

Socio Economic Status SES of Baiga Tribe as Per Modified Kuppuswamy Scale 2023

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Abstract:

The main objective of the present research study is to study the socio-demographic profile and socio-economic status of the Baiga tribe. In the form of the research area, 102 respondents from each development block of 3 districts (Bilaspur, Kabirdham and Mungeli) of Chhattisgarh, in this way, a total of 306 respondents were selected in the research study and data were collected from them. The research study is based on primary data, in which interview schedule, semi-participant observation, photographic research tools and techniques have been used for data collection. In the study, the Modified Kuppuswamy Scale-2023 has been used to find out the socio-economic status of the Baiga tribe, in which it was found that the Baiga tribe of Chhattisgarh comes in the Upper Lower Scale (IV). It is necessary to study the socio-economic status of any family because it reveals the family's living conditions, educational status of the family, occupation, income and place of the family in the society.

Keyword: Socio-demographic Profile, Socio-economic Status, Kuppuswamy Scale, Baiga tribe, Chhattisgarh.

INTRODUCTION:

Socioeconomic status encompasses a range of economic, social, and cultural factors that influence an individual's or family's position within society and their access to resources and opportunities (Park & Park 2023); (Sood & Bindra 2022). The relationship between SES and health outcomes often follows a gradient, where individuals at each level of the socioeconomic hierarchy experience varying levels of health risks and outcomes. This gradient underscores the importance of addressing social determinants of health and implementing policies aimed at reducing socioeconomic disparities to improve overall population health (Ayoub & Raja 2023).

Socioeconomic status (SES) scales are one of most important crucial tools/determinants used in various fields such as sociology, economics, public health, and market research to assess an individual or household's relative position in society based on factors like income, education, and occupation (Khairnar et al. 2017). In India, several scales have been developed over the years to measure SES, each with its own methodology and applicability. Some of the noteworthy SES scales include Rahudkar scale (1960); B.J. Prasad (1961); Udai Parikh (1964); Jalota scale (1970); Kulshreshta scale (1972); Modified Kuppuswamy scale (1976); Shrivastava scale (1978); Bhardwaj scale (2001) & O. P. Aggarwal (2005) (Sing et al. 2017).

It's indeed important to recognize the diversity within Indian society, especially concerning tribal

communities. The Baiga community, like many other tribal groups in India, has a unique way of life, often closely tied to their environment and traditional practices. The three types of livelihood are the adaptability of tribal communities to their surroundings:

- 1. Agriculture or agriculture labor:** This reflects a connection to the land and traditional farming practices. However, as you noted, this may only provide sustenance for a few months due to factors like seasonal variations and dependence on rain-fed agriculture.
- 2. Manufacturing of forest-based products or bamboo utensils:** This showcases their utilization of natural resources and indigenous skills. It also indicates a sustainable approach to livelihood, often in harmony with their environment.
- 3. Short-term employment:** This could be through government schemes or relief work, which provides additional income during times when other means of livelihood may not be sufficient. However, this type of employment might not be as stable or reliable as the other two. The dependence on multiple sources of livelihood underscores the resilience of tribal communities in adapting to changing circumstances and leveraging various opportunities available to them.

Kuppuswamy's SES scale:

The Modified Kuppuswamy SES Scale is widely used in both urban and rural areas of India for assessing socioeconomic status (Wani, 2019). This scale was devised by Kuppuswamy in 1976 and involves a composite score based on the education and occupation of the family head, along with the family's monthly income (Mishra et al. 2003); (Masthi et al. 2013). The scale typically assigns scores ranging from 3 to 29, with higher scores indicating higher socioeconomic status. These scores are then used to classify the study populations into different SES categories, typically five in number. While factors like education and occupation tend to remain relatively stable over time for the head of the family, the income categories in the scale can become outdated due to changes in the value of currency and inflation. As a result, there is indeed a need to periodically update the scale to ensure its continued relevance and applicability to study populations. One way to update the scale is by adjusting the income categories based on changes in the consumer price index (CPI) or other relevant economic indicators. This adjustment helps to account for inflation and ensure that the income thresholds used in the scale reflect the current purchasing power and economic conditions (Wani, 2019); (Saleem et al. 2021); (Kumar et al. 2022); (Radhakrishnan & Nagaraja 2023).

Aims and Objectives of the study:

The objectives of the study are as follows:

1. To study the social-demographic profile of Baiga tribe.
2. To study the socio-economic status of Baiga tribe.

Importance of the study:

By understanding the socio-economic status of the Baiga tribe, we can tailor interventions and support systems to improve their education, Occupation and monthly income. This could involve providing educational opportunities, vocational training, access to healthcare, and support for entrepreneurship within their community. Additionally, it's important to consider cultural sensitivity and community involvement in any initiatives aimed at improving their socio-economic status. Engaging with community leaders and members can help ensure that interventions are well-received and culturally appropriate.

Overall, this study has the potential to make a positive impact on the lives of the Baiga tribe by addressing key socio-economic factors that influence their well-being and opportunities for advancement.

Material and methods:

Research design: The study was a cross-sectional population-based descriptive and exploratory type of research design.

Sampling technique: Purposive sampling method was adopted for selecting the three Baiga dominating districts i.e. Kaberdham, Bilaspur and Mungeli. The blocks selected for data collection were Bodla, Kota and Lormi. The villages with predominating Baiga population were listed as per information provided by Tribal Research and Training Institute (TRTI), Raipur and the selection of villages was done by lottery system. Baiga tribe is a particularly vulnerable tribal group that resides in inaccessible remote areas hence, 102 eligible respondent were selected from each block, thus 306 respondent formed the sample for this study.

Nature of research: Both qualitative and quantitative data were considered for the present study.

Tools and techniques of data collection: Primary and secondary data were collected for the present investigation.

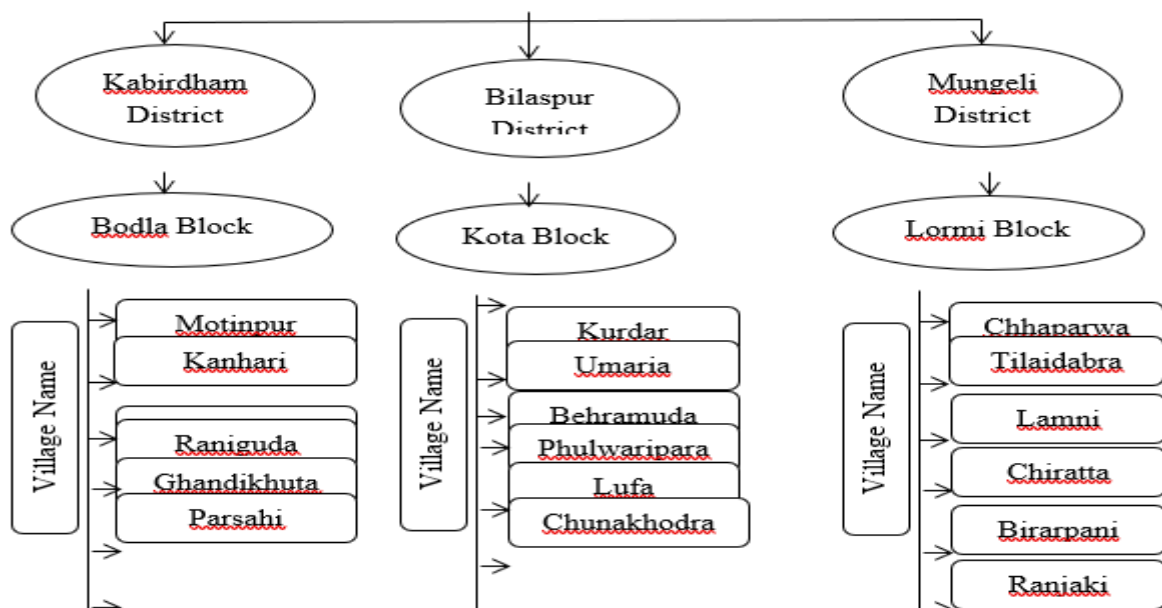
Primary data: Interview schedule, Observation, Focus group discussion (FGD), and Photography tools and techniques used for primary data collection.

Secondary data: Published research paper/article/thesis and govt. website used for secondary data collection.

Data analysis: MS office, SPSS and Modified Kuppuswamy Scale-2023 used for data analysis.

Area and people: The present study entitled “**Socio-economic Status (SES) of Baiga tribe as per Modified Kuppuswamy Scale-2023**” was conducted in 18 villages of three blocks of Chhattisgarh i.e. Bodla block of Kabirdham district, Kota block of Bilaspur district and Lormi block of Mungeli district. The details of the area and people with the methods followed for the present study have been discussed below.

Research area: The following research areas have been selected for the present study:



Baiga tribe: The Baiga tribe holds a special place among the tribes of the Central Provinces. Considering the backward development level of this tribe, the President has placed it in the Particularly Vulnerable Tribe (PVTG) group. Being a particularly vulnerable tribe, the Baiga tribe is protected by the central and state governments, as a result of which many government schemes are being run for this tribe. Baiga tribe is as ancient as the tribe, equally ancient is the culture of Baigas. Baiga tribe is preserving its culture. Their lifestyle and food habits are very simple (Vaishnav, 2017). People of Baiga tribe worship the tree and consider Budha Dev and Dulha Dev as their deities. Baigas believe in witchcraft and witchcraft, they are known as "medicine men" among the tribes. Their dress is very minimal. Baiga men mainly wear a langot and gamchha on their heads, while Baiga women wear a saree (kapchi) and a polkha. But at present, due to the effect of modernization, the youth living in the plains have started using shirt-pants also. Women of Baiga tribe are fond of jewelery and tattooing. Tattooing is very important in their culture.

Institutional Ethical Clearance (IEC):

Ethical approval was taken from Institutional Ethical Committee of Pt. Ravishankar Shukla University, Raipur (IEC Ref. No: 266/IEC/PRSU/2019 Date: Feb 15, 2019). The purpose of the study was explained to individual participants and informed consent was taken for data collection. Confidentiality was maintained and the data was used only for research purpose.

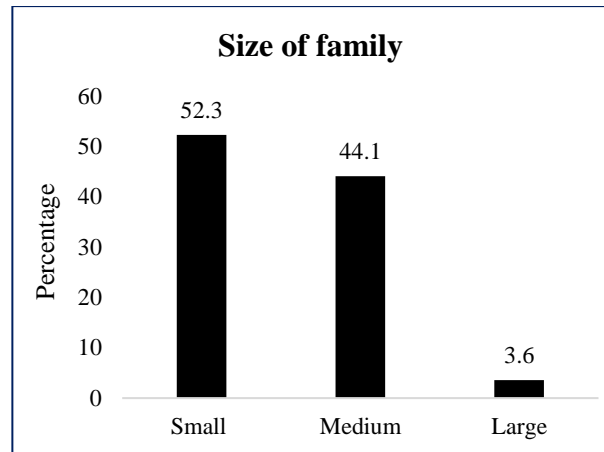
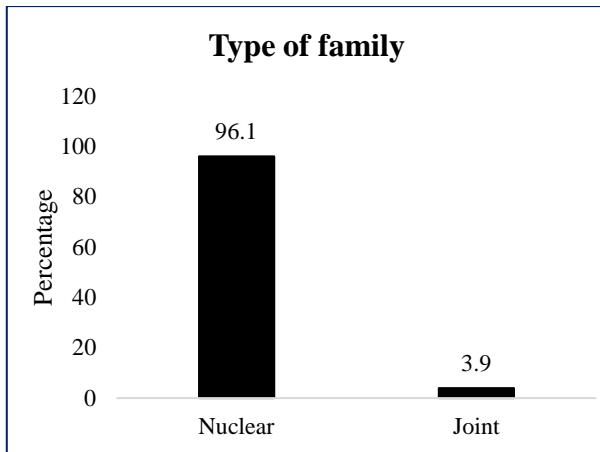
Results and Discussion:

Results and discussion is divided into the following two parts-

A. Socio-demographic profile:

Table 1.1			
Table showing type and size of family of the respondents			
Type of family (N=306)			
S. No.	Type of family	Frequency	Percent
1.	Nuclear	294	96.1
2.	Joint	12	3.9
Size of family (N=306)			
S. No.	Size of family	Frequency	Percent
1.	Small	160	52.3
2.	Medium	135	44.1
3.	Large	11	3.6
	Total	306	100.0

Family Size: Small= up to 4, Medium= 5-7 and Large= more than 7 members



The Baiga population under study showed that majority of the families were of nuclear type i.e. 96.1% and only 3.9% of the population were of joint type. Most of the tribal population of Chhattisgarh has been converted into nuclear type of family as reported by other authors.

With regard to family size, maximum 52.3% of the respondents were found to have small-sized families (up to 4 members), 44.1% medium-sized (5-7 members) while 3.6% of the respondents were found to have large-sized families (>7 members).

Table 1.2
House hold features of the respondents

S. No.	House hold feature	Pattern/type	Frequency	Percentage
1.	House Type (N=306)	Kuchcha	238	77.8
		Semi Pucca	46	15.0
		Pucca	22	7.2
2.	Wall / House Type (N=306)	Mud	238	77.8
		Brick+Mud	46	15.0
		Brick+cement	22	7.2
3.	Number of Rooms (N=306)	1	93	30.4
		2	177	57.8
		3	30	9.8
		>3	6	2.0
4.	Source of drinking water (N=306)	Hand pump	186	60.8
		Tube well	55	18.0
		Well	26	8.5
		Hand pump and Tube well	30	9.8
		Hand pump and well	9	2.9
5.	Source of light (N=306)	Electricity	189	61.8
		Kerosene	18	5.9
		Solar light	99	32.3
6.	Separate kitchen (N=306)	Yes	42	13.7
		No	264	86.3
7.	Source of fuel	Wood	306	100

8.	Toilet Facilities (N=306)	Yes	285	93.1
		No	21	6.9
8.1	Use of toilet facilities (N=285)	Yes	40	14.0
		No	245	86.0
8.2	Hand washing after defecation (N=306)	Soap	2	0.6
		Soil	122	39.9
		Plain water	182	59.5
9.	Land Ownership (N=306)	Yes	255	83.3
		No	51	16.7
9.1	Area of Land Ownership (N=255)	<1 Acre	126	49.4
		1 Acre	51	20.0
		2 Acre	61	23.9
		3 Acre or more	17	6.7
9.2	Type of land (N=255)	Irrigated	107	65.5
		Non-irrigated	139	54.5

Table 1.2 shows the household characteristics of the Baiga tribe. The table revealed that 77.8% of the respondents had kuccha type of house and only 7.2% had pucca type of house. 57.8% of the households had two rooms and 30.4% had a single room household. 60.8 percent of the respondents had hand pump as a source of drinking water, 18.0 percent used tube well water and 8.5% used well water and the rest of the respondents used either of two. 61.8% respondents had the facility of electricity in their household and the most remarkable observation in the area under study was that 32.3% of the respondents. All the respondents used wood as fuel and only 13.7% of them had separate kitchen. 93.1% of the Baiga households had their own toilet facility through ‘Swachha Bharat Yojana’ but only 14.0% of them were found to use their toilets and the rest 86.0% were not observed to use their toilets. After defecation only 0.6% used soap for washing their hands and the rest were observed to use either soil or plain water. 83.3% of the respondents owned land and only 6.7 percent had three or more than 3 acres of land. 54.5% respondents had non irrigated type of land.

Table 1.3				
Socio-demographic profile of respondents				
S. No.	Socio-demographic profile		Frequency	Percentage
1.	Availability of BPL card	Yes	306	100
		No	Nil	-
1.1	Color of BPL card	Red	306	100
2.	Type of road (N=306)	Kaccha	101	33.0
		Pucca	205	67.0
3.	Availability of bus (N=306)	Yes	128	41.8
		No	178	58.2
4.	Facility of News Paper (N=306)	Yes	Nil	Nil
		No	306	100
5.		Yes	4	1.3

	Facility of Internet (N=306)	No	302	98.7
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All the respondents possessed BPL Card the colour of which was red. Only 67.0% had pucca approachable road for transportation and 41.8% of them availed the facility of bus. The whole population were devoid of newspaper facility. Internet facility was availed by only 1.3% of the population.

B. Socio-economic status (SES) of Baiga tribe as per Kuppuswamy’s SES scale, 2023:

The Kuppuswamy SES scale ensure its continued relevance and utility in assessing socioeconomic status and informing policy decisions aimed at addressing disparities and improving overall well-being.

Table 2.1 Education level of the head of family

S. No.	Education of the Head	Score
1.	Profession or Honours	7
2.	Graduate	6
3.	Intermediate or diploma	5
4.	High school certificate	4
5.	Middle school certificate	3
6.	Primary school certificate	2
7.	Illiterate	1

(Source: Ayoub & Raja, 2023)

Table 2.2 Occupation of Head of the family

S. No.	Occupation of the Head	Score
1.	Legislators, Senior Officials & Managers	10
2.	Professionals	9
3.	Technicians and Associate Professionals	8
4.	Clerks	7
5.	Skilled Workers and Shop & Market Sales Workers	6
6.	Skilled Agricultural & Fishery Workers	5
7.	Craft & Related Trade Workers	4
8.	Plant & Machine Operators and Assemblers	3
9.	Elementary Occupation	2
10.	Unemployed	1

(Source: Ayoub & Raja, 2023)

Table 2.3 Total Monthly Income of the Family

S. N.	Updated Monthly Family Income in INR (2016)	Updated Monthly Family Income in INR (2020)	Updated Monthly Family Income in INR (2021)	Updated Monthly Family Income in INR (2022)	Updated Monthly Family Income in INR (2023)	Scores

1.	≥40430	≥199862	≥123322	≥184376	≥249044	12
2.	20210-40429	99931-199861	61663-123,321	92191-184,370	124489-249043	10
3.	15160-202029	74755-99930	46129-61662	68967-92185	93381-124488	6
4.	10110-151519	49962-74755	30831-46,128	46095-68961	62273-93380	4
5.	6060-10109	29973-49961	18497-30830	27654-46089	37325-62272	3
6.	2021-6059	10002-29972	6175-18496	9232-27648	12445-37324	2
7.	≤2021	≤10001	≤6174	≤9226	≤12444	1

(Source: Ayoub & Raja, 2023)

Table 2.4 Kuppuswamy socio-economic status scale 2023

S. No.	Score	Socioeconomic Class
1.	26-29	Upper (I)
2.	16-25	Upper Middle (II)
3.	11-15	Lower Middle (III)
4.	5-10	Upper Lower (IV)
5.	<5	Lower (V)

(Source: Ayoub & Raja, 2023)

Table: 2.5

Kuppuswamy scale for socioeconomic status (SES)

S. No.		Frequency	percentage	Score as per Kuppuswamy)
(A) Education level of the Head				
1.	Profession or Honours	-	-	-
2.	Graduate	-	-	-
3.	Intermediate or diploma	-	-	-
4.	High school certificate	9	2.9	36
5.	Middle school certificate	16	5.3	48
6.	Primary school certificate	86	28.1	172
7.	Illiterate	195	63.7	195
Total (A)		306	100	451
(B) Occupation of the Head				
1.	Legislators, Senior Officials & Managers	-	-	-
2.	Professionals	-	-	-
3.	Technicians and Associate Professionals	-	-	-
4.	Clerks	-	-	-
5.	Skilled Workers and Shop & Market Sales Workers	7	2.3	42
6.	Skilled Agricultural & Fishery Workers	-	-	-
7.	Craft & Related Trade Workers	21	6.9	63

8.	Plant & Machine Operators and Assemblers	5	1.6	15
9.	Elementary Occupation	271	88.5	542
10.	Unemployed	2	0.7	2
Total (B)		306	100	664
(C) Total Family income per month of respondents				
1.	≥249044	-	-	-
2.	124489-249043	-	-	-
3.	93381-124488	-	-	-
4.	62273-93380	-	-	-
5.	37325-62272	-	-	-
6.	12445-37324	118	12.4	236
7.	≤12444	188	87.6	188
Total (C)		306	100	424
Total Score (A+B+C)				1539
Score of socio-economic status				5.03
Socio-economic Class		Upper Lower (IV)		

Table 2.5 shows the socio-economic status of the population under study (As per K Modified Kuppaswamy Scale-2023). The total score based on education, occupation and family income was 1539 and the score of socio-economic status was 5.03 which indicated that they belonged to the upper lower (IV) socio-economic class.

Conclusion:

In the present study, it was found that the level of education in the Baiga tribe community is very low, almost all the families of the studied Baiga tribe are of nuclear type in which more than half of the families have 4 or less members living in them. The houses of more than two-thirds of the families are kutcha, constructed from mud, grass, bamboo, wood, thatch etc. Only a few families have permanent houses which have been built under the Pradhan Mantri Awas Yojana. Most of the houses have electricity facilities but even in the age of modernity, one-third of the houses of Baiga tribe do not have electricity facilities. The study found that under the Swachh Bharat Abhiyan, toilets have been constructed in almost all houses, but due to a lack of roof, door, seat as well as water facilities, it is used only by a few families. Based on Modified Kuppaswamy Scale-2023, the socio-economic status of the studied Baiga tribe was found to be under upper lower grade (IV).

Recommendations:

- **Education Improvement Initiatives:** Create and carry out educational initiatives that are suited to the specific requirements of the Baiga tribe. To raise overall literacy rates, this could entail setting up community-based schools or educational facilities, offering financial aid or scholarships for education and running adult literacy initiatives.
- **Housing Development Projects:** Most of the houses of the Baiga tribe in the study are kutcha and do not have sufficient rooms to live in. Therefore, government institutions or non-governmental

organizations (NGOs) should construct permanent houses for them in which sufficient rooms are available for them to live.

- **Electrification Efforts:** The study found that most of the Baiga families do not have electricity in their homes. Therefore, the government should install transformers of appropriate capacity according to the number of beneficiaries at the local level so that the Baiga tribe can get the benefit of electricity. This will improve their living standards and they will also be able to keep pace with other communities.
- **Infrastructure Enhancement for Toilets:** Existing toilet facilities constructed under initiatives like Swachh Bharat Abhiyan should be upgraded to remove deficiencies like roof, door, seat and water facility. Community based practices and cultural beliefs should be given special attention during toilet construction so that all members of the Baiga community can use the toilet after its construction.
- **Livelihood and Income Generation Programs:** Implement income-generating projects and vocational training programs to enhance the socio-economic status of the Baiga tribe community. This could involve supporting traditional livelihoods such as agriculture, handicrafts, or forest-based activities, as well as promoting entrepreneurship and small-scale businesses.
- **Community Empowerment and Participation:** Foster community engagement and participation in decision-making processes related to development initiatives. Empower community members to take ownership of projects, ensuring that interventions are culturally sensitive, sustainable, and responsive to the needs of the Baiga tribe.
- **Health and Sanitation Awareness Campaigns:** Conduct health and sanitation awareness campaigns within the Baiga tribe community to promote hygiene practices and improve health outcomes. Provide education on the importance of sanitation facilities and proper usage of toilets to maximize their benefits.
- **Regular Monitoring and Evaluation:** Establish mechanisms for regular monitoring and evaluation of socio-economic development initiatives to track progress and identify areas for improvement. Utilize feedback from community members to inform decision-making and adapt strategies as needed to achieve desired outcomes.

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