

Fertility Performance of a Tea Working Population of Dibrugarh District, Assam

Rekha Das¹ and Mayuri Goswami²

1. Department of Anthropology, Gauhati University, Guwahati 781 014, Assam, India

2. Pragjyotish College, Guwahati, Assam, India

KEYWORDS Fertility. Menarche. Marriage. Pregnancy. Menopause

ABSTRACT The present paper deals with the fertility performance of 249 women working in the tea industry. The tea garden where these women are working is called Rajgarh Tea Estate, in the district of Dibrugarh, Assam. These women are mainly engaged as waged labourer for plucking tea leaves. The women considered for the present study are classified age specifically into eight different groups. The fertility performances of these women have been studied age specifically. Biological as well as socio-cultural factors are considered to see its influence on fertility. Age at marriage, age at first childbirth, birth interval, pregnancy wastage and age at menopause are the biological factors; while education and occupations are the social factors that have been considered for the present study.

INTRODUCTION

Fertility, a major component of population growth is an important aspect of population study. Literally, though fertility is a biological phenomenon a number of social, economic and cultural factors influence this biological phenomenon. As a result of these fertility differentials are observed from population to population.

In the present paper an attempt has been made to study the fertility performance of a tea garden labourers of Rajgarh tea estate in Dibrugarh district, Assam.

THE PEOPLE

The tea garden labourers are migrant people in Assam. These people are working in tea industries of Assam since the last 150 years or so (Kar, 2001). They were brought to Assam to serve as labourers in tea gardens from different parts of India. The fairly old tea industry has exerted some unique influences on the life of the people involved in this industry. They do not show any readily observable difference in their day-to-day life activities. It may be due to their common type of economy, administration, housing and ecology (Kar, 1975). Though the different groups have their independent language most of them have forgotten their own language. In tea plantation for conversation they speak a common language called 'sadani' which may be called "Assamese of tea garden" (Khound, 1967). The language 'Sadani' is formed by an intermingling of languages like Assamese, Bengali,

Bhojpuri, Hindi, Oriya etc. and also having Maithali and Magadhi impression (Gohain, 1974).

MATERIALS AND METHODS

249 ever married women between the ages 15 to above 50 years of age having at least one live birth are considered for the present study. Interviewing the eligible couples with the help of some previously structured schedule the data has been collected. The biological factors like age at first childbirth, spacing between childbirth, total live birth, pregnancy wastage, age at menopause and completed fertility are considered for the present study. On the other hand the age at marriage, education, and occupation of the concerned couples are studied cultural factors to see its effect on fertility.

RESULTS

Age at Marriage: The age at marriage of the 249 women varies from 12 to 26 years. The highest frequency is at the age of 17 years. The percentage is 14.86. The mean age at marriage is 16.74 years. It has also been found that 72.29% of the women were married below the age of 18 years (Table 1).

Age at First Childbirth: The mean age at first childbirth of the women is 17.91 years (Table 2).

Number of Conception: The total number of conceptions of the 249 tea-working women is 1313 and the average number of conception is 5.3. The frequency of women having two

Table 1: Distribution of women according to age at marriage

Age at marriage (in years)	No. of women by present age in years							Total	%	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49			50+
12	3	2	3	1	1	2	1	1	15	6.02
13	4	3	4	2	1	3	3	2	20	8.03
14	7	3	3	4	2	2	2	2	26	10.44
15	9	6	6	3	3	5	1	2	36	14.46
16	5	4	5	7	2	-	2	3	29	11.65
17	8	7	10	2	5	3	2	-	37	14.86
18	-	2	2	5	2	1	1	-	17	6.83
19	-	3	12	1	4	3	-	-	24	9.64
20	-	1	9	3	2	1	-	-	16	6.43
21	-	3	4	2	3	-	-	-	12	4.82
22	-	-	2	3	2	-	-	-	7	2.81
23	-	-	1	2	-	-	-	-	3	1.20
24	-	-	-	-	2	-	-	-	2	0.80
25	-	-	-	-	3	-	-	-	3	1.20
26	-	-	-	-	2	-	-	-	2	0.80
Total no. of women	36	34	64	35	34	22	14	10	249	99.99
Mean age at marriage	14.92	16.29	17.48	17.37	19.08	15.64	15.29	14.40	16.74	-

Table 2: Distribution of women according to age at first child birth

Age at first child birth in years (in years)	No. of women by present age in years							Total	%	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49			50+
13-14	4	5	7	1	2	5	2	3	29	11.65
15-16	13	9	9	6	5	7	4	2	55	22.09
17-18	19	11	15	10	7	5	2	5	74	29.72
19-20	-	5	17	7	6	4	3	-	42	16.87
21-22	-	4	13	4	5	1	2	-	29	11.65
23-24	-	-	3	2	2	-	1	-	8	3.21
25-26	-	-	-	3	-	-	-	-	3	1.20
27-28	-	-	-	2	2	-	-	-	4	1.61
29-30	-	-	-	-	3	-	-	-	3	1.20
31-32	-	-	-	-	2	-	-	-	2	0.80
Total no. of women	36	34	64	35	34	22	14	10	249	99.99
Mean age at first child birth	15.83	17.15	18.41	19.50	20.73	16.50	17.78	15.90	17.91	-

conceptions is the highest. The average number of conception is gradually increasing from lower to higher age group of the women (Table 3).

Number of Live Birth: The total number of live birth of the women in various age groups is 1268 and the mean fertility is 5.2. Women of 50 years and above age group have the highest mean fertility and it is 7.8. Gradual increase in the average live birth is seen from lower to the higher age group of the women (Table 4).

Pregnancy Wastage: Stillbirth and abortions are considered as pregnancy wastage in the present study. Out of 249 women, 40 women (16.06%) have experienced pregnancy wastage and the

total number of pregnancy wastage is 45. The number of women having pregnancy wastage is the highest in the age group of 30-34 years (Table 5).

Education and Fertility: The educational levels are classified as illiterate, up to lower primary and from class v to class x. The number of women in the illiterate category is the highest. The average fertility for the illiterate women is 5.42. For the women having their education up to lower primary level is 4.4. 2.6 are the mean fertility for the women who have completed middle or high school level education (Table 6).

Occupation and Fertility: Out of total 249

Table 3: Number and percentage of women according to number of conceptions

No. of conceptions	No. of women by present age in years								Total	%
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+		
1	14	4	-	-	-	-	-	-	18	7.25
2	22	8	8	1	1	-	-	-	40	16.06
3	-	10	-	-	2	-	1	-	13	5.22
4	-	12	10	10	2	3	1	-	38	15.26
5	-	-	14	4	4	2	2	-	26	10.14
6	-	-	14	-	2	3	2	1	22	8.84
7	-	-	18	-	5	2	1	2	28	11.24
8	-	-	-	12	5	4	4	3	28	11.24
9	-	-	-	8	4	4	3	4	23	9.24
10	-	-	-	-	9	1	-	-	10	4.02
11	-	-	-	-	-	1	-	-	1	0.40
12	-	-	-	-	-	2	-	-	2	0.80
Total no. of women	36	34	64	35	34	22	14	10	249	99.99
Total no. of conceptions	58	98	336	230	249	167	95	80	1313	-
Average no. of conceptions	1.6	2.9	5.3	6.6	7.3	7.6	6.8	8.0	5.3	-

Table 4: Number of women in different age groups giving birth to various number of children

No. of live-births	No. of women								Total	%
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+		
1	14	8	-	-	-	-	-	-	22	08.83
2	22	4	8	1	1	-	-	-	36	14.47
3	-	10	-	-	2	-	1	-	13	5.23
4	-	12	10	10	2	3	1	-	38	15.28
5	-	-	14	4	4	2	2	-	26	10.44
6	-	-	14	-	2	3	2	1	22	8.83
7	-	-	18	-	5	2	1	3	29	11.64
8	-	-	-	12	5	4	4	4	29	11.64
9	-	-	-	8	4	4	3	2	21	8.43
10	-	-	-	-	9	1	-	-	10	4.01
11	-	-	-	-	-	1	-	-	1	0.40
12	-	-	-	-	-	2	-	-	2	0.80
Total women	36	34	64	35	34	22	14	10	249	100.00
Total live-births	58	94	331	218	239	160	90	78	1268	
Average live-births	1.6	2.8	5.2	6.2	7.0	7.3	6.4	7.8	5.2	

Table 5: Distribution of women according to pregnancy wastage

Pregnancy wastage	No. of women by present age in years according to still-births and abortions																Total (%)
	15-19		20-24		25-29		30-34		35-39		40-44		45-49		50+		
	SB	AB	SB	AB	SB	AB	SB	AB	SB	AB	SB	AB	SB	AB	SB	AB	
1	-	1	-	4	-	5	3	9	-	4	1	4	-	3	-	2	36(14.86)
2	-	-	-	-	-	-	-	-	-	1	-	1	1	-	-	-	3 (1.20)
3	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1 (0.40)
Total no. of women having PW	1		4		5		12		6		6		4		2		40(16.47)
Total SB+AB	1		4		5		12		9		7		5		2		45(18.47)

PW: Pregnancy Wastage SB: Still-birth AB: Abortion

Table 6: Education and fertility

<i>Educational qualification of mother</i>	<i>No. of women</i>	<i>No. of children born</i>	<i>Mean fertility</i>
Illiterate	180	975	5.42
Up to LP	64	280	4.4
Classes V-X	5	13	2.6
Total	249	1268	5.1

Table 7: Occupation of mother and fertility

<i>Type of occupation</i>	<i>No. of women</i>	<i>No. of children born</i>	<i>Mean</i>
Labour or Tea worker	239	1188	5.0
Housewife	10	80	8.0
Total	249	1268	5.27

Table 8: Number of women of completed fertility giving birth to various numbers of children

<i>Total no. of children</i>	<i>No. of women</i>	<i>Percentage of women</i>	<i>No. of live-births</i>
1	-	-	-
2	-	-	-
3	1	2.56	3
4	1	2.56	4
5	2	5.13	10
6	6	15.38	36
7	3	7.69	21
8	11	28.21	88
9	11	28.21	99
10	1	2.56	10
11	1	2.56	11
12	2	5.13	10
Total	39	99.99	306
Mean fertility		7.9	

women, 239 are working and the rest 10 are housewives. The average fertility of working women is 5.0 and that of the non-working women is 8.0. (Table 7).

Completed Fertility: 39 (15.66%) women of the total have completed their fertile period by attaining menopause. The total number of children to these women is 306. The mean fertility is 7.9. The number of children born to these women varies from 3 to 12 (Table 8).

DISCUSSION

Menarche is the beginning of the fecund life of a woman, but in actual practice, it starts from the time of marriage. As marriage is a socially sanctioned institution, cohabitation starts only after marriage. Therefore, age at marriage plays

an important role in lengthening or shortening the married life of a woman. The mean age at marriage of the women of the present study is only 16.74 years, which is much below the government norms for minimum age at marriage of the Indian girls i.e. 18 years. Agarwala (1977) has pointed that if all the Indian women got married after the age of 19 years, there would have been 30% reduction in the birth rate. It was found in 1966 from a survey on fertility and family planning in greater Bombay that those women, who married before the age of 19 years, had on an average one child more than those who married after the age of 19 years (Bhende and Kanitkar, 1996). Therefore, with 16.74 years as the mean age at marriage and 46.38 years as mean age at menopause it is clear that the women of the present study get a longer fertile life and therefore, the mean fertility of the women who completed their fertile life is found to be 7.8. Bhende and Kanitkar (1992) observed that the completed fertility of the Indian women is between five and seven. On the other hand Das and Das (1992) observed that the completed fertility of the Assamese Hindu women ranges from 5.5 to 6.6. Thus the completed fertility of the tea garden labourers of the present study is higher than the fertility of the Indian women as well as the Assamese Hindu women. The early age at marriage may be one of the causes for longer fertile life and high fertility of the women. The lack of interest of the people for educating their children specially the girls may be the reason of early age at marriage of the girls. The average fertility of the women of the present study is 5.2 and though it is within the Indian average still it is very high in comparison to the developed and some developing countries. Mahadevan (1979), Patnaik (1985), Khan (1997) showed in their studies that the women of lower caste groups have higher average fertility. This fact is once again proved by the findings of the present study because in Assam the tea garden labourers are scheduled as "More other backward classes" (MOBC).

Various researchers have already proved it for number of times that there is a negative correlation between education and fertility (Driver, 1963; Bhowmick et al., 1971; Patnaik, 1985). It is proved by the present findings also that a higher fertility (5.42) is seen to the illiterate women in comparison to the fertility (2.6) of the women having high school level education.

Pregnancy wastage is an important biological factor to affect the fertility of a woman during her natural reproductive span. In the present study 16% of the women have pregnancy wastage. Choudhary and Adikari (1997) have stated that higher is the number of pregnancies of a woman greater is the risk of the pregnancy wastage. This is in agreement with the findings of the present study. A difference is noticed among the working and non-working women regarding their average fertility and this coincides with the established fact that the workingwomen always have lower fertility than the non-working women. It must be mentioned here that the working women of the present study have a higher average fertility (5.0) than the average fertility of many other working women studied by various researchers in different parts of India. It may be due to several reasons- (a) that the working women of present study are mostly illiterate, (b) they have the crèche facilities in their working place, (c) the children are readily absorbed in the garden work in due time which ultimately help in their economic condition.

CONCLUSION

The 249 women considered for the present study show an average fertility of 5.2. Illiteracy and low age at marriage may be identified as responsible factors for high fertility. Their poor economic conditions also indirectly encourage

them to have higher fertility because they think that higher the number of children higher will be their earning member in the family.

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