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## 5. Reproductive Performance And Biological Indicators Among The Boro-Kachari Women Of Baksa District, Assam

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### **Abstract**

*Health is a very wide concept and it has a considerable impact for the survival of human. It is the general condition of a person's mind and body usually meaning free from illness. The concept, information, skills and healthcare system has been evolved through the evolution of human Civilization in various societies. However, due to many issues related to gender, caste, religion, residence, customs, culture, health priorities for men and women have been different in different societies.*

*The World Health Organization (WHO) has defined health in 1946 as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. This definition was acknowledged by all the signatories to the Alma-Ata Declaration on health adopted by the 31st World Health Assembly in 1978. This declaration accepted that primary health care was a key to attaining this goal and provision of healthcare should be considered as a fundamental right. However, due to many issues related to gender, caste, religion, residence, customs, culture, health priorities for men and women have been different in different societies. The health problems of the tribal population of India are different according to their socio-economic, socio-cultural and ecological setting. According to SRS (Sample Registration System, 2015-16) Assam has the highest maternal mortality rate in India with 215 maternal deaths per one lakh live births. Lack of nutrition, healthcare of the mother, sanitation and hygiene are some of the causes leading to this highest rate in the state. Present paper is focused on the reproductive health of the Boro-Kachari women rising in Baksa district and various biological factors associated with this health issue.*

**Keywords:** *Health, Women, Tribal, menarche*



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### Introduction

Men and women have the right to be informed and have access to safe, effective, affordable and acceptable method of their choice for the regulation of fertility and the right to access the appropriate healthcare services. Women's health has long been a concern for WHO but today it has become an urgent priority. It is fact that apart from the general health requirements, women have special health requirements related to their role in child bearing and rearing. Women's reproductive health is a crucial component of a women's general health. Reproductive health is lifelong beginning even before women and men attend their sexual maturity and continuing beyond women's childbearing years. Traditionally in Indian society women are viewed as a reproductive agent and their fertility is generally prized as pointed out by Mandelbum (1974) that "mark of her success as a person is her living and thriving children". The mother is the central figure who provides child care, nutrition, hygiene and even primary health care. Despite this in most of the societies less attention is given to the problems of maternal and child health.

Rural women's health is overlooked as a result of a web of interconnected factors working at different levels. The problems are lack of basic needs such as food, water, fuel and health facilities. Poverty among rural Indian population has a devastating impact on rural women's health. It can cause delays in seeking health services until a condition reaches its most severe phase. On the other hand, society and culture play an important role in rural women's health status and health seeking behaviors

In India majority of research studies on women reproductive health are based on hospital studies and community based studies. A fair section of these researches covers issues of maternal mortality risks, its causes and trends. India continues to contribute about a quarter of all global maternal death. The important indicators of maternal health in India are age at marriage, maternal mortality, levels of fertility, spacing between births, place of delivery, access to health care services etc.

Various studies on health status of tribal women have shown that the factors which influence the health of the tribal population in general are also applicable to tribal women. Malnutrition, lack of hygiene and sanitation and non-availability of safe drinking water are some of the factors which influence their health. Illiteracy, ignorance and such superstitious belief among the tribal made them

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more vulnerable towards the treatment of health problems. It is also seen that there are less number of health institution and nonfunctioning of the existed institution made the situation worse for the tribal so far as reproductive health is concern.

According to SRS (Sample Registration System) 2021, Assam has the highest maternal mortality ratio in India with 215 (2016-18) maternal deaths per 1 lakh live births. Lack of nutrition, healthcare of the mother, sanitation and hygiene are a few causes leading to this highest rate in the state.

**Table 1.2: Maternal Mortality Ratio of Assam from 1997-2018**

Year	Maternal deaths per 1 lakh live births
1997-1998	568
1999-2001	398
2001-2003	490
2004-2006	480
2007-2009	390
2010-2012	328
2011-2013	300
2014-2016	237
2015-2017	229
2016-2018	215

Source- Registrar General of India, Ministry of Home Affairs (SRS bulletin)

In Assam utilization of antenatal (ANC) and post natal care (PNC) is found to be lower than the national level. About 45% pregnant women seek treatment during pregnancy (DLHS-III, 2007-08) which is lower than the national level (55%). The report revealed that in Assam 28% women did not received any antenatal care during their pregnancy. About 16% women received post natal care which is again lower than the national average (49%). Utilization of antenatal care is highest in urban areas then the rural areas. Utilization of ANC is also high among the Hindu (79.3%) than Muslims (66.6%) and Christian (63.3%). Again utilization of ANC is lower among the schedule tribes than schedule

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caste and other backward classes. It is also observed that the health status of tribal woman in Assam is not satisfactory. The utilization of full ANC checkups is a matter of great concern for the state. Some of the district has a very low percent so far utilization of ANC checkups is concern. About 18.4% mother received full ANC in the state. The full ANC checkup is an important element for reducing maternal mortality and infant mortality in the state. Again institutional delivery is very low in Assam. A gap has been observed in case of institutional delivery between rural and urban areas. In urban areas the rate of institutional delivery is higher than the rural areas. The similar situation is seen in case of safe delivery. People from rural areas received more healthcare services government sources. Therefore, it is important to strengthen the health infrastructure in rural areas of the state to provide better health care service to the people.

#### Objectives of the present study

1. To find out the reproductive performance of the women in the study villages.
2. To see the various biological factors associated with this performance.

#### Methodology

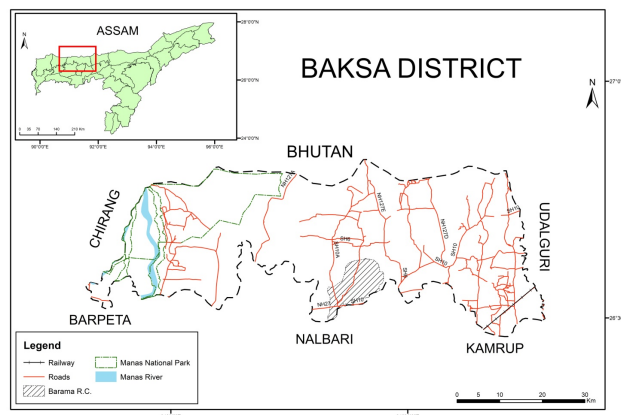
The study was conducted among the Boro-Kachari women of Barama area of Baksa district. A total of 558 married women residing in three villages of Barama area such as Kaljhar, Alagjhar and Kharua were selected for the study. The women belonging to the age group 15-49 years who have at least one child below the age of 6 years were included in the study. The reason for selecting these women was to get the accurate and recent information on their reproductive behavior and health care practices. Both quantitative and qualitative data are collected to cover the various issues related to reproductive health of women in the study area.

#### Area of the study

Baksa is one of the four new district of the Assam created after census, 2001. It was notified as a District in October 2003. The original word 'Baksa' is not above controversy, a good number of populations prefer to use *Bangsa* in lieu of Baksa. The popular assumption that 'Baksa' is the miss pelt form of *Bangsa* meaning a farm house and corridors it is known that Bhutanese king and subject used this area for trade and passage to the plains. The district was in fact one of the most important

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'Doors' of Bhutan. According to Bodo source the name originated from a kind of rice grain which is known as "Baksa". The said rice grain is one kind of broken and unlearned product which is gained after milling the rice. As the name Baksa is itself derived from various sources so there exist lots of controversy over the time. But still today no concrete evidence has been found which might determine the final source. Only popular sources and folklores are evident but no historical sources have been found. The district falls under the Bodoland Territorial Council (BTC) which is a territorial privilege established according to the Memorandum of Settlement, 2003. The area under the BTC jurisdiction is called Bodoland Territorial Area District (BTAD). The BTAD is consist of four contiguous districts- Kokrajhar, Baksa, Udalguri and Chirang carved out of seven existing districts- Kokrajhar, Bongaigaon, Barpeta, Nalbari, Kamrup, Darrang and Sonitpur. The BTAD is created under the Sixth Schedule of the Constitution of India. Baksa district was created from parts of Barpeta, Nalbari and Kamrup districts. A very small part of Darrang district also falls within the district. Baksa district is located on the globe between 90.50 and 91.48 degree east longitude and 26.24 and 26.49 degree north latitude. The district is located in north western part of Assam with the district headquarter at Mushalpur which is 105 Km away from state capital Guwahati. The district is bounded by Bhutan in the north, Udalguri district in the east, Barpeta, Nalbari and Kamrup districts in the south and Chirang district in the west. This district covers a total area of 2457 Sq.km. In terms of total area covered this district occupies 14<sup>th</sup> rank among the districts of Assam.



Map 1: Maps of Assam showing Baksa District

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### **The Boro-kacharis**

The Boro-Kacharis of Assam is a branch of the great Bodo group of the Indo-Mongoloid family falling within the Assam-Burmese linguistic section. Their identity is not uniform as an ethnic group. Different names are used to designate them. In Bengal and in the lower ranges of the Himalayas coming with the territory of Nepal, they are known as Meches. In upper Assam they are identified as Sonowal and Thengal Kachari, while in the western Assam they are more popularly known as Boro or Boro-kachari. In the southern district of North Cachar and Cachar they are designated as Dimasa and Barmas respectively (Bordoloi et al., 1987). They are found mainly in the district of Kokrajhar, Baksa, Chirang, Darrang and kamrup. They belong to patrilineal family and speak Bodo language. The total population of Bodo tribe in Assam (2001 Census) was 1352771 of which 682710 are males and 670061 are females.

According to Endle, the origin of the Bodo-Kachari race is still very largely a matter of conjecture and inference in the absence of anything entitled to be regarded as authentic history. However, on the basis of the Mongolian affinities of the Kacharis, they would point out to Tibet and China as the original home of the race (Endle, 1975). Whatever be their habitat, it has now been established that they are the original autochthones of Assam and the later immigrants than the Aryans (Bordoloi et al, 1987).

### **Results and discussion**

Human fertility is considered as the actual reproductive performance of women. It indicates the number of live births which are produced by a woman in her reproductive span of life. It is the major determinants of reproductive health of women in India. A number of reproductive health determinants have been studied among the women of present study such as age at menarche, age at marriage, age at first conception, age at first delivery, total number of live births reproductive wastage and complications etc. The following table shows the overall reproductive performance of the study population.

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### Reproductive Performance of the Boro-Kachari women

Age Intervals	No of Women	No of children (live birth)	Abortions and Miscarriages.	Still Birth	Total number of Conception	Percentage Of successful conception
18-21 years	84	85	9	0	94	90.42
22-25 years	97	111	11	0	122	90.98
25-29 years	147	271	23	1	295	91.86
30-33 years	87	216	9	0	225	96
34-37 years	82	264	21	4	289	91.34
38-41 years	50	182	10	6	198	91.91
41+ years	11	42	2	1	45	93.33
<b>Total</b>	<b>558</b>	<b>1171</b>	<b>85</b>	<b>12</b>	<b>1268</b>	<b>92.35</b>

### Various biological factors associated with reproductive performance.

#### a. Age at menarche

Age at menarche is an important maturity factor for the assessment of development status of teenage female (Cameron and Nagdee, 1996). Menarche is the primary indicator of onset of sexual maturation in a female, which affect her reproductive life. Age at menarche being a physiological factor is affected by interaction between different factors such as genetic, nutrition and socio-economic status (Eveleth and Tanner, 1976).

Various studies all over the world have reported that the mean age at menarche has decreased recently. Tanner (1962) reported that the menarcheal age has started decreasing from 1830 onwards in every country.

In developing countries the mean menarcheal age varied from 16.2 years in Nepal, 15.8 years in

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Bangladesh, 14.3 years in India, 13.4 in Sri Lanka to 12.30 8 years in China (Pathak et al 2017). In India the mean age at menarche varied from 16.50 years to 12.43 years over the past four decades (ICMR, 1972). States like Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Maharashtra ,Rajasthan, Haryana, Punjab shows higher age at menarche than the national average (13.7 6 years). On the other hand, many states from North Eastern, eastern and Southern parts of India have lower mean age at menarche. States like Assam, Arunachal Pradesh, Manipur, Karnataka and Tamil Nadu where mean age at menarche remained lower than the national average.

**Table 2: Mean age at menarche of Boro-Kachari women**

Age at Menarche	No of women	Percentage
10	41	7.34
11	110	19.81
12	162	29.03
13	120	21.50
14	88	15.8
15	35	6.3
16	2	0.35
<b>Total</b>	<b>558 (Mean-12.38)</b>	<b>100</b>

Menarche of the present study population is found to be 12.38 years (table 2). The mean age at menarche ranges from 10 years to 16 years. Sengupta (1996) in his study reported that females belonging to Mongoloid groups (mostly tribes) experienced menarche at later age than the Caucasoid group (caste). Das et al (1989) reported that menarche among the Deoris of Assam was 13.08 years. Different population groups of India showed that the range of age at menarche was 11.7 years to 15.9 years. The Bhutia (Chatterjee, 2001), Lepcha (Bhasin and Bhasin, 1995), Khasi women (Deb, 2011), Ao Naga ( Sengupta and Purnugla, 2005) Bengali females of West Bengal (Bhagat et al, 2011) have higher age at menarche. On the other hand, the age at menarche among the Garos (Das and Saikia, 1999), Ahoms (Sengupta and Rajkhowa, 1996), Sonowal (Deka, 1976), Brahmin (Das and Das1967), Kaibarta (Das, 1996) is found to be lower.



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### b. Live birth and Conception

Age at first conception, delivery and total number of live births are important determinants of reproductive health status of women. These are associated with the utilization of contraceptive among the couples and their knowledge about birth control methods. Teen age pregnancy and first delivery at young age among women leads to various health problems. The age of first child bearing and age of women at the time of first birth also contributes to reproductive performance.

**Table 3: Age at first conception**

Age at first conception	Number of Women	Percentage (%)
16	1	0.2
17	33	5.9
18	116	20.8
19	103	18.5
20	102	18.3
21	66	11.8
22	50	8.9
23	35	6.2
24	23	4.1
25	21	3.8
26	5	1
27	3	0.5
<b>Total</b>	<b>558 Mean (19.91)</b>	<b>100</b>

The mean age at first conception of the Boro-Kachari women of the present study is found to be 19.91 years (table 3). The age at first conception ranges from 16 years to 27 years. Highest percentage of women (20.8%) is found getting their first conception at the age of 18 years. After 18 years the percentage of women having their first conception is reduced.

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**Table 4: Age at first delivery**

Age at first delivery	Number of Women	Percentage (%)
17	8	1.4
18	86	15.4
19	123	22.0
20	91	16.3
21	95	17.0
22	50	8.9
23	49	8.7
24	26	4.6
25	20	3.6
26	5	1
27	5	1
<b>Total</b>	<b>558 Mean (20.52)</b>	<b>100</b>

Again the mean age at first delivery among the Boro-Kachari women of the present study is found to be 20.52 years (Table 4). The table shows that the Boro-Kachari women delivered their first child at a very young age. About 1.4% women delivered their first child before 18 years of age. Highest number of women 22.0% is found delivered their first child at the age of 19 years. The age at first delivery also decreases with the increase of age of the mother. Few women delivered their first child after 25 years. The mean age at first delivery was 19.4 years among the Muslims of Assam, 18.9 years among the Hindus of Assam and 18.4 years among the mongoloid population (Das et al, 1989). It was 20.27 years among the Lepchas of sikkim (Mukhopadhyay, 2001), 21.18 years among the Mundas of Assam (Gogoi, 2002), 22.90 years among the Kalitas of Assam and 21.87 years among the Deoris of Assam (Bordoloi, 2018). Differences in age at first delivery mainly attributed to biological as well as socio-economic and educational factors.

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**Table 5: Number of women and total conception**

Age Intervals	Number of Women	Total conception	Mean total conception
18-21 years	84	94	1.1
22-25 years	97	122	1.25
25-29 years	147	295	2.0
30-33 years	87	225	2.58
34-37 years	82	289	3.52
38-41 years	50	198	3.96
41+ years	11	45	4.09
<b>Total</b>	<b>558</b>	<b>1268</b>	<b>2.27</b>

It is seen from the present study that the highest number of mean conception (4.09) is seen among the women in the age group of 41+ years followed by the age group of 38-41 years (3.96) and 34-37 years (3.52). It is seen in the present study that the number of conception and number of live births are high among the women whose present age is above 30 years. It is less among the young married women but it might increase as they increase their family size (table 5).

### c. Mean live birth

In the present study the average number of children of the women is found to be 2.09 (Table 6). The

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highest number of children (3.81) is found among the women whose age is above 40 years. The lowest means live birth (1.01) is found in the age group of 18-21 years indicating early marriage and only child bearing. It is also seen in the presence study that mean live birth increased with the increase age of the mother. The elder mothers have the highest number of live births. As the reproductive age of mother increases, the number of children ever born also increases.

DLHS-3 (2007-2008) found mean number of children ever born to married women between 15- 49 years is to be 2.6 in Assam. Among non-literate couples the mean number of children found to be 3.4 and 1.7 for women with at least 10 years of education. The completed fertility measured in terms of average children ever born to ever women between 15- 49 years is 3.8. It varies from 3.2 children in Karimganj district to 2.1 children in Kamrup district.

DLHS-3 (2007-2008) also reported that 78.7% women in Assam reported having two child and do not want any more child for their family. Das et al (1989) reported that the means number of children among Hindus (Brahmin, Kalita and Kaibarta) and among mongoloid population (Ahom, Mishing, Moran, Deori and Chutia) population of Assam was 4.4 and 4.6 which is higher than the presence study. Seal et al (2010) found that among Mishing population of Assam who married below 18 years of age showed high incidence of pregnancy and live births. Some other population of North East India such as Khamti, Munda, Sonowal, Hmars, Nocte, Ao Naga have higher number of live births than the present study population. The low average number of children of the present study population is because of their lack awareness of family planning methods and poor socio economic status.

NFHS-4 reported total fertility rate in Assam was 2.2 children per women. Fertility decreased by 1.1 children in the 13 years between NFHS-1 and NFHS-2 and has declined further by 0.2 children in the 10 years between NFHS-3 and NFHS-4. In urban areas fertility rate was 1.5 children per women and 2.3 children for women in rural areas. There are large differential in fertility by residence, religion, caste, tribe and schooling. The fertility rate was 2.9 among women who had no schooling and 1.7 among women who had 12 or more years of schooling. Again Muslim women had higher fertility 2.9 than the Hindus 1.8.

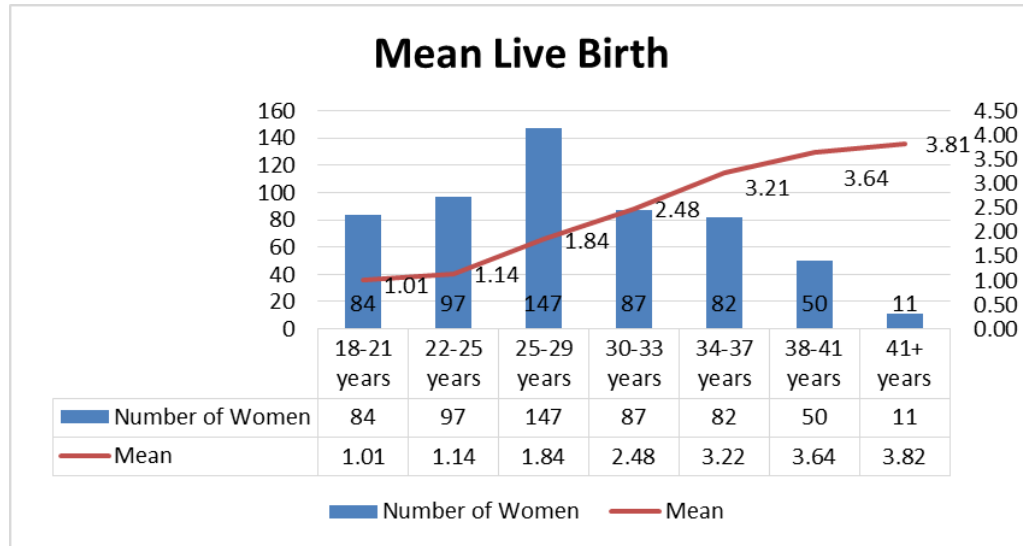
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There is a relationship between age at marriage of women and number of surviving children. In a study conducted among the Boro-Kacharis of Goalpara district of Assam found that most of the women 32% have two surviving children and only 16% of women have 3 or more surviving children (Gogoi, 2018). The highest number of children is found among those couples whose age at marriage was very low. The study established that the number of children is inversely proportionate to the age at marriage of the women. The Mysore study also found that female marrying between 14 and 17 years gave birth to 5.9 children compare to 4.7 children by the females marrying between 18- 21 years.

**Table 6: Mean live birth**

Age Interval	Number of Women	Number of Children	Mean live birth
18-21 years	84	85	1.01
22-25 years	97	111	1.14
25-29 years	147	271	1.84
30-33 years	87	216	2.48
34-37 years	82	264	3.21
38-41 years	50	182	3.64
41+ years	11	42	3.81
<b>Total</b>	<b>558</b>	<b>1171</b>	<b>2.09</b>

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**Fig 1: Mean live birth**

In the present study, women in the age group of above 41 years have the most number of children 3.81. Average number of live birth in the age group of 18- 21 years is 1.01 indicating that there is early marriage and early child bearing. The number of children ever had born per women increases with increasing age of women (table 6).

#### d. Reproductive wastage

Reproductive time wastage includes miscarriages, abortion and still birth of women which occur during pregnancy. There are many factors which are associated with reproductive wastage such as ill health of the mother, unwanted pregnancy, anaemia, poor socioeconomic status etc. In the present study the total still birth is 12 and total miscarriage and abortion is 85. That incidence of still birth is found more among the higher age group women. The incidence of abortion and miscarriage is little bit more among the young married women. Maharana (2011) studied the incidence of abortion in rural and urban area of eight states of India such as Assam, West Bengal, Orissa, Uttar Pradesh, Maharashtra, Punjab, Tamil Nadu and Kerala. The study found that the incidence of abortion in these eight states is less than the national average. The incidence of induced abortion is high in urban areas than the rural areas.

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**Table 7: Reproductive wastage**

Age Intervals	No of women	Abortions and Miscarriages	Still birth	Total Reproductive Wastage
18-21 years	84	9 (10.58%)	0	9 (9.27%)
22-25 years	97	11 (12.94%)	0	11 (11.34%)
25-29 years	147	23 (27.05%)	1 (8.33%)	24 (24.74%)
30-33 years	87	9 (10.58%)	0	9 (9.27%)
34-37 years	82	21 (24.70%)	4 (33.33%)	25 (25.77%)
38-41 years	50	10 (11.76%)	6 (50%)	16 (16.49%)
41+ years	11	2 (2.35%)	1 (8.33%)	3 (3.09%)
<b>Total</b>	<b>558</b>	<b>85 (15.23%)</b>	<b>12 (2.12%)</b>	<b>97 (17.38%)</b>

In the present study incidence of miscarriage and abortion is 15.23% which is higher than the Kalitas and Deoris of Assam (7.1% and 6.9%) (T.Bordoloi, 2018). The percentage of still birth is 2.12%. Highest percentage of miscarriage and abortion is found in the age group of 25-29 years (27.05%). It is followed by 24.7% and 12.9% in the age group of 34-37 years and 22-25 years. Still birth is found among the women belongs to higher age groups.

The reproductive wastage is more in the age group 34-37 years (25.77%). Total reproductive wastage in the study population is 17.38%. The mongoloid population of Assam had higher still birth than the caste population (Sengupta and Kalita, 2001). Das et al (1989) reported high percentage of still birth among the caste population (Brahmin, Kalita and Kaibarta) than the mongoloid population (Mishing, Moran, Ahom, Deor and Chutia). Gogoi (2002) reported high rate of abortion and still birth among the illiterate Munda tribe of Assam.

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Hazarika et al (2013) mentioned that the rate of still birth among the Deori women has been decreasing from 6.35% to 3.53% during 2012-13. The reason behind this decrease is due to the increasing health awareness among the women.

According to NFHS-4 abortion is the most commonly reported type of foetal wastage. Abortion accounts for 6% of all pregnancies, miscarriages account for 4% and 0.5% ended in still births.

### Multiple Regression analysis

In this paper the objective is to see the biological indicators and reproductive performance among the Boro-Kachari women in the Barama area of Baksa district. The key questions that need to be answered are the impact of various biological factors on the reproductive performance which ultimately leads to the actual birth performance among the women. Here actual birth performance means the fertility performance among the study population.

The regression analysis is done by taking biological variable with respect to total number of children ever born by the Boro-Kachari women of the present study. The researcher has identified important variables and then separated them into biological variables.

For determining the biological variables, the dependent variable is the total number of children and the independent variable taken here are reproductive wastage, age at first conception and age at first birth. As per the regression done, it is seen that the following variables play a significant role on the total number of children among the women.

- Reproductive wastage
- Age at marriage
- Age at first conception
- Age at first birth



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**Table 8: Reproductive performance and biological variables**

SUMMARY OUTPUT 1						
<i>Regression Statistics</i>						
<b>Multiple R</b>	0.28211921					
	4					
<b>R Square</b>	0.07959125					
	1					
<b>Adjusted R Square</b>	0.07293368					
	3					
<b>Standard Error</b>	0.99227974					
<b>Observations</b>	558					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
<b>Regression</b>	4	47.0841	11.7711252	11.9550041	2.52658E-09	
<b>Residual</b>	553	544.494352	0.98461908			
<b>Total</b>	557	591.578853				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
<b>Intercept</b>	2.97315909	0.41404514	7.18076066	2.24777E-12	2.15986551	3.786453
	3	5	2		2	3
<b>Reproductive wastage</b>	0.27623015	0.11139929	2.47964012	<b>0.01344827</b>	0.05741264	0.495048
	9	4	8	<b>8</b>	2	8
<b>age at marriage</b>	-0.32189891	0.05405346	-5.95519484	4.62141E-09	-0.42807413	-0.215724
	2	4	8		4	
<b>Age at first conception</b>	0.32982555	0.09338401	3.53192745	<b>0.00044698</b>	0.14639479	0.513256
	4	2	2	<b>8</b>	1	6
<b>Age at first birth</b>	-0.06863578	0.08955332	-0.76642364	0.44375130	-0.24454206	0.107276
	4	2	9	4	6	

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From the above analysis it is seen that reproductive wastage has an impact on the birth performance. The p value is 0.01. Women who had experience reproductive wastage they conceive more than the women who did not experienced reproductive wastage. The number of children among those women is high. The number of children is more for women who conceive at an early age than women who conceive at an older age.

### Conclusion

Health problems and their treatments need special attention in the context of the tribal populating of India because of the fact that most of them are economically and educationally backward and live in an area where modern health facilities are not available and even if available are not accessed because of some socio-economic problems and lack of information and awareness.

The reproductive performance of the women in the study area is very much affected by the biological factors. The biological factors influenced fertility behavior directly. The change in one or more of these variable changes the reproductive performance and health status of the women unless another variable offset the effect. A good proportion of women have got married at an early age which results in early pregnancy and early child birth. So the increase of in the age of marriage of the women would provide better and healthy reproductive health.

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