

MARKETING BEHAVIOUR OF TRIBAL MILLET GROWERS AND RELATIONSHIP WITH THEIR PROFILES

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ABSTRACT

This study analysed the marketing behaviour of tribal millet growers in Dindori, Madhya Pradesh, and its relationship with their profiles. Millets, despite their nutritional and cultural importance, have seen a decline in cultivation due to shifts toward commercial crops. Tribal millet farmers face significant marketing challenges, including limited market access, lack of knowledge, and weak bargaining power. A sample of 120 respondents from six villages was analyzed using a structured interview schedule. Results revealed that most of the respondents exhibited medium-level marketing behaviour. Key factors influencing marketing behaviour include education, landholding size, gender, and cosmopolitan exposure. Education had the strongest positive effect, while gender showed a significant negative influence, with men more involved in marketing activities than women. Larger landholdings and exposure to external markets also positively impacted marketing behaviour. Variables such as age, family size, total annual income, annual income from millet cultivation, extension contact, social participation, economic motivation, and risk preference were found to be non-significant. The findings highlighted the need for targeted interventions, including educational initiatives, gender empowerment, and stronger market linkages, to enhance the marketing practices of tribal millet growers and support the sustainability of millet farming in this region.

Keywords: tribal millet growers, marketing behaviour, profile

INTRODUCTION

Agriculture is a cornerstone of India's economy, supporting 42.3% of the population and contributing 18.2% to GDP (Economic Survey 2023-24). The sector is crucial for rural livelihoods, food security, and economic stability, with investments in agricultural research yielding high returns. Agriculture is the backbone of India and it has traditionally been viewed as a source of subsistence living and livelihood by growing food crops like rice, maize, wheat, millets and pulses etc (Rutika et al. 2022.) Millets, one of the earliest cultivated grains, are particularly significant for disadvantaged and tribal communities due to their resilience and nutritional richness (Vinaya et al., 2020). These grains are critical for food and livelihood security in various regions of India and Madhya Pradesh where millet cultivation is deeply rooted in both culture and economy. India is the leading global producer of millets, contributing 80% of Asia's production (Ministry of Agriculture & Farmers Welfare). However, millet cultivation has declined since the Green Revolution, emphasizing commercial crops, leading to a drop in millet's share of cultivated grains from 40% to under 20% (Rao et al.). This shift has impacted agricultural

diversity, nutritional sustainability, and environmental health. Madhya Pradesh, a major producer of small millets, has seen a significant reduction in millet-growing areas over the past few decades, particularly in tribal districts like Dindori and Mandla (Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare). An efficient marketing of any produce is essential for developing and maximizing returns and it is depend on the marketing behaviour of the producer (Patil and Chengappa, 2022). Providing farmers with access to reliable, accurate and efficient markets is a key factor in raising their revenues (Tadavi et al. 2024, Machapathri et al., 2023. Chovatia et al., 2024, Madhuprasad et al., 2024). Tribal millet farmers in Dindori face numerous challenges, particularly in marketing their produce. Issues like limited access to markets, lack of knowledge, weak bargaining power, and the presence of private player cartels severely affect their ability to secure fair returns. These marketing bottlenecks undermine the profitability and sustainability of millet farming in the region, despite millet's importance to their livelihoods. Given the rising awareness of millet's health benefits and the growing demand for these grains, addressing the marketing challenges faced by tribal farmers is critical. Developing efficient, fair marketing systems is

essential to revitalize millet production and ensure equitable returns for disadvantaged farmers. This study aimed to bridge the research gap by analyzing the marketing behaviour of tribal millet growers in Dindori and examining how personal, socio-economic, communication and psychological factors influence their practices. Understanding these dynamics will help develop interventions to improve marketing outcomes and support the sustainability of millet farming in these tribal communities.

OBJECTIVES

- (1) To study the marketing behaviour of tribal millet growers
- (2) To analyze the relationship between the profile of tribal millet growers and their marketing behaviour

METHODOLOGY

The study was undertaken in the Dindori district of Madhya Pradesh with the highest area and production of small millets (mainly kodo and kutki) in the state. A sample size of 120 respondents (20 from each village) was selected using simple random sampling from six villages of the Bajag block with the highest area (2022-23) under small millet cultivation in the Dindori district. The primary data was collected with the help of an interview schedule while secondary data was gathered from research journals, publications and websites. The independent variables selected for the study were age, gender, education, size of family, land holding, total annual income, annual income from millet cultivation, extension contact, social participation, cosmopolitanism, economic motivation and risk preference. The marketing behaviour of tribal millet growers was considered as the dependent variable for this study and was measured by using the scale developed by Nirban, 2004. The selected variables were quantified by ascribing scores and data was analysed using different statistical tools like frequency, percentage, arithmetic mean, range, correlation and regression analysis.

RESULTS AND DISCUSSION

Marketing behaviour of tribal millet growers

The marketing behaviour of tribal millet growers was operationalized as all the activities performed by the tribal millet growers in relation to operations after harvest of crop till the sale of produce in the market (at doorstep or physical marketplace). As depicted in Table 1, the majority of respondents (65.00%) exhibited a medium level of marketing behaviour followed by 35 per cent respondents with low level and none with high level of marketing behaviour demonstrating a moderate level of marketing behaviour

among most of the respondents. The findings are in line with those of Devi (2022) and Nagar (2020).

Table 1: Distribution of tribal millet growers according to their marketing behaviour (n=120)

Sr. No.	Category	Respondents	
		Frequency	Percentage
1	Low (Up to 43 score)	42	35.00
2	Medium (44 to 86 score)	78	65.00
3	High (Above 86 score)	0	0.00

Most of the tribal millet growers do not visit the physical marketplace place as their produce is collected by the trader/commission agent/middlemen from their doorstep itself on a regular basis. Tribal growers also sell their produce according to their financial needs. Many times, growers approach the marketplace with their produce in the payable transportation facility provided by the trader/commission agent/middlemen. The findings on marketing behaviour suggested moderate engagement of tribal millet growers in market-oriented activities, likely relying on traditional practices. The absence of high-level marketing behaviour highlights a gap in adopting advanced techniques, possibly due to socio-economic and logistical challenges. Enhancing market linkages, cooperative strategies, and training could help these growers improve their marketing capabilities, leading to better returns and increased resilience against market fluctuations.

Relationship between the profile of tribal millet growers and their marketing behaviour

Table 2 shows that out of twelve selected independent variables, eight variables i.e., education, land holding, annual income from millet cultivation, extension contact, social participation, cosmopolitanism, economic motivation, and risk preference bore positive and significant correlations at the 1% level of probability whereas gender exhibited a negative and significant correlation at the 1% level of probability, while the variables age, size of family, and total annual income had non-significant correlations with the marketing behaviour.

The negatively non-significant correlation (-0.027) between age and marketing behaviour shows no direct dependence as all age farmers participate equally in millet sales (Nirban, 2004).

Table 2: Correlation analysis of the profile of tribal millet growers with their marketing behaviour

(n=120)

Sr. No.	Selected independent variable	Correlation coefficient (r)
X ₁	Age	-0.027 ^{NS}
X ₂	Gender	-0.236 ^{**}
X ₃	Education	0.893 ^{**}
X ₄	Size of family	-0.099 ^{NS}
X ₅	Land holding	0.355 ^{**}
X ₆	Total annual income	-0.088 ^{NS}
X ₇	Annual income from millet cultivation	0.336 ^{**}
X ₈	Extension contact	0.236 ^{**}
X ₉	Social participation	0.651 ^{**}
X ₁₀	Cosmopolitaness	0.320 ^{**}
X ₁₁	Economic motivation	0.514 ^{**}
X ₁₂	Risk preference	0.641 ^{**}

**Significant at 0.01 level of probability

NS: Nonsignificant

A significant negative correlation (-0.236) was found between gender and marketing behaviour. This suggests that gender plays a crucial role in marketing, with male growers likely being more engaged in marketing activities than female growers. Cultural and societal norms might limit female participation in direct market activities, leading to this significant gender difference.

Education exhibited a strong positive and significant correlation (0.893) with marketing behaviour. Educated growers may have better access to market information, a deeper understanding of market dynamics, and stronger decision-making capabilities (Sontakke, 2020).

The negative and non-significant correlation (-0.099) of size of family with marketing behaviour suggests that family size does not play a significant role in determining how well tribal millet growers perform in the market interpreting that the larger families do not necessarily translate into more efficient marketing behaviour.

A significant positive correlation (0.355) between landholding size and marketing behaviour indicates that farmers with larger landholdings are more involved in marketing activities as large landholdings allow for higher production and surplus, providing more opportunities to engage in the market (Patil, 2018).

A negative and non-significant correlation (-0.088)

between total annual income and marketing behaviour shows that overall income does not significantly influence millet marketing behaviour, indicating that income from other sources might not affect how farmers approach millet marketing.

Annual income from millet cultivation exhibited a positive and significant correlation (0.336) with marketing behaviour concluding that higher income from millet sales encourages more effective marketing behaviour because growers with higher income from millets are likely to be more motivated to engage in structured marketing activities (Devde, 2017).

Extension contact positively influences marketing activities, as extension personnel often provide valuable market-related advice. This finding supports the positive and significant correlation (0.236) between extension contact and marketing behaviour (Jahangirali, 2014).

The growers who engage in social/economic organizations or community activities are more likely to exhibit active marketing behaviour which emphasizes the importance of social networks in facilitating better marketing practices. A strong and significant positive correlation (0.651) between social participation and marketing behaviour proves it (Patil, 2018).

Cosmopolitaness exhibited a positive and significant correlation (0.320) with marketing behaviour and influences it positively. It explains that farmers with broader exposure to external ideas and networks tend to be more effective in marketing their produce.

A significant positive correlation (0.514) between economic motivation and marketing behaviour reveals that economically motivated farmers are more likely to engage in effective marketing practices. Hence, economic motivation plays a key role in driving growers' marketing decisions (Shekar, 2009).

Risk preference exhibited a strong positive and significant correlation (0.641) with marketing behaviour. Growers with a higher tolerance for risk are more likely to engage in dynamic and effective marketing activities proving that higher risk preference encourages more active participation in the market (Shekar, 2009).

Multiple regression analysis

The multiple regression analysis examined the relationship between various independent variables and the marketing behaviour of tribal millet growers (Table 3).

A high R-squared value (0.878) indicated that 87.8% of

Table 3: Multiple regression analysis of the profile of tribal millet growers with their marketing behaviour (n=120)

Sr. No.	Selected independent variable	Regression coefficient (b)	Standard Error (S.E.)	t-value
X ₁	Age	-0.042	0.038	-1.10
X ₂	Gender	-2.893	1.067	-2.71
X ₃	Education	3.226	0.183	17.61*
X ₄	Size of family	-0.190	0.148	-1.29
X ₅	Land holding	1.704	0.504	3.38*
X ₆	Total annual income	0.464	0.581	0.80
X ₇	Annual income from millet cultivation	-0.058	0.065	-0.89
X ₈	Extension contact	-0.055	0.116	-0.47
X ₉	Social participation	0.097	0.139	0.70
X ₁₀	Cosmopolitaness	1.465	0.617	2.37*
X ₁₁	Economic motivation	0.042	0.097	0.44
X ₁₂	Risk preference	-0.173	0.111	-1.56

$R^2 = 0.878$, $F = 64.61$, NS=Non-significant *Significant at 0.05 level of probability

the variation in marketing behaviour was explained by the selected variables. The F-value (64.61) was highly significant, confirming that the overall model was robust. Education (b=3.226, t=17.61), land holding (b=1.704, t=3.38) and cosmopolitaness (b=1.465, t=2.37) emerged to be the only variables creating positive and significant variations in the marketing behaviour of the tribal millet growers. Contrary, gender showed a significant negative influence (b= -2.893, t= -2.71) at the 0.01 level of significance, indicating that men were more likely to engage in effective marketing compared to women. However, other variables i.e. age, family size, total annual income, annual income from millet cultivation, extension contact, social participation, economic motivation, and risk preference didn't contribute to marketing behaviour as they did not substantially affect it in this context.

RECOMMENDATIONS

To enhance the marketing behaviour of tribal millet growers, several recommendations are proposed. Firstly, educational initiatives should focus on improving training opportunities for millet growers, empowering them to enhance their marketing skills and make informed decisions that allow for better access to market opportunities. Additionally, addressing gender disparities is crucial; promoting female participation in marketing activities through tailored training programs can help women overcome cultural barriers and engage more actively in millet marketing. Strengthening market linkages is also essential; developing cooperative strategies, improving transportation, and establishing direct-to-market connections for small and medium millet farmers will ensure they have better access to markets while reducing reliance on intermediaries. Furthermore, encouraging cosmopolitan exposure through exchange programs, external market visits, or digital platforms will broaden farmers' understanding of market trends and enhance their marketing

strategies. Support for larger landholders is important as well; encouraging them to adopt modern marketing techniques can create a positive ripple effect on smaller growers through peer influence and cooperative initiatives. Lastly, further research should investigate the non-significant effects of social participation and extension contact to identify targeted interventions that could improve their impact on marketing behaviour.

CONCLUSION

The study reveals that the marketing behaviour of tribal millet growers in Dindori is predominantly influenced by education, gender, landholding size, and cosmopolitaness. A majority of respondents exhibited medium-level marketing behaviour, with no respondents displaying high-level marketing skills. Education emerged as the most critical factor, positively influencing marketing behaviour, while gender differences highlighted that men are more actively involved in marketing than women. Larger landholdings and exposure to outside ideas also contributed positively to effective marketing practices. Efforts to improve marketing practices among tribal millet growers should focus on enhancing education, leveraging women's involvement, and supporting larger landholders. Cosmopolitan exposure also plays a crucial role, suggesting that programs aimed at broadening growers' worldviews may improve their marketing abilities. Non-significant variables like social participation and extension contact may need further investigation to understand their limited role.

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CONFLICT OF INTEREST

The authors declares 'no conflict of interest'.

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