P-ISSN: 2618-0723 E-ISSN: 2618-0731



NAAS Rating (2025): 5.04 www.extensionjournal.com

## **International Journal of Agriculture Extension and Social Development**

Volume 8; Issue 9; September 2025; Page No. 403-406

Received: 11-07-2025

Accepted: 13-08-2025

Peer Reviewed Journal

# Socio-demographic profile, food habit and dietary practice among the *Paraja* community of Koraput

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**DOI:** https://www.doi.org/10.33545/26180723.2025.v8.i9f.2435

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#### Abstract

Poor nutrition and health disparities remain major challenges among population living in socio-economically deprived settings worldwide. Food choices and associated dietary behaviours which determine the nutritional and health outcomes are profoundly affected by a myriad of factors including the interplay of cultural, socio economic, ethical, and sustainability considerations. A study among 400 *Paraja* households was conducted using descriptive and cross-sectional design. Data related to Socio- demographic profile, dietary practice and eating behaviour were collected through pre-tested interview schedule. Association between socio demographic variables and meal pattern was analysed by chi square test. Socio economic class determined using Pareek Scale, indicate majority of households in lower-middle class. Low level of literacy was also observed in the sample area. The community predominantly rely on non-vegetarian diet. Except educational level of head of the households, no other socio demographic variable is associated with meal pattern. There is a need to improve agricultural productivity, enhance market access, and promote income-generating opportunities to support livelihood and food security, alongside implementing nutrition education programs to create nutritional awareness within the community.

Keywords: Socio demography, dietary practices, meal pattern, Paraja

### Introduction

India is home to 104 million Indigenous people, officially recognized as Scheduled Tribes (STs) or Adivasis, which comprises 8.6% of the country's total population and ranked the second largest tribal population in the world. Living in hills and forests, these communities have a close proximity with nature and uphold unique cultural heritage and rich traditional knowledge. Tribal lifestyles are instrumental in strengthening national integrity, crystallizing social solidarity and promoting communal harmony in the country (Saikia and Chauhan, 2021) [14]. However, despite this rich heritage, they remain marginalized, depriving of livelihood, education and access to health care (IWGIA, 2024).

Odisha is the third largest tribal populated state of the country, constituting 22.85% of the total state population and 9.17% of the country's tribal population. The state also hails 62 divergent types of tribal communities, including 13 Particularly Vulnerable Tribal Groups (PVTGs), mostly concentrated in the districts like Koraput, Sundergarh, and Mayurbhanj. Among them, the *Paraja* tribe of Koraput district is one of the prominent tribal communities, known for its distinct culture, custom and deep connection with nature (Census, 2011).

Recent research has evidenced serious nutrition related problems among the tribal women and children in the form of under nutrition, anaemia, and stunted growth (Naik *et al.*, 2020) [13]. Numerous studies also indicate that people living in lower socio-economic backgrounds are often suffer from

poor nutrition and health (Kivimaki *et al.*, 2020 and, Zhu *et al.*, 2021) <sup>[7, 16]</sup>. Food choices and associated dietary behaviours which determine the nutritional and health outcomes are profoundly affected by a myriad of factors including the interplay of cultural, social, ethical, and sustainability considerations. (Jayasinghe *et al.*, 2025) <sup>[5]</sup>. Food beliefs and taboos, especially during critical phases like pregnancy, lactation, menstruation, and illness also play significant role in determining dietary practices (McNamara *et al.*, 2019) <sup>[12]</sup>.

Although there is a growing concern over the issues of tribal nutrition and health, there is still a dearth of research focusing on socio cultural system, food habit and dietary practices in specific tribal groups. In this context, the present study was undertaken to assess the socio economic and demographic profile of the *Paraja* community and to explore and document their dietary practices and food belief system. By adopting a culturally sensitive and community-based approach, the study seeks to add valuable insights and contribute to policy strategies tailored to tribal context.

#### Methodology

A descriptive and cross-sectional design was adopted for the present study to provide a comprehensive understanding of the socio-economic profile, food habit and dietary practices of the *Paraja* community. The study was conducted across 25 selected villages inhabited by the *Paraja* community in Koraput district, Odisha. A sample of 400 households was

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selected using simple random technique. A pre-tested interview schedule was used to collect data on socio-demographic variables including age, gender, education, number of family member, type of family and economic characteristics including occupation, annual income, food habits, meal pattern and eating behaviour. Socio-economic class was determined using the Pareek Scale (Majumder *et al.*, 2021) <sup>[11]</sup>. Data were statistically analysed using the statistical package SPSS. Descriptive statistics like frequency and percentage was used to represent the quantitative data. The association between socio demographic variables and meal pattern was analysed using chi square test and *P* value less than 0.05 was considered statistically significant.

#### **Results and Discussion**

The socio demographic profile of the respondents was presented in Table 1. The findings revealed that more than 60% of the population falls in the age group of 16-60 years, i.e. the productive age group. A substantial percentage of child and adolescent population (36.45 and a very lower percentage of elderly population (2.22%) was observed. A slightly higher percentage (53.29%) of female population in comparison to male was observed. A majority of families were medium-sized (61.50%) with 4 to 6 members. More number of joint families (58%) was observed in comparison to nuclear families.

Slightly above 50% literacy was observed among head of the households, but only one was identified as graduate. About 24% had primary level of education and 14% each were studied up to high school or middle school. A high level of female illiteracy (69.5%) was noted among the Paraja community. Only 14% respondents had attained primary level education followed by 8% had completed either middle or high school education. Insignificant percentages (0.5%) of women were identified as graduates.

A high percentage (90%) of households derives their livelihood from agriculture, which is their primary occupation. Nearly half the families (48.5%) earn ≤₹10,000 and only 2% earn above ₹30,000. A large majority (75.25%) of household were in the lower-middle class and not a single household in upper middle or upper-class.

The findings indicate a young, predominantly agrarian population with economic marginalisation and low literacy levels, particularly among women. The prevalence of joint, medium-sized families highlights traditional social structures. Poor income and education pattern restrain food security, dietary diversity, and overall development.

Similar to these findings, Archana *et al.* (2023) <sup>[2]</sup> also observed high level of illiteracy, indebtedness, lack of awareness, poor infrastructure and unemployment among Urali Tribes of Tamil Nadu. However, Bhatt *et al.* (2023) <sup>[3]</sup> reported 90% respondents were literates and 8% were illiterate among the Jarda community of western Himalaya. Kulkarni, *et al.* (2024) <sup>[8]</sup> observed that more than 50% joint family systems, low literacy rates and majority households belong to socioeconomic class IV and V among tribal Population at Udaipur, Rajasthan. Saina *et al.* (2025) <sup>[15]</sup> reported that majority of households were of medium sized with 5 to 7 members and with medium annual income (Rs. 56,000 to Rs. 1,20,000) among tribal farmers of Andhra Pradesh. Majority of farmers found in the low income

category ranging the annual income from less than 50 thousand (Kumar *et al.*, 2025) [9]. Most of the respondents (85.84%) had medium annual incomes (₹67,110.19–₹1,76,639.82) and low educational levels (Akhila *et al.*, 2025) [1].

Table 1: Socio-Demographic Profile of the respondents

Sl. No.	Variables	Category	No (%)
1		0-15 years	771 (36.45)
	Age (N=2115)	16-60 years	1297 (61.32)
		Above 60 years	47 (2.22)
2	Gender	Male	988 (46.71)
	(N=2115)	Female	1127 (53.29)
	Family size (N=400)	Small (< 3 member)	67 (16.75)
3		Medium (4 to 6 member)	246 (61.50)
	(N=400)	Large (> 6 member)	87 (21.75)
4	Family Type	Nuclear	168 (42.00)
	(N=400)	Joint	232 (58.00)
	Educational	Illiterate	195 (48.75)
	qualification of	Primary	95 (23.75)
5	head of the	Middle School	56 (14.00)
	household	High School	53(13.25)
	(N=400)	Graduate and above	01 (0.25)
	Educational qualification of respondents (N=400)	Illiterate	278 (69.50)
		Primary	56 (14.00)
6		Middle School	32 (8.00)
		High School	32 (8.00)
		Graduate and above	02 (0.50)
	Occupation of	Agricultural	360 (90.00)
7	head of the	Unskilled	27 (6.75)
,	household	Skilled	11 (2.75)
	(N=400)	Professional	2 (0.50)
	Family	≤ Rs.10000	194 (48.50)
8	monthly	Rs. 10001-20000	152 (38.00)
	income	Rs. 20001-30000	46 (11.50)
	(N=400)	> Rs. 30000	8 (2.00)
9		Lower lower	11 (2.75)
	Socio-	Lower middle	301 (75.25)
	Economic	Middle	88 (22.00)
	class (N=400)	Upper Middle	0 (0.00)
	Upper		0 (0.00)

The dietary practices and eating behaviour are presented in Table 2. It was observed that almost all the respondents were non-vegetarian. It was also observed that 87.25% respondents follow a three-meal pattern, 9.25% follow two meal pattern and only 3.5% follow more than three meal pattern. Only 12.75% respondents were occasionally reported to skip meals. Regarding outside eating habits, 34.5% respondents eat outside daily, 17% respondents weekly, and 40.5% respondents occasionally. Only 8% respondents reported never eating outside. The findings suggest that while most respondents maintain a regular three-meal non-vegetarian diet, frequent outside eating habits indicate a gradual dietary transition influenced by changing lifestyles. A preference for non-vegetarian diet is also observed among the tribal community of Jharkhand (Kumari and Prasad, 2022) [10]. Similar to the findings of the present study, Chauhan et al. (2025) [4] also observed that 50.65% of the respondents had their meals three times a day. However, Jerath et al. (2020) [6] noticed a two-meal pattern among Sauria Paharias, a Vulnerable Tribal Community in Jharkhand, India.

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Table 2: Dietary Practices and Eating Behaviours of Respondents

Sl. No.	Variables	Category	No (%)
01	Food Habit	Vegetarian	02 (0.5)
		Non-Vegetarian	398 (99.50)
02		Two-Meal	45(11.25)
	Meal Pattern	Three-Meal	343 (85.75)
		More than Three Meal	12 (3.00)
03	Meal skipping	Yes	51 (12.75)
		No	349 (87.25)
04		No	32 (8.00)
	Outside Eating Habit	Occasionally	162 (40.50)
		Weekly	68 (17.00)
		Daily	138 (34.50)

The Chi-square test conducted to examine the association between socio demographic variables and meal pattern of the respondents and presented in Table 3. From the table it was observed that there is no statistically significant association between family type, family size, and Socio-Economic class with meal pattern (p < 0.05). Only statistically significant association between the education level of the head of the family and educational level of respondents and meal pattern (p < 0.05) was observed.

**Table 3:** Association between socio demographic variables with meal pattern

	mear patte	rn					
	Daily Meal Pattern						
Variables	2 Meal	3 Meal	4 Meals				
	pattern	Pattern	Pattern				
Family Type							
• Joint	29	198	5				
Nuclear	16	145	7				
χ <sup>2</sup> =3.	53  (df = 2), P	/alue=0.171					
Size of family							
<ul> <li>Small</li> </ul>	8	57	2				
<ul> <li>Medium</li> </ul>	30	209	07				
<ul> <li>Large</li> </ul>	7	77	3				
χ²=1.6	69 (df = 4), P v	alue = $0.792$					
Education of head of the family							
Illiterate	25	167	3				
Primary	16	72	7				
Middle School	3	51	2				
High School	1	52	0				
Graduate and above		1					
	49 (df = 8), P v						
Educ	ation level of 1	respondents					
Illiterate	35	236	7				
Primary	07	47	2				
Middle School	02	28	02				
High School	01	30	01				
Graduate and above	0	2	0				
	87 (df = 8), P v						
Socio economic class							
Lower lower	1	10	0				
Lower middle	34	258	9				
Middle	10	75	3				
$\chi^2 = 1.9$	96 (df =4), P va	alue = $0.743$					

#### Conclusion

The present study presents valuable insights into the sociodemographic profile, dietary practices and eating behaviour of the *Paraja* community in Koraput, Odisha. The results highlight a predominantly agrarian population with limited income and low literacy level, that significantly influence their nutrition behaviour.

To create nutritional awareness among the community implementation of culturally appropriate nutrition education programs, honouring indigenous beliefs while incorporating scientifically sound dietary practices is essential. This also calls for the need to improve agricultural productivity, market access, and income-generating opportunities to support livelihood and ensure Food Security. Further indepth qualitative research and dietary assessments are necessary to identify nutrient deficiencies and health outcomes across different age and gender groups within tribal communities.

Funding: Funded by ICSSR, New Delhi.

**Declaration:** Authors have no conflict of interest.

#### Acknowledgment

Authors are grateful to Rama Devi Women's University, Bhubaneswar for providing necessary support; ICSSR, New Delhi for the financial support and respondents of surveyed villages for providing the valued information.

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