information, which ultimately affects their farming practices and overall well-being. It is essential to recognize the interplay between socioeconomic and psychological characteristics while respecting the diverse cultural backgrounds of tribal communities. This will help create targeted policies and interventions aimed at supporting these farmers in overcoming the challenges they face in farming and promoting sustainable agriculture in their regions. Ultimately, successful rural development, agricultural sustainability, and preservation of indigenous traditions all depend on the interplay between information management and the unique traits of tribal farmers.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest

REFERENCES

- Bariya, Minaxi, Chandravadia, Kiran and Gami, Hansa (2022) Socio-economic characteristics of SHG and non-SHG members. *Guj. J. Ext. Edu.* 34(2):95-100.
- Jegoda, M. N., Jadav, S. J. and Patel, J. H. (2022) Socio economic profile and constraints faced by goat keepers. *Guj. J. Ext. Edu.* 34(1):79-85.
- Khurana.G.S(2004) "Information needs of young farmers of Punjab, Abstract Indian Journal of Extension Education, Vol10(1&2)pp23-27.
- Kumarn.M,Ponnusamy.K and Krishna.M(2004) "Utilisation of Information Sources by Shrimp Farmers," *Indian Journal of Extension Education*, Vol40 (1&2) pp63-64.
- Niva Bora and Singh. 2004. Influence of Mass Media on

- Tribal farm women. *Indian Journal of Extension Education*. Vol40 (1&2), pp71-74.
- Parmar, K. M., Prajapati, M. R. and Jatapara, A. C. (2021) Path analysis of socio-economic impact of MNREGA on beneficiaries. *Guj. J. Ext. Edu.* 32(1):218-222.
- Patrick, J. A., Omede, U. D. and Kalsariya, B. N. (2022) Socio-economic characteristics of pigeon farmers in Benue State of Nigeria. *Guj. J. Ext. Edu.* 34(2):91-94.
- Prameela.K and Ravichandra.V(2004) "Utilisation of Interpersonal and Mass communication channels by farm women," *Indian Journal of Extension Education*, Vol40(1&2),pp67-70.
- Singh B,S.Prakash *et al*(2007) "Adoption of Wasteland utilisation system,"N.P university of Agriculture &Technology,Kamargomt,Faizabad.
- Tabina, Kubrevi Syed Shafat and Saraf, Sajad (2021) An analysis of socio-personal characteristics of strawberry growers. *Guj. J. Ext. Edu.* 32(1):143-148.
- Vinaya Kumar H. M., and Shivamurthy, M. (2021) Factor influencing fishery-based farmers' perception and their response to climate-induced crisis management. *Environ. Dev. Sustain.*, 23, 11766–11791. Springer, <https://doi.org/10.1007/s10668-020-01141-x>

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