



Market Orientation and Marketing Behaviour of Tribal Farmers in Andhra Pradesh

S. Hima Saina¹, V. Jyothi², A. Lalitha³ and D. Ramesh⁴

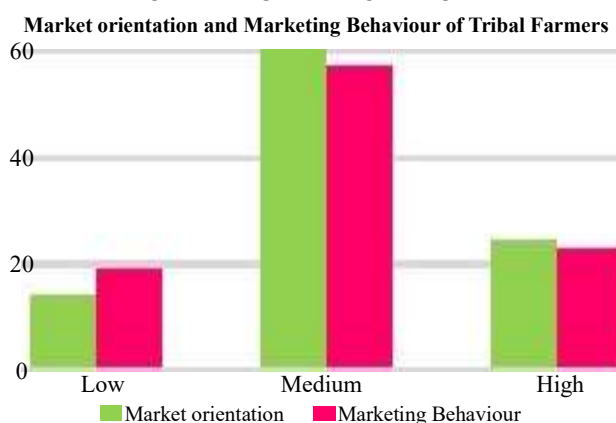
1. P. G Scholar, 2&3. Assoc. Prof. (Agril. Ext.), 4. Asst. Prof., ANGRAU, Guntur, AP

Corresponding author's email: himasainasaramanda@gmail.com

HIGHLIGHTS

- The study highlights the market orientation and marketing behaviour of tribal farmers
- The research shows how tribal farmers can improve their sales and income by using better marketing strategies.
- The study reveal how market orientation and marketing behaviour interact, helping us to optimize marketing strategies to improve income and support for farmers.

GRAPHICAL ABSTRACT



ARTICLE INFO

Editor:

Dr. Kaushik Pradhan
Dr. Vinod Kumar

Key words:

Tribal farmers, Market orientation,
Marketing behavior, Farming practices

Received : 25.08.2024

Accepted : 15.09.2024

Online published : 01.10.2024

doi:10.54986/irjee/2024/oct_dec/66-72

IRJEE METRICS

Google citations - 9424
h-index - 44
i10-index - 304
NAAS rating - 4.99

ABSTRACT

Context: Tribal farming practices produce nutritious, organic crops that are often unique to specific regions and can fetch higher prices due to their authenticity. However, tribal farmers frequently face challenges due to their remote locations. The market structure is often disorganized, with limited communication and transportation facilities.

Objective: The purpose of this research was to study the market orientation and marketing behaviour of tribal farmers in Andhra Pradesh

Method: A study was conducted during 2023-24 in Alluri Sitharama Raju District Andhra Pradesh using *ex-post facto* research design. A sample of 120 tribal farmers were selected from the six villages in the district. The study investigated into Market orientation and Marketing behaviour of tribal farmers. Data was collected with the help of structured schedule through personal interview.

Results & Discussion: The results indicated that 61.67 per cent of the tribal farmers had medium market orientation, followed by high (24.17%) and low (14.16%). More half of the tribal farmers belonged to medium (57.50%) marketing behaviour followed, by high (23.33%) and low (19.17%). The marketing behavior index was 75.58. there was a significant correlatio between market orientation and marketing behavior of tribal farmers

Significance: The study focused on the market orientation and marketing behavior of tribal farmers and also explored the relationships between these factors.

Tribal farming and their products are crucial for several reasons. Tribal farming practices incorporate traditional knowledge and sustainable techniques refined over generations, promoting biodiversity, soil health, ecological balance, making them essential for environmental conservation. The crops grown with these traditional practices are nutritive, healthier and organic. Tribal farm products are often unique and associated with specific geographical indications. They can command premium prices in markets that value authenticity, sustainability and health benefits, offering significant income potential. However, tribal farmers frequently face challenges due to their remote locations, personal characteristics and social inhibitions, which often result in lower prices for their produce than expected.

Andhra Pradesh occupies 8th position among Indian states with the largest tribal populations and holds the highest tribal population in the southern peninsula. Tribals, the original inhabitants of the forests and highlands of Andhra Pradesh, have been an integral part of the state's cultural, social and political history. According to the 2011 census, there are 33 tribal groups with a total population of 5.9 million in Andhra Pradesh. Alluri Sitharama Raju district in Andhra Pradesh, has the highest number of tribal populations, with about 70 per cent directly or indirectly dependent on agriculture and allied activities. These areas, nestled in nature's lap, have unique potential to absorb the tribal population and create employment opportunities. Traits such as hard work, dignity of labor, affection for the land are inherent traits among tribals and are considered fundamental assets. The district's agriculture primarily relies on crops like paddy, ragi, maize, bajra, korra, niger, rajma, beans, red gram, chillies, turmeric, ginger and jowar. Due to its favorable climate, many fruits, vegetables and flowers of commercial importance are grown, making it an agriculturally and horticulturally rich belt. However, tribals are historically disadvantaged and economically backward, with lower incomes, higher indebtedness and fewer assets.

In these areas, the market structure is often disorganized, with limited communication and transportation facilities. Agriculture is the primary occupation and essential for food security. Due to their ecologically and topographically complex environments, tribal farmers use various methods to cultivate the land, including "hill and shifting cultivation" and

"settled agriculture." Shifting cultivation is not just an economic activity but is deeply woven into their social structure, economy, political organization and religion. Connectivity from farms to markets is poor, requiring farmers to travel long distances, often hindered by climatic conditions like fog and haze. They have limited access to market information, leading to the sale of their produce in ungraded and unprocessed forms to middlemen, individuals and companies. Small land holdings and the absence of organized groups weaken their bargaining power, making them vulnerable to exploitation by middlemen. To address these issues, a study was conducted to investigate the market orientation and marketing behavior of tribal farmers in the Alluri Sitharama Raju district of Andhra Pradesh.

METHODOLOGY

The present study was carried out in the Alluri Sitharama Raju district of Andhra Pradesh (latitude 17°17'-18°21'N and longitude 80°53'-82°50'E), which was purposively chosen due to its high population of tribal people. Three mandals viz., Chintapalli, Gangaraju madugula, Gudem kotha veedi were selected, from each of the selected mandal, two villages were selected using simple random sampling procedure. Tajangi and Daily nagar villages from Chintapalli mandal; Kilthari and Vanjari villages from Gangaraju madugula mandal; Vanchula and Vanthadipalli villages from Gudem kotha veedi were selected for the study. Thus a total of six (06) villages were selected for the study. From each of the selected village, 20 respondents were selected using simple random sampling procedure. Thus, a total of 120 respondents were selected for the study.

An ex-post facto research design was employed



Map depicting the study area

for this study. Data collection was conducted through personal interviews with respondents, **utilizing a pre-tested structured schedule**. The collected data were systematically tabulated for analysis. For this study, market orientation was defined as the respondent's evaluation and decision-making process regarding the sale of their farm produce, based on available infrastructure and market intelligence.

Marketing behavior of tribal farmers was operationalized as their participation in various decisions related to the selling the farm produce at specific time, sales channels, place of sale, modes of transport, distance to the market, reasons for selling at specific locations, selling to specific agencies, terms and conditions of sale, timing of sale, sources of market information, grading and packing of farm produce. The components of marketing behavior was measured on two point continuum of yes and no, scored as 2 and 1 respectively Marketing Behavior Index was calculated using the formula:

$$MBI = \frac{\text{Obtained score}}{\text{Obtainable score}} \times 100$$

Where, MBI=Marketing Behaviour Index

Scores for both marketing orientation and marketing behavior were categorized into three levels as low (< Mean - S.D), medium (Mean ± S.D) and high (> Mean + S.D). Various statistical tools, including frequency, percentage, standard deviation, mean, Marketing Behavior Index and Spearman rank correlation coefficient, were utilized for data interpretation and analysis.

RESULTS:

The results revealed that 61.67 per cent of the tribal farmers had medium market orientation, followed by high (24.17%) and low (14.16%) market orientation presented in Table 1.

The Marketing behaviour of the tribal farmers was measured on the components namely the reasons for selling the farm produce at specific time, sales

Table 1. Distribution of tribal farmers according to their market orientation (N=120)

Category	No.	%
Low (<13.53)	17	14.16
Medium (13.53 - 16.89)	74	61.67
High (>16.89)	29	24.17
Total	120	100.00
Mean = 15.21 SD = 1.68		

channels, place of sale, modes of transport, distance to the market, reasons for selling at specific locations, selling to specific agencies, terms and conditions of sale, timing of sale, sources of market information, grading and packing as presented in Table 2.

Reasons for selling the farm produce at specific time: The results revealed that majority of tribal farmers sold the farm produce at a particular period/time due to financial urgency (80.00%), followed lack of cold storage facility (79.16%), low shelf life (78.33%) and to preserve quality (21.67%).

Sales channels: Less than two-third of tribal farmers sold to brokers/middle men (61.66%) followed by directly to the consumer (60.83%), private agencies (39.16%) and government agencies (33.34%).

Place of sale: Two-third of the tribal farmers sold their produce at the nearby weekly market (66.66%), followed by in the village (45.83%) and at the distant market (41.66%).

Mode of transport: Less than two-third of the tribal farmers used mini truck/auto rickshaw/jeep (61.67%) to transport farm produce to selling point, followed by Van/ Truck (41.66%) and motorcycle (21.66%) used.

Distance to the market: Majority of the tribal farmers reported that distance to the market was below 10 km (77.50%) followed by 11-30km (54.16%) and above 30km (15.00%).

Reasons for selling at specific location: Majority of the tribal farmers sold at a particular place as Market is nearby (70.83%) followed by better prices (55.83%) and availability of transport facility available to market (58.34%).

Selling to specific agencies: More than two-thirds of the tribal farmers sold their produce to a specific agency primarily because of immediate cash payment (67.50%), followed by the proximity of the agency (58.34%), better prices (55.83%), previous agreements (55.83%) and lack of time to sell produce directly to consumers (33.34%).

Terms and conditions of sale: The tribal farmers preferred deferred cash payment (60.00%), followed by ready cash payment (58.34%) and preferred pre-harvest contracts (35.83%).

Timing of sale: Less than two-third of the tribal farmers sold their produce immediately after harvest irrespective of prices (61.66%), followed by sold when in need of cash if prices are favorable (42.50%) and sold when it is convenient (38.34%).

Table 2. Distribution of the tribal farmers according to their marketing behaviour (N=120)

Marketing activities	Tribal farmers	
	No.	%
<i>Reasons for selling the farm produce at specific time</i>		
Low shelf life	94	78.33
Lack of cold storage facility	95	79.16
To preserve quality	26	21.66
Financial urgency	96	80.00
<i>Sales channels</i>		
Directly to the consumer	73	60.83
Brokers/middle men	74	61.66
Govt. agencies	40	33.34
Private agencies	47	39.16
<i>Place of sale</i>		
In the village	55	45.83
Nearby weekly market	80	66.66
Distant market	50	41.66
<i>Modes of transport</i>		
Motorcycle	26	21.66
Van /Lorry	50	41.66
Mini truck /Jeep/Auto	74	61.66
<i>Distance to the market</i>		
Below 10 km	93	77.50
11 km – 30 km	65	54.16
Above 30 km	18	15.00
<i>Reasons for selling at specific locations</i>		
Market is nearby	85	70.83
Transport facility available	70	58.34
Better price	79	65.83
<i>Selling to specific agencies</i>		

Near	70	58.34
Better price	67	55.83
<i>No time to engage self to sale produce directly to the consumer</i>		
Immediate cash payment	40	33.34
Previous agreement	81	67.50
Terms and conditions of sale	67	55.83
<i>Pre-harvest contract</i>		
Deferred cash payment	43	35.83
Ready cash payment	70	58.34
<i>Timing of sale</i>		
Immediately after harvest	72	60.00
When in need of cash	74	61.66
Convenience	51	42.50
<i>Source of market information</i>		
Newspaper	46	38.34
Television	36	30.00
Mobile phone calls	35	29.16
Market agents	72	60.00
Personally visit to market	54	45.00
<i>Grading</i>		
No grading	41	34.17
Grading based on size	34	28.33
Grading based on size, shape	74	61.66
Grading based on size, shape and colour	74	61.66
<i>Packing</i>		
Polybag	90	75.00
Gunny bag	72	60.00
Cotton cloth	45	37.50
Marketing Behaviour Index	49	40.83
	75.58	
*Responses are inclusive		

Table 3. Distribution of tribal farmers according to their overall marketing behaviour (N=120)

Category	No.	%
Low (<62.12)	23	19.17
Medium (62.12 - 68.00)	69	57.50
High (>68.00)	28	23.33
Total	Total	120
Mean = 65.06	SD = 2.94	

Table 4. Correlation between marketing orientation and marketing behaviour

Variable	Correlation coefficient (r)
Market orientation	0.269*
Marketing behaviour	

Source of market information: The tribal farmers obtained market information by mobile phone calls (60.00%), followed by market agents (45.00%), personally visited to market to get information (34.14%), newspaper (30.00%) and television (29.16%).

Grading: Majority of the tribal farmers revealed that the farm produce was graded based on size, shape and colour (75.00%), followed by based on size (61.66%), based on size & shape (61.66%) while the remaining farmers did not do any grading (28.33%).

Packing: The results revealed that 60.00 per cent of the tribal farmers packed their produce in polybags followed by cotton cloth (40.83%) and gunny bags (37.50%).

Based on the total scores, the overall marketing behaviour index of the tribal farmers reported was 75.58. The overall marketing behaviour of the tribal

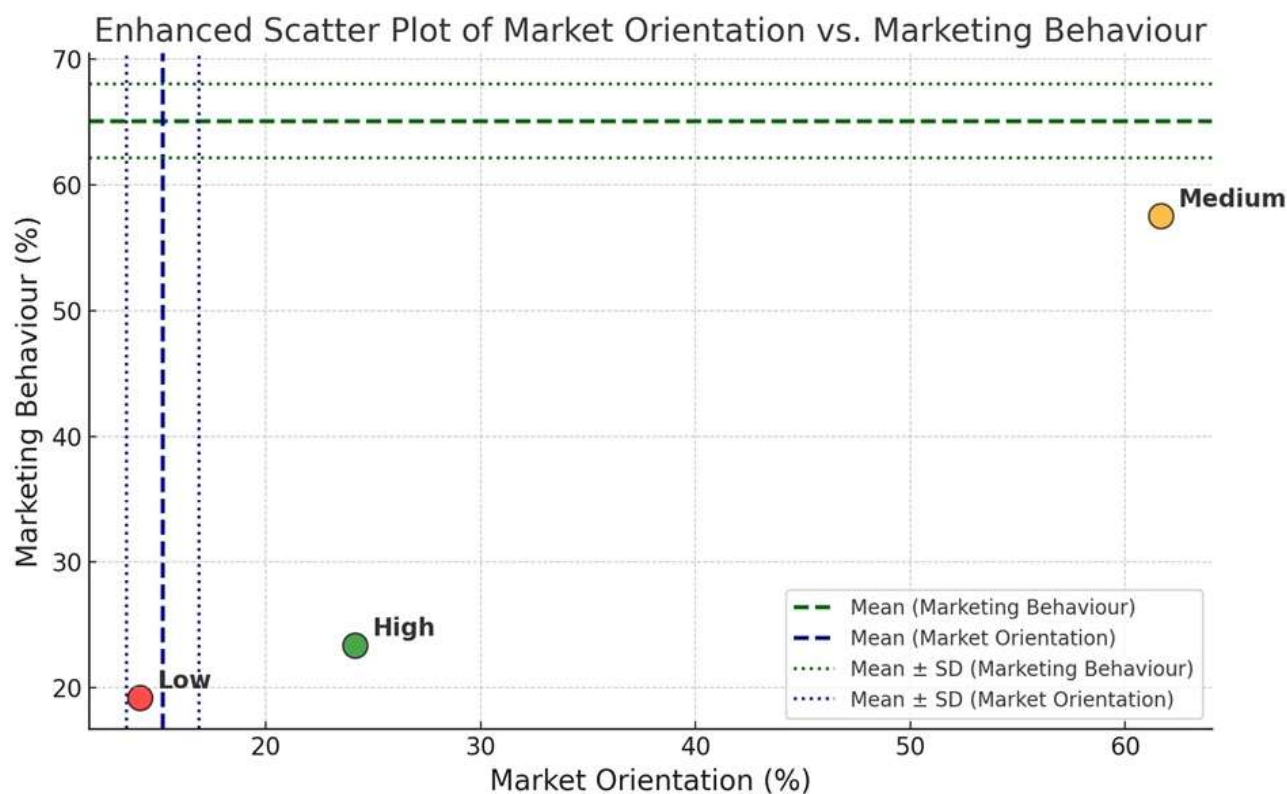


Fig. 1. Enhanced scatter plot market orientation vs. marketing behaviour

farmers revealed that more than half of them belonged to medium (57.50%) marketing behaviour followed, by high (23.33%) and low (19.17%) as presented in Table 3.

Enhanced scatter plot with market orientation and marketing behaviour is presented in Fig 1. The relationship Between marketing orientation and marketing behaviour was observed to be positive and significant ($r=0.269$) as presented in Table 4.

DISCUSSION

Market orientation: Most tribal farmers exhibited moderate market orientation, balancing between understanding market dynamics and practical selling strategies. A smaller segment showed high market awareness, while a few had minimal market orientation, indicating varied levels of engagement with market practices and economic considerations. Similar observations were also made by Johnson and Manoharan (2009); Kishor Kumar *et al.* (2019); Vijayabhinandana *et al.* (2018); Marbaniang *et al.* (2020); Revathi Nagamani *et al.* (2020); Sontakke (2020)

Marketing behavior: The findings of tribal farmers practices for selling their farm produce highlight

several key factors influencing their decisions and methods.

Reasons for selling at specific times: Financial urgency is the leading factor, which emphasizes the pressing need for cash that drives the timing of sales. The absence of cold storage facilities and the perishable nature of the produce further compel farmers to sell quickly to avoid losses.

Sales channels: When it comes to selling their produce, tribal farmers use multiple channels. This diversity in sales channels reflects both the need for intermediaries in reaching broader markets and the desire to engage directly with consumers where possible.

Place of sale: Proximity to the market plays a crucial role, making nearby markets the preferred choice due to convenience and reduced transport costs.

Modes of transport: Transportation methods vary, but mini trucks, auto rickshaws and jeeps are the most frequently used. Vans, trucks and motorcycles are also employed, reflecting the varied logistics options available to farmers based on their specific needs and resources.

Distance to market: The short distances highlight the

importance of local markets in the farmers selling strategies and the impact of proximity on their choice of sales locations.

Reasons for selling at specific locations: The proximity of markets, better prices and transport availability are key factors in farmers decisions about where to sell. These reasons indicate that convenience, economic benefits and logistical support are crucial in determining the selling locations.

Selling to specific agencies: Proximity of the agency, better prices and prior agreements are also significant factors influencing their choice. This preference suggests that immediate financial benefits and logistical convenience are highly valued.

Terms and conditions of sale: Deferred cash payment is preferred by a majority of farmers, with a substantial number also favoring ready cash payments. Pre-harvest contracts are less commonly preferred, indicating a tendency toward flexible payment arrangements that align with their financial needs.

Timing of sale: Most farmers sold their produce immediately after harvest, often regardless of market prices, driven largely by the need for cash. A smaller proportion sells based on cash needs or convenience, indicating a primary focus on immediate financial relief.

Source of market information: Farmers predominantly used mobile phone calls to obtain market information, with market agents and personal visits to markets also playing important roles. This reliance on mobile phones reflects the growing role of digital communication in accessing market data.

Grading and packing: Grading practices are prevalent, with most farmers grading their produce by size, shape and color. Packing methods are diverse, with polybags being the most common, followed by cotton cloth and gunny bags. These practices highlight the importance of maintaining product quality and ensuring effective packaging.

Marketing behavior index: The marketing behavior index of tribal farmers indicates a generally positive approach to market engagement. This score suggests that farmers are reasonably adept at navigating market conditions and applying effective strategies, reflecting a solid level of market orientation and practice in their selling activities.

Overall marketing behaviour of the tribal farmers: The marketing behavior of tribal farmers is often

characterized by a blend of traditional practices and emerging modern techniques. Typically, tribal farmers rely on local markets and community networks to sell their produce, which includes a variety of crops such as coffee, turmeric and other region-specific products. They often face challenges such as limited access to larger markets, inadequate infrastructure and lack of information about market trends and prices. Despite these hurdles, many tribal farmers are gradually adopting new methods to improve their marketing strategies. They are beginning to understand the importance of value addition, branding and direct sales to consumers, which can significantly enhance their income. Support from government programs and non-governmental organizations is also playing a crucial role in empowering tribal farmers with the necessary skills and resources to market their products more effectively. Similar observations were also made by Singh *et al.* (2016); Vineetha (2018), Nagar (2020), Riza (2021) Yogi *et al.* (2021) and Sravani (2022).

Relationship Between marketing orientation and marketing behavior: The scatter plot shows the relationship between market orientation and marketing behavior across three categories namely, low, medium and high. Market orientation measures how much an organization focuses on market needs and customer satisfaction, while marketing behavior reflects their marketing activities and strategies. The medium category has the highest values for both variables, suggesting a balanced approach in common. The low category, with the lowest values, indicates that organizations with less focus on market needs tend to have less proactive marketing activities. The high category, with relatively high values for both, represents a smaller but significant group that emphasizes understanding market needs and strong marketing strategies. The data suggests a positive correlation: as market orientation increases, so does marketing behavior. This implies that organizations more focused on market needs are likely to engage in more effective marketing activities. Most organizations are near the average for both variables, with fewer at the extremes. Overall, the analysis indicates that a higher market orientation is correlated to better marketing behavior, highlighting the importance of being market-driven for enhancing organizational presence and customer engagement.

CONCLUSION

Many farmers have a medium level of market orientation, a substantial number also exhibit high and low orientations, reflecting the tribal farmer's engagement with market dynamics. Factors such as financial urgency, lack of cold storage and the perishable nature of farm produce heavily influence the timing and channels of sales. Tribal farmers often sell their produce in nearby markets or to specific agencies due to logistical convenience and immediate cash needs. The choice of sales channels, modes of transport and terms of sale are shaped by practical constraints and market conditions. The positive and significant correlation between market orientation and marketing behavior suggests that improving market orientation can lead to more effective marketing practices. This emphasizes the importance of targeted interventions to enhance market access, provide better storage solutions and support strategic marketing efforts. The study emphasizes the need for tailored support to address the unique challenges faced by tribal farmers, ultimately aiming to improve their market outcomes and economic stability.

Funding : There was no funding support for conducting this research.

Declaration of competing interest: Authors have no competing interests.

Data availability: Data would be made available on request

Acknowledgement: The authors are deeply indebted to the tribal farmer respondents who formed the sample for the study.

Appendix: The supplementary data, table, graph in jpeg format for online visibility to the readers are submitted as an appendix.

Authors contribution: First author conducted the study under the guidance of other authors. The second, third & fourth authors edited and revised the manuscript. The authors approve of the content of the manuscript and agree to be held accountable for the work

REFERENCES

Johnson, B. and Manoharan, M. (2009). Marketing

behaviour of cashew farmers. *Indian Res. J. Ext. Edu.*, **9**(1), 6-10.

Kiran, S.; Bramel, P.J.; Reddy, L.J and Varaprasad, K.S. (2002). Traditional pigeon pea cultivation practices in North Coastal Andhra Pradesh- A Tribal legacy. ICRIASAT, Patancheru Andhra Pradesh.

Kishor Kumar, N.; Jyothi, V. and Vijayabhinandana, B. (2019). An insight into the profile of reliance foundation information services benefit carriers in Guntur district of Andhra Pradesh. *Front. in Crop Improv.*, **10**:424-429 (Special Issue-I)

Marbaniang, E.K.; Pasweth, D. and Chauhan, J.K. (2020). Marketing behaviour of tomato growers in West Khasi Hills district of Meghalaya. *Indian Res. J. Ext. Edu.*, **20** (2&3): 22-26

Nagar, A.K. (2020). Marketing behaviour of pea farmers in Jabalpur District, MP. *M. Sc. (Ag.) Thesis*. Jawaharlal Nehru Krishi Vishwa Vidyalyaya, Jabalpur.

Revathi Nagamani, P.; Jyothi, V.; Gopal, P.V.S and Mosha, K. (2020). A comparative analysis of the selected profile of characteristics of farmers in East Godavari district of Andhra Pradesh. *The Andhra Agril. J.*, **67** (3): 236-240

Riza, M. (2021). A study on entrepreneurial and marketing behaviour of cassava growers in Thiruvananthapuram district of kerala state. *M. Sc. (Ag.) Thesis*. University of agricultural sciences Bangalore.

Singh, R.; Chauhan, J.K.; Singh, J.; and Saharan, S.P. (2016). Meghalaya State Agricultural Produce Market Committee Act: Trend analysis of arrivals and price of major commodities. *Indian Res. J. Ext. Edu.* **16** (3) : 49-52

Sontakke, R.A. (2020). Marketing behaviour of green chilli growers in Amravati District. *M.Sc (Ag.) Thesis*. Dr. Punjabrao Deshmukh Krishi Vidyapeeth, Akola, Maharashtra.

Vijayabhinandana, B.; Jyothi, V. and Venkata Subbaiah, P. (2018). Enhancing the Role of Tenant Farmers in Achieving Nutrition Sensitive Agriculture. *Indian Res. J. Ext. Edu.*, **18** (1):15-21

Vineetha, A. (2018). Marketing behaviour of groundnut farmers in Anantapuramu district of Andhra Pradesh. *M. Sc. (Ag.) Thesis*. Acharya N.G. Ranga Agricultural University Guntur.

Yogi, Vikram; Pramod Kumar, Sitaram Bishnoi and Chauhan, J. K. (2021). An Economic Analysis of Price Behaviour of Kinnow Market in North-Western India (Punjab). *Indian Res. J. Ext. Edu.*, **21** (2&3): 53 – 59

