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Correlates of profile of chia growers' to their marketing behaviour

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Abstract

The present study was conducted in Washim district of Maharashtra with the objectives of studying the profile of chia growers and the relationship between their selected profile characteristics and marketing behaviour. An ex-post-facto research design was adopted for the study. Washim and Risod tehsils were selected purposively, and 120 chia growers from six villages were selected as respondents. Data were collected through personal interviews using a structured interview schedule and analysed using frequency, percentage, mean, standard deviation and correlation coefficient. The findings revealed that 52.50 per cent of the respondents belonged to the middle age group, while the majority belonged to the medium category of sources of information (73.34%), market orientation (67.50%), risk orientation (68.33%), innovativeness (65.84%) and economic motivation (75.00%). Regarding marketing behaviour, 85.83 per cent regularly collected market price information and 79.17 per cent sold their produce through brokers/middlemen. Overall, 70.83 per cent of the chia growers belonged to the good marketing behaviour category. The correlation results indicated that land holding, experience in chia cultivation, area under chia cultivation, income from chia cultivation, annual income, sources of information, market orientation, risk orientation and economic motivation had positive and highly significant relationships with marketing behaviour. Education, family size and innovativeness had positive and significant relationships with marketing behaviour. Age showed a negative and significant relationship, whereas mass media exposure showed a positive but non-significant relationship with marketing behaviour.

Keywords: Chia growers, marketing behaviour, chia marketing, market information, marketing channels, agricultural marketing, market access, price realization

Introduction

Agriculture is an important source of livelihood in India, but farmers face problems such as fluctuating market prices, rising input costs and production risks. These conditions have encouraged the adoption of alternative crops for diversification and additional farm income. Chia (*Salvia hispanica* L.) has gained attention in India as an emerging crop, mainly because of the nutritional value of its seeds and their increasing use in food products.

Chia belongs to the family Lamiaceae and is cultivated for its seeds, which contain omega-3 fatty acids, dietary fibre, protein and other bioactive constituents^[7]. The seeds are used in health drinks, bakery products and other food preparations. Its relatively short crop duration and suitability to different agro-climatic conditions have also encouraged interest in chia cultivation as an alternative crop.

In Maharashtra, particularly in the Vidarbha region, farmers have shown interest in alternative crops due to fluctuations in returns from major crops such as cotton. Chia cultivation has

gradually been taken up by some farmers in the region on a limited scale. With its cultivation, marketing of the produce becomes important for obtaining remunerative returns.

Marketing behaviour involves activities such as obtaining market information, selecting markets and marketing channels, transportation, grading, packaging and sale of produce. These practices may vary among growers according to their personal and socio-economic characteristics. However, information on the marketing behaviour of chia growers and its relationship with their selected profile characteristics is limited. Therefore, the present study was undertaken in Washim district of Maharashtra to study the marketing behaviour of chia growers and its relationship with their selected profile characteristics.

The present study was framed with the following objective

1. To study the profile of chia growers.
2. To study the relationship between profile of chia growers and their marketing behaviour.

Methodology

An ex-post-facto research design was used for the present investigation. The study was conducted during 2025–2026 in Washim district of Maharashtra. Washim district was selected purposively based on the potential area under chia cultivation. After consultation with the District Superintendent Agriculture Officer and ATMA personnel, Washim, two tehsils having maximum area under chia cultivation were selected purposively. From these tehsils, three villages each were selected purposively based on the area under chia cultivation, making a total of six villages. A

total of 120 chia growers, with 20 respondents from each selected village, were selected purposively for the study. Data were collected through personal interviews using a structured interview schedule prepared in English and Marathi.

The data were tabulated and the statistical tools namely percentage, mean, standard deviation, and Karl Pearson's coefficient of correlation were employed for the interpretation of the findings.

Results and Discussion

Table 1: Distribution of the respondents according to their selected profile

Sr. No.	Profile of the Chia Growers	n=120
		Percentage (%)
1	Age	
	Young age (Up to 35 years)	19.17
	Middle age (36 to 50 years)	52.50
	Old age (Above 50 years)	28.33
	Total	100.00
2	Education	
	Illiterate	6.67
	Primary School	10.83
	Middle School	11.67
	Secondary School	21.67
	Higher Secondary School	37.50
	College	11.66
	Total	100.00
3	Family size	
	Small (Up to 4)	50.00
	Medium (5–8)	40.00
	Large (Above 8)	10.00
	Total	100.00
4	Land Holding	
	Marginal (Up to 1.00 ha)	18.33
	Small (1.01 to 2.00 ha)	33.33
	Semi-Medium (2.01 to 4.00 ha)	36.67
	Medium (4.01 to 10.00 ha)	10.00
	Large (more than 10.00 ha)	1.67
	Total	100.00
5	Experience in chia crop cultivation	
	Up to 2 years	40.00
	3 to 4 years	52.50
	Above 4 years	07.50
	Total	100.00
6	Area under chia cultivation	
	Up to 1.07 ha	60.83
	1.08 – 1.94 ha	28.34
	Above 1.94 ha	10.83
	Total	100.00
7	Income from chia cultivation (Rs.)	
	Up to 149019	23.34
	149020 – 258439	55.00
	258440 – 367859	8.33
	367860 – 477279	10.83
	above 477280	2.50
	Total	100.00
8	Annual income (Rs.)	
	Up to 444340	22.50
	444341 – 669980	24.16
	669981 – 895620	30.00
	895621 – 1121260	14.17
	Above 1121260	09.17
	Total	100.00

9	Sources of information	
	Low	10.83
	Medium	73.34
	High	15.83
	Total	100.00
10	Mass Media Exposure	
	Low	14.17
	Medium	60.83
	High	25.00
	Total	100.00
11	Market Orientation	
	Low	15.00
	Medium	67.50
	High	17.50
	Total	100.00
12	Risk orientation	
	Low	20.00
	Medium	68.33
	High	11.67
	Total	100.00
13	Innovativeness	
	Low	15.83
	Medium	65.84
	High	18.33
	Total	100.00
14	Economic motivation	
	Low	10.00
	Medium	75.00
	High	15.00
	Total	100.00

The data presented in Table 1 show that the majority of the chia growers belonged to the middle age group (52.50%). Comparable findings were reported by [8, 13, 14]. Regarding education, the highest proportion of respondents had higher secondary education (37.50%), followed by secondary school education (21.67%). Similar findings were reported by [8, 13]. Half of the respondents (50.00%) had a small family size. In respect of landholding, 36.67 per cent of the respondents had semi-medium landholdings, followed by small landholdings (33.33%). Comparable findings were reported by [2, 13, 14]. Regarding experience in chia cultivation, 52.50 per cent of the respondents had 3 to 4 years of experience. Similar findings were reported by [5, 12]. A majority of the respondents (60.83%) had a small area under chia cultivation, up to 1.07 ha. Comparable findings were reported by [2, 8, 13]. In terms of income from chia cultivation, 55.00 per cent of the respondents belonged to the ₹149020–₹258439 category. Similar findings were reported by [1, 9]. Regarding annual income, the highest proportion of respondents (30.00%) belonged to the ₹669981–₹895620 category. Comparable findings were reported by [10]. Further, 73.34 per cent of the respondents had a medium level of sources of information. Similar findings were reported by [6, 15, 21]. Similarly, a majority of the respondents had a medium level of mass media exposure (60.83%), with comparable findings reported by [3, 19, 20]. Regarding market orientation, 67.50 per cent of the respondents belonged to the medium category, with similar findings reported by [12, 22]. In respect of risk

orientation, 68.33 per cent of the respondents belonged to the medium category, with comparable findings reported by [3, 6, 21], innovativeness (65.84%) with similar findings reported by [5], and economic motivation (75.00%). Comparable findings were reported by [4, 16, 18]. Overall, the profile of the chia growers indicated that they were predominantly middle-aged, had medium levels of sources of information, mass media exposure, market orientation, risk orientation, innovativeness and economic motivation, and were characterised by semi-medium landholdings and a small area under chia cultivation.

Marketing behaviour of chia growers

Regarding overall marketing behaviour, 70.83 per cent of the chia growers belonged to the good marketing behaviour category, followed by 20.83 per cent who belonged to the very good category and 8.33 per cent who belonged to the poor category. The mean marketing behaviour score was 44.53 with a standard deviation of 4.20. Further, 85.83 per cent of the respondents regularly collected information regarding chia market prices, while 79.17 per cent sold their produce through brokers/middlemen.

Relationship between Profile Characteristics of Chia Growers and their Marketing Behaviour

The coefficient of correlation was calculated to assess the relationship between the profile characteristics of chia growers and their marketing behaviour. The results are presented in Table 2.

Table 2: Coefficient of Correlation of selected characteristics of chia growers with their marketing behaviour

Sr. No.	Independent Variable	Correlation Coefficient (r)
1	Age	-0.2334*
2	Education	0.1981*
3	Family size	0.1816*
4	Land Holding	0.2370**
5	Experience in chia cultivation	0.2943**
6	Area under chia cultivation	0.3530**
7	Income from chia cultivation	0.2421**
8	Annual income	0.2454**
9	Sources of information	0.2749**
10	Mass media exposure	0.1069NS
11	Market orientation	0.2540**
12	Risk orientation	0.2449**
13	Innovativeness	0.2062*
14	Economic motivation	0.2682**

*Significant at 0.05 level of probability.

**Significant at 0.01 level of probability.

NS – non-significant

The findings presented in Table 2 revealed that among the fourteen independent variables, age showed a negative and significant relationship with marketing behaviour. The finding was contrary to the findings reported by [11, 15]. Education, family size and innovativeness showed a positive and significant relationship with marketing behaviour at 0.05 level of probability. The finding regarding education was in agreement with the findings reported by [6, 11]. Landholding, experience in chia cultivation, area under chia cultivation, income from chia cultivation, annual income, sources of information, market orientation, risk orientation and economic motivation showed a positive and highly significant relationship with marketing behaviour at 0.01 level of probability. The findings regarding landholding were in agreement with the findings reported by [6, 11, 15]. The finding regarding experience in chia cultivation was in agreement with [15]. The finding regarding area under chia cultivation was in agreement with [6, 15]. The finding regarding annual income was in agreement with [6, 11, 15]. The finding regarding sources of information was in agreement with [6, 15]. The finding regarding market orientation was in agreement with [11], while the finding regarding risk orientation was in agreement with [6]. Mass media exposure showed a positive but non-significant relationship with marketing behaviour. Among the variables studied, area under chia cultivation showed the highest positive correlation with marketing behaviour, followed by experience in chia cultivation and sources of information. Thus, the findings indicated that most of the selected profile characteristics were positively associated with marketing behaviour, whereas age was negatively associated and mass media exposure did not show a significant relationship with marketing behaviour.

Conclusion

It was concluded that most of the chia growers were middle-aged, had higher secondary education and belonged to the semi-medium landholding category. A higher proportion had 3–4 years of experience in chia cultivation and cultivated chia on a small area. The majority had medium levels of sources of information, mass media exposure, market orientation, risk orientation, innovativeness and economic motivation. Most of the growers regularly collected information on chia market

prices, sold their produce through brokers/middlemen and marketed their produce at APMC Washim. Overall, 70.83 per cent of the chia growers belonged to the good marketing behaviour category. Landholding, experience in chia cultivation, area under chia cultivation, income from chia cultivation, annual income, sources of information, market orientation, risk orientation and economic motivation showed positive and highly significant relationships with marketing behaviour, whereas education, family size and innovativeness showed positive and significant relationships. Age showed a negative and significant relationship, while mass media exposure showed a positive but non-significant relationship with marketing behaviour.

References

1. Aglawe DD. Technological gap in turmeric production technology. Rahuri (Maharashtra): Mahatma Phule Krishi Vidyapeeth; 2012.
2. Ankita MB. Production and marketing behaviour of onion growers. Akola (Maharashtra): Dr. Panjabrao Deshmukh Krishi Vidyapeeth; 2017.
3. Baraker SK, Manjunath KV, Lalitha KC, Lat CM. Profile characteristics and marketing behaviour of onion growers in Gadag district of Karnataka. Indian J Econ Dev. 2021;9:1-6.
4. Bidve GR, Sasane GK, Wankhade SA, Bhang SB. Socio-economic, communicational and psychological characteristics of pomegranate growers from western Maharashtra. Pharma Innov J. 2021;10(9S):283-287.
5. Chengappa KK. Marketing behaviour of coffee growers in Kodagu district of Karnataka. Rahuri (Maharashtra): Mahatma Phule Krishi Vidyapeeth; 2017.
6. Devde PU. Marketing behaviour of vegetable growers. Latur (Maharashtra): Vasantrao Naik Marathwada Krishi Vidyapeeth, College of Agriculture; 2017.
7. Güney HD, Göbel P. Chia seeds (*Salvia hispanica* L.): a comprehensive look at their attributes, phytochemical profile, and impact on health. GIDA. 2024;49(4):768-778.
8. Jangwad NP. Perception of respondents regarding environmental risk in use of pesticide. Amravati (Maharashtra): Dr. Panjabrao Deshmukh Krishi Vidyapeeth; 2018.
9. Kadam ST. A study of technological gap in ginger cultivation. Rahuri (Maharashtra): Mahatma Phule Krishi Vidyapeeth; 2008.
10. Manjunath K, Amaresh Kumar K, Bai DS. Profile analysis of mango growers of Karnataka. J Pharmacogn Phytochem. 2019;8(2):904-908.
11. Maratha P. A study on marketing behaviour of vegetable growers in Morar Block of Gwalior district, M.P. Gwalior (Madhya Pradesh): Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, College of Agriculture; 2015.
12. Maratha P, Badodiya SK. Study on marketing behaviour and other attributes of vegetable growers at Kota block of Kota district in Rajasthan. Int J Pure Appl Biosci. 2017;5(1):329-337.
13. Mathkar AU, Koshti NR, Shambharkar YB, Sadawarte AK, Nagpure SC. Profile analysis of vegetable growers in Akola district, Maharashtra. Int J Agric Extension Social Dev. 2026;9(6S):177-182.
14. Meshram HV, Lambe SP, Gawande SA, Gomase AS,

- Dangore UT. Farmers' preference for social media platforms for agricultural information. *Int J Agric Extension Social Dev*. 2026;9(8):425-428.
15. Parab YS. Marketing behaviour of mogra and kagda growers in Palghar district. Dapoli (Maharashtra): Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth; 2016.
 16. Raut AG. Entrepreneurial behaviour of gram seed producers. Amravati (Maharashtra): Dr. Panjabrao Deshmukh Krishi Vidyapeeth; 2018.
 17. Sapate AU. Marketing behaviour of pomegranate growers. Rahuri (Maharashtra): Mahatma Phule Krishi Vidyapeeth; 2018.
 18. Sharma A, Venyo V, Chauhan J. Entrepreneurial behaviour of potato growers in Kohima district of Nagaland. *Indian Res J Ext Edu*. 2014;14(2):82-86.
 19. Shirur M. A study on mushroom entrepreneurship and consumer behaviour in Karnataka [PhD thesis]. Bangalore (Karnataka): University of Agricultural Sciences; 2015.
 20. Sindhu K. A study on entrepreneurial behaviour of agripreneurs in Vishakhapatnam district of Andhra Pradesh. Hyderabad (Telangana): Acharya N. G. Ranga Agricultural University; 2015.
 21. Tijare DR. Entrepreneurial behaviour of nursery owners. Rahuri (Maharashtra): Mahatma Phule Krishi Vidyapeeth; 2018.
 22. Vineetha A. Marketing behaviour of groundnut farmers in Anantapuramu district of Andhra Pradesh. Guntur (Andhra Pradesh): Acharya N. G. Ranga Agricultural University; 2018.