

## **Demographic Profile among Bagatha of Pedabayalu Mandal, Visakhapatnam District, A.P**

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**Abstract:** A demographic survey is attempted in the present study among Bagatha tribal population inhabiting Pedabayalu Mandal of Visakhapatnam district. The present study is a small contribution to the field of anthropological demography and aims to unravel all socio-biological facts of marriage, fertility, and mortality to evaluate the impact of all demographic characteristics on the level of fertility performance. Fertility performance measured in terms of a mean number of total conceptions (3.22), live births (3.15) and living children (2.77) per couple is moderate. In these live births also the neonatal mortality, infant mortality and child mortality is more. The crude Birth rate is 11.0/1000 population and Crude Death rate is 5.5/1000 population. This study helps socio biologists in predicting the future fertility trends of Bagatha population.

**Key words:** Fertility, Live Birth, Conceptions, Bagatha

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Date of Submission: 25-01-2018

Date of acceptance: 13-02-2018

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### **I. INTRODUCTION**

Demography study mainly concerned with structure, size and composition of population and determinants of population change. Population Studies the consequences of population changes, relationships of biological, economical, social, political and psychological and geographical variables. Anthropological demography is a specialty within demography which uses anthropological theory and methods to provide a better understanding of demographic phenomena in current and past populations (Laura Bernardi 2007).

In Andhra Pradesh state consists 35 tribes with a population of 59, 18,073 as per 2011 census. The percentage of tribal population is around 7% total state population. In Andhra Pradesh state, large number of tribal groups found to live in the agency area of Visakhapatnam district. About 16 tribes inhabits in the tropical forest zone of this Visakha agency area. The total population in Visakhapatnam district is 557,572 which constitute 14.55% to total population of the district. The Bagatha tribal population is 132577 out of 64848 males, 67693 female.

Tribal people are different from non-tribals in demographic attributes. Further, the structure of tribal population manifests in their cultural and economic attributes. Fertility and mortality levels were reported in Bagatha (150), Konda Dora (150), Konda Reddi (150) and Koya Dora (170) tribes inhabiting Eastern Ghats of Andhra Pradesh. Relatively higher fertility is reported among Konda Dora women (3.4, 3.2 and 2.8) when compared to Bagatha (2.9 2.6 and 2.2) conceptions, live births and living children per woman while the remaining tribes have reported moderate fertility (Bharathi, JM Naidu & Nanibabu, 2016)

### **II. METHODS AND MATERIAL**

The present study was selected from the villages of near Rudakota panchayat, Pedabayalu Mandal. Random sampling method was applied according to the availability of subjects in those villages at the time of our visit. A specially designed schedule was used to collect data pertaining to the number of conceptions, live births, the number of living children, age dependency ratio, crude birth rate and crude death rate were recorded. The people are uneducated and birth records are not accurately available, so the age of individuals is assessed by visual review as well as enquiring elderly people about seasons and important events at their birth. A total number of 150 households inhabiting in 10 villages belonging to 4 panchayats in Pedabayalu Mandal were surveyed.

### III. RESULTS AND DISCUSSIONS

Family size reveals that the total number of individuals in a family. The family size depends upon varied factors like duration of the marriage, education of couple, the number of live births and living children, desired family size, etc.

**Table-1:** Type of Family among Bagatha

Type of Family	No.	%
Nuclear	100	66.67
Joint	49	32.67
Extended	1	0.66
Total	150	100.00

Out of 150 households, the frequencies of different types of families are presented. 66.67% of Bagatha populations are nuclear families with a wife, husband and children. 66.67% of bagatha populations from the given data are nuclear families because of the marriage type is elopement. And 32.67% of people support and prefer being in joint families along with their parents and only 1 family is extended family.

**Table -2:** Distribution of Households based on Total Family Members

No. of individual in Family	Total No of Households	%
1	4	2.67
2	12	8
3	36	24
4	43	28.67
5	32	21.33
6	19	12.67
7	4	2.66
Total	150	100.00

The Bagatha households are categorized based on the total number of residents in a family are given in the above table. 24% of families have '3' members, 21.33% of families have '5' members, 8% of families have '2' members, 28.67% of families have '4' members and 12.67% have '6' members in their families. 2.66% of families are shared by the worst hit by sterility or poverty or orphaned by their children. They are common widows or widowers in this section. They live individually facing the struggle to sustain.

**Table -3:** Distribution of Households according to Sex wise size of the Family Members.

No. of Males	Men		No. of Females	Women	
	No.	%		No.	%
1	26	17.33	1	2	1.33
2	61	40.67	2	57	38
3	36	24.00	3	53	35.34
4	27	18.00	4	38	25.33
Total	150	100.00	Total	150	100.00

Simultaneously the Bagatha households were considered according to the sex of family members and their number.

In this tribe, the female and male are both earning members, commonly female looks after the family welfare and helps in the Podu cultivation along with her husbands. So the female is noticed as a person participating in many activities that earn the wage and contribute to the welfare of the family.

**Table -4:** Distribution of Bagatha households with information about Mode of Income

Mode of Income	No.	%
Daily wage	45	30
Agriculture	85	56.66
Salaried	10	6.67
Others	10	6.67
Total	150	100.00

Here these tribal people are seen depending majority on Podu cultivation. Majority i.e., 56.7% of people earn their income basing on agriculture. Commonly majority of people are having the lands cultivated frequently i.e., biannually or few lands are all occupied by permanent plantations. Few are depending on the salaried bases. So the major share of family's income is coming from the agricultural bases.

**Table -5:** Household Items Observed among Bagatha

Household Items	No.	%
Tape recorder, Chairs	18	12
Tape recorder, CD Player	4	2.67
TV, CD player	2	1.33
Single cot, chairs	2	1.33
TV, Tape recorder, CD Player, Chairs	1	0.67
Tape recorder	3	2
Bike, chairs	13	8.67
Single cot	10	6.66
TV, CD Player, chairs	2	1.33
TV	1	0.67
Cycle, Chairs	1	0.67
TV, Single cot, chairs	2	1.33
TV, Single cot	1	0.67
Cycle, chair, CD player	2	1.33
TV, Tape recorder, chairs	1	0.67
Bike, TV, CD player, Chairs	1	0.67
Bike, TV, Chairs	2	1.33
Bike, TV, Tape recorder CD player, Chairs	3	2
Tape recorder, CD Player, Chairs	1	0.67
Cycle	1	0.67
Cycle, Bike, TV, CD player	2	1.33
Single cot, Chairs, cycle, TV	1	0.67
TV, Cycle, CD Player	1	0.67
Chairs	65	43.33
None	10	6.66
Total	150	100

In this Bagatha people are more eager to prove commercial needs rather than basic amenities. So the household items which are common in the majority of the households are T.V, CD player, Tape recorder and chairs. Among these surveyed 150 households 140 households possess any one of the above-mentioned goods. And 10 households possess none of these. This indicates the high level of poverty among Bagatha.

**Table 6:** Education Status among Bagatha

Education	Men		Women	
	No	%	No	%
Illiterate	65	43.33	110	73.33
Primary	4	2.67	10	6.67
Secondary	48	32	10	6.67
Intermediate	23	15.33	16	10.66
Degree	10	6.67	4	2.67
Total	150	100	150	100

However, the government has established several primary and secondary schools along with free hostel facilities. But this influenced very few people that to youngsters to move on to further studies. But 43.3% of men and 73.4% of women are illiterates. But the present teenagers are being pushed out from work and placed in schools in the dream of employment. Although schooling is blooming in these areas and the presence of under graduation and post-graduation students indicates that education can prosper in this area

**Table 7:** Alcoholism among Bagatha

Alcoholism	Men		Women	
	No.	%	No.	%
Yes	113	75.33	84	56
No	37	24.67	66	44
Total	150	100	150	100

Traditionally prepared tribal drinks Sago palm juice (*Kallu*) is commonly consumed by men in this tribe. All tribal communities are used to intoxicating drinks, the availability of modern liquors in the market made them to consume bottle liquors along with traditional alcoholic drinks. It is observed that 56% females are also habituated to drinking but 24.67% of men are not habituated to drinking.

**Table 8:** Tobacco Smoking/Chewing among Bagatha

Smoking/Chewing	Men		Women	
	No.	%	No.	%
Yes	95	63.33	83	55.33
No	55	36.67	67	44.67
Total	150	100.00	150	100.00

The tobacco smoking and tobacco chewing is a traditional habit. Tobacco rolls are made by their own and are smoked by both the sexes. 63.33% men are habituated to smoking and chewing tobacco and 55.33% females are seen chewing tobacco than smoking. This had become a habit and part of the tribal tradition. Very few are left out without having any habit of drinking or smoking. It is noticed that they are mostly educated.

**Table 9:** Type of marriage in Bagatha

S.NO	Type of marriage	No	%
1	Affinal	66	44.00
2	Uncle niece	66	44.00
3	FSD	10	6.66
4	MBD	4	2.67
5	Cross cousin marriage	4	2.67
	Total	150	100.00

Bagatha knew especially for their marriage type that is an elopement. Mostly they prefer the affinal type of marriage. Among these 150 surveyed villages only 10 preferred FSD. The consanguineous marriages are not so common but they show the availability of bride or bridegroom in their nearby blood relations. In this

context, they are forced to marry so this resulted in 44% Uncle Niece and 2.67% of MBD type. Finally, the type of marriage preferred most is the affinal type that is 44%.

**Table 10:** Age and Sex composition among Bagatha

Age group	Male		Female		Total	
	No	%	No	%	No	%
0-4	40	14.76	36	13.24	76	13.99
5-9	20	7.39	26	9.56	46	8.47
10-14	20	7.39	19	6.99	39	7.18
15-19	34	12.55	35	12.86	69	12.72
20-24	34	12.55	30	11.03	64	11.79
25-29	17	6.27	34	12.51	51	9.39
30-34	18	6.64	19	6.99	37	6.82
35-39	28	10.33	24	8.82	52	9.58
40-44	9	3.32	10	3.68	19	3.49
45-49	21	7.74	6	2.21	27	4.97
50-54	4	1.48	18	6.61	22	4.06
55-59	12	4.42	7	2.57	19	3.49
60-64	3	1.10	5	1.83	8	1.47
>65	11	4.06	3	1.10	14	2.58
Total	271(49.91)	100.00	272 (50.09)	100.00	543	100.00

Majority of the tribes are illiterates and hence are not maintaining any records regarding the exact date of birth. Age of an individual is assessed by visual observation, enquires from elderly persons and school teachers. Age and sex composition statistics are the primary determinants of the demographic structure of the population. The data pertaining to age and sex composition is tabled. In this survey, it is observed that males (271) are slightly less in number than females (272) and the age of 0-4 (13.99) population is high.

**Table 11:** Age Dependency Ratio and Sex Ratio of Bagatha

Age group	Male		Female		Total	
	No	%	No	%	No	%
0-14	80	29.52	81	29.78	161	29.65
15-49	161	59.41	158	58.08	319	58.75
>50	30	11.07	33	12.14	63	11.60
Total	271	100.00	272	100.00	543	100.00

**Dependency ratio:**

The proportion of person above 55 years of age and children below 15 years of age are considered to be dependent on the economically productive age group (15-50). The ratio of the combined age groups 0-14 years plus 55 years and above to the 15-50 years age group is referred to as the total dependency ratio. It is also referred to as the societal dependency ratio and reflects the need for a society to provide for their younger and older population groups. The dependency ratio can be sub divided into young age dependency ratio (0-14 years) and old age dependency ratio (> 55 years).

The proportion of males in 0-14 year's age group (29.52%) is slightly lower than females (29.65%). The proportions of females are less in 20-24 years age groups than males. Among above 45 years age group people, an excess of women are observed than men. The age dependency ratio of Bagatha is tabled here. The population when categorized into three sections here 15-49 age group people are more in number when compared to 0-14 and above 50 age groups. This shows that the dependency ratio of Bagatha is less.

**Table 12:** Distribution of Ever/Never pregnant Bagatha women

Pregnant	No.	%
Never	5	3.33
Ever	145	96.67
Total	150	100.00

Among 150 Bagatha women, only 3.33% are sterile and 96.67% of women have conceived at least once in their life time i.e., before reaching menopause. This indicates the low frequency of sterile women among Bagatha. Some of these women are at younger ages but does not have the capability to conceive because of terminating uterus due to a tumor in their uterus. And few are using allopathy and even ayurvedic medicines for being fertile or to conceive. And these fertile women are even capable of conceiving 4-5 children before reaching menopause. So these 3.3% women are mentioned as reproductively inactive.

**Completed fertility:**

When you can see the completed fertility rate the Bagatha women are capable of carrying out ‘5’ deliveries before reaching menopause. But survival rate depends upon the nutrition, medical aid availability, body resistance power to naturally occurring epidemic diseases. The 3.3% women are sterile means they did not even get conceived for a single time. In these 150 females 33 had reached menopause and in this, the completed fertility rate is 3.22 per woman.

**Table13: Fertility Ratio among Bagatha**

Women	Number	Conceptions		Live Births		Living Children	
		No.	Per Woman	No.	Per Woman	No	Per Woman
Ever Pregnant	145	467	3.22	457	3.15	402	2.77
Never Pregnant	5	-	-	-	-	-	-
Total	150						

The fertility ratio among Bagatha i.e. information pertaining to fertility such as the number of live births and living children indicate that Bagatha women have a mean number of 3.15 live births and 2.77 living children per woman. Out of 467 conceptions, 457 resulted as live births and 402 are surviving as on the day of the survey.

The details of prenatal and postnatal mortality among Bagatha women that cover the number of abortions, still births, infant deaths, child deaths, adolescent deaths and adult death is also presented. However, while calculating mortality rate per women both fertile and sterile 150 women are considered

**Table 14: Mortality Rate among Bagatha**

Age Group	Total No. of Conceptions	Live Births	Living Children
15-19	5	5	5
20-24	35	30	26
25-29	103	98	87
30-34	59	63	46
35-39	77	76	75
40-44	29	29	27
45-49	31	31	25
50-65	91	119	105
>65	12	6	6
Total	467	457	402

**Crude Birth Rate:**

It refers to the number of live births per 1000 on the estimated mid-year population in a defined area per year. This is crude rate because it is based on estimated mid-year population. It is very simple and valid measure of the number of children being born in a population in a given year. But this measure does not depict the true picture of natality because the entire population is not exposed to child bearing.

Here we notice that the Crude birth rate in Bagatha is 11.0/1000 population.

**Crude Death Rate:**

It is defined as the number of deaths per 1000 estimated midyear population in a year in a defined area. The crude death rate is used to measure the change in population size over a specified year.

Here we notice that the Crude Death rate in Bagatha is 5.5/1000 population

**Summary and Conclusion**

In India, many distinct populations with clear variations are present in a limited physical boundary with a large number of populations showing differences in their morphological, physical, cultural and genetic traits and provide the good opportunity for biological anthropologists to study variations in demographic parameters.

Andhra Pradesh state with about 35 endogenous tribal groups provides a rich area for demographic studies. This Andhra Pradesh is divided into different geographical zones like coastal plains, Eastern Ghats, Deccan plateau and desert areas with diverse ethnic, cultural and linguistic populations.

This demographic survey revealed out that in the Bagatha tribe 66.67% prefer nuclear type and only 32.67% prefer joint families. They depend on agriculture in order to earn income. 30% depend on daily wage and agriculture to overcome the family needs. Only 1% serves the government and private sectors that are based on salary bases. The main occupation is agriculture. These Bagatha people speak Telugu commonly and few especially used words are left on the tongues of older people.

The household items like T.V, CD player, and Chairs are commonly seen in most of the houses. 73.33% females are illiterates when compared to 43.33% of males. Consuming alcoholic traditional drinks is common among men and not seen in women. Tobacco smoking and chewing are seen commonly in both the sexes.

Affinal type of marriage is prominently seen i.e., 44% are affinal and 66% are consanguineous marriages. The dependency ratio is less as the earning group 15-49 age group is more in number i.e., 58.75%. Fertility performance measured in terms of the mean number of total conceptions (3.22), live births (3.15) and living children (2.77) per couple is moderate. In these live births also the neonatal mortality, infant mortality and child mortality is more. The Crude Birth rate is 11.0/1000 population and Crude Death rate is 5.5/1000 population. These are all calculated based on the midyear population and births and deaths occurred during the period of December 15-16. Here we noticed 6 births i.e., 2 males and 4 females. 3 deaths i.e 3 females.

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IOSR Journal Of Humanities And Social Science (IOSR-JHSS) is UGC approved Journal with Sl. No. 5070, Journal no. 49323.

Ch Srinivas "Demographic Profile among Bagatha of Pedabayalu Mandal, Visakhapatnam District, A.P." IOSR Journal Of Humanities And Social Science (IOSR-JHSS). vol. 23 no. 1, 2018, pp. 58-65.