

Demographic scenario of the Mundas with special reference to inter-spouse age difference in a Sundarban village

Ayan Bandyopadhyay¹ and Abhijit Guha^{2*}

ABSTRACT

The demographic structure of a population is related with the demographic processes. Both the demographic structure and the demographic processes again are studied by the anthropologists from a bio-cultural point of view. Viewed from the above angle, inter-spouse age difference is not only a pure demographic affair but an expression of a number of socio-cultural factors like preference for marriage partners by both women and men, the prevalent decent system (patrilineal or matrilineal) of the society, status of women, role of the parental generation in the preference of mates etc. Under this background we have first described the general demographic scenario of the Munda population inhabiting a village in Sundarban in South 24 Parganas of West Bengal. After this we have placed some data on the relationship between inter-spouse age difference and other demographic variables like present age, age at marriage and number of surviving children and reported the results of our empirical research.

Keywords: Demography, Inter-spouse age difference, Age at marriage, Munda, Sundarban.

INTRODUCTION

Demography is the empirical and statistical study of human populations. The basic demographic structure of any human population is formed by its (i) age-sex composition, (ii) sex ratio, (iii) child-women ratio and (iv) proportion of married and unmarried persons. Apart from demographic structure there are three important demographic processes, viz., fertility, mortality and migration.

The demographic structure of a population is related with the demographic processes. Both the demographic structure and the demographic processes again are studied by the anthropologists from a bio-cultural point of view.

¹ Ph.D. Research Scholar, Department of Anthropology, Vidyasagar University, Midnapore, West Bengal 721102

² Professor (Retired), Department of Anthropology, Vidyasagar University, Midnapore, West Bengal 721102

*Corresponding author: abhijitguhavuanthro@rediffmail.com

Viewed from the above angle, inter-spouse age difference is not only a pure demographic affair but an expression of a number of socio-cultural factors like preference for marriage partners by both women and men, the prevalent decent system (patrilineal or matrilineal) of the society, status of women, role of the parental generation in the preference of mates etc. Studies on inter-spouse age difference are still less than other kinds of research in demography. (Casterline, et.al. 1986:353-374).

Secondly, inter-spouse age difference has some relationship with the fertility outcome of the couples in their reproductive careers.

Thirdly, age at marriage, which in itself is a bio-cultural affair also, has a relationship with inter-spouse age difference.

Under this background we would first describe the general demographic scenario of the Munda population inhabiting a village in Sundarban in South 24 Parganas of West Bengal, which has been taken from our paper in the *Journal of the Indian Anthropological Society*. (Bandyopadhyay and Guha, 2016:128-144).

AREA AND THE PEOPLE

The Sundarban literally means ‘beautiful forest’, in Bengali, is a huge archipelago situated between the vast Indian Ocean to the south and the fertile plain of Bengal to the north. Created by the confluence of the Ganges, Meghna and Bramhauthra rivers and their innumerable distributaries, the Sundarbans constitute the southern end of both Bangladesh and West-Bengal. It is the largest delta in the world measuring about 10,000 sq. kms. of mangrove forest spread over India (Approx. 4200 sq. kms. of reserved forest) and Bangladesh (Approx. 6000 sq. kms. of reserved forest) is also the largest mangrove forest in the world. Sundarban is a vast area covering 4262 sq. kms. in India alone with a large portion in Bangladesh. About 2585 sq. kms. of the Indian Sundarban forms the largest tiger reserve and National Park in India. The island of Satjelia, shaped like a heart and is one of the southernmost inhabited island of the West Bengal Sundarban. It is one of the last islands to have been reclaimed and inhabited. The island Satjelia is situated under the district of South 24-Parganas, at the eastern side of Gosaba Block, of Sundarban. It is the largest island in the block of Gosaba with an area of 615 sq.kms. Inhabited by 42,000 souls. (Jalais 2011:24-25). The population density turns out to be 68.29 per sq.kms., which is extremely low when compared with the population density of West Bengal, because most of this island is covered by the mangrove forest of Sundarban. There are two ‘Gram Panchayats’, named Lahiripur and Satjelia in the island. There are 14 villages under the Satjelia gram panchayat and 11 villages in Lahiripur gram panchayat. The distance between Gosaba to Satjelia is 12.7 kms and takes about 1 hour in a motorised launch through the rivers.

MATERIALS AND METHODS

The data for this paper were mainly collected as part of the general fieldwork of the M.Sc. second semester course in Anthropology at Vidyasagar University during the month of February 2014 by the students and Dr. Abhijit Guha who was the field supervisor. There were 24 students who participated in the fieldwork along with their teacher. The fieldwork was conducted in a team and direct observation and interviews of the villagers and the people of the locality were done for 11 days. Data on village settlement pattern and the drawing of the map was done collectively while collection of demographic data was done with the help of household census and these are being used in this paper.

Demographic scenario of the population

The village in which we have conducted our fieldwork is named by the Mundas as Sardarpara and it located in the Satjelia Island of the South 24 Parganas of West Bengal. The village Sardarpara (the real name of the village) is situated on the bank of a river and is close to the mangrove forest zone of Sundarban in the Satjelia Island and is mostly inhabited by the Munda group of tribe, who are enlisted under the scheduled tribe category of the government. We would now describe the age-sex composition of the village population.

Table 1 shows that only the first three young age groups, i.e. 0-4, 5-9 and 10-14 constituted more than a quarter i.e. 30.38% of the total population out of twenty age groups. This fact is also visible in the broad based population pyramid. If we add the next two age groups, i.e. 15-19 and 20-24 then more than half of the population (55.01%) comes under the first five age groups. So, this Munda village represents a growing and young population. The relative contribution of the two sexes in these young age groups shows that except two age groups (10-14 and 15-19) the other three age groups show almost balanced sex-ratio pattern.

Age at marriage

Now we would throw some light on the age at marriage of males and females before moving into the different dimensions of the inter-spouse age difference in the population because age at marriage of males and females reflects cultural norms and actual behavioural preferences of marital age for both the sexes and in many societies there exists good deal of difference in age at marriage of males and females. Inter-spouse age difference may be viewed as a variable which depends on the age at marriage of the males and females in a society.

Table 2 revealed that the overall mean age at marriage of the males and females were found to vary by 8 years. Interestingly, the cross-tabulation of present age with mean age at marriage revealed a decline among the younger individuals over the years in case of both sexes. In other words, on an average, the older males and females were found to marry later than younger ones and the decline in the age at marriage among the younger generation was more marked among the males.

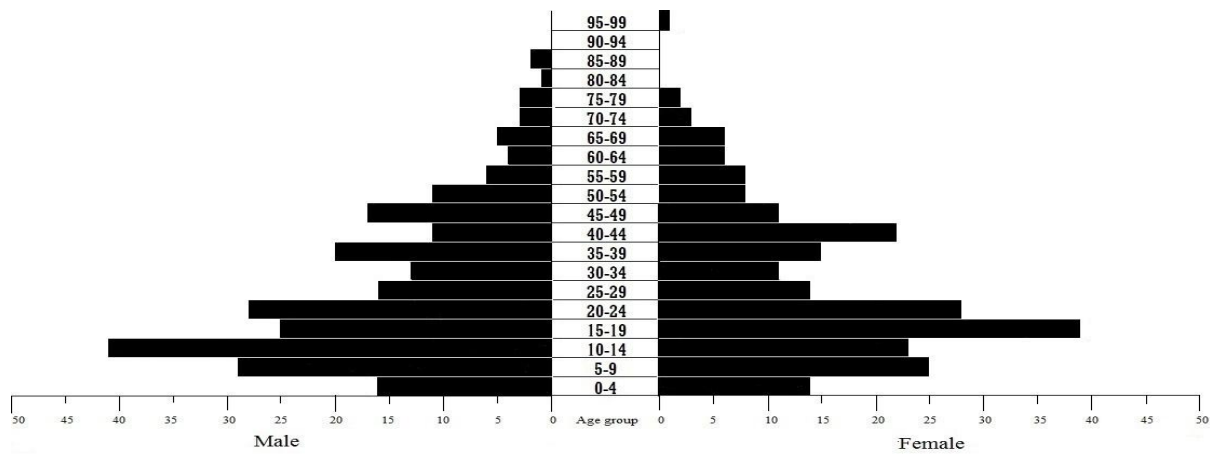
Inter-spouse age difference and its different dimensions

Through the household census, which we had taken during the course of our fieldwork it was found that the husbands were always older than their wives and the Mundas were found to be patrilineal and patriarchal. In table 3 we have classified the inter-spouse age difference into 10 categories with one year interval and have counted the number of couples under these categories. The categories revealed that even in a tribal society who live in a remote area the inter-spouse age difference varied between 1-20 years of age. Prasenjit Sarkar and D.P. Mukherjee reported 2-17 years of inter-spouse age difference among a Hindu caste population of north 24 Parganas. (Sarkar & Mukherjee, 2010:583-587).

Table 1 Age-sex composition of Sardarpara

Age group(in years)	Male	Female	Total
0-4	(6.37) 16 [3.28]	(5.93) 14 [2.87]	30 [6.16]
5-9	(11.55) 29 [5.95]	(10.59) 25 [5.13]	54 [11.08]
10-14	(16.33) 41 [8.41]	(9.74) 23 [4.72]	64 [13.14]
15-19	(9.96) 25 [5.13]	(16.52) 39 [8.00]	64 [13.14]
20-24	(11.15) 28 [5.74]	(11.86) 28 [5.74]	56 [11.49]
25-29	(6.37) 16 [3.28]	(5.93) 14 [2.87]	30 [6.16]
30-34	(5.17) 13 [2.66]	(4.66) 11 [2.25]	24 [4.92]
35-39	(7.96) 20 [4.10]	(6.35) 15 [3.08]	35 [7.18]
40-44	(4.38) 11 [2.25]	(9.32) 22 [4.51]	33 [6.77]
45-49	(6.77) 17 [3.49]	(4.66) 11 [2.25]	28 [5.74]
50-54	(4.38) 11 [2.25]	(3.38) 8 [1.64]	19 [3.90]
55-59	(2.39) 6 [1.23]	(3.38) 8 [1.64]	14 [2.87]
60-64	(1.59) 4 [0.82]	(2.54) 6 [1.23]	10 [2.05]
65-69	(1.99) 5 [1.02]	(2.54) 6 [1.23]	11 [2.25]
70-74	(1.19) 3 [0.61]	(1.27) 3 [0.61]	6 [1.23]
75-79	(1.19) 3 [0.61]	(0.84) 2 [0.41]	5 [1.02]
80-84	(0.39) 1 [0.20]	-	1 [0.20]
85-89	(0.79) 2 [0.41]	-	2 [0.41]
90-94	-	-	-
95-99	-	(0.42) 1 [0.20]	1 [0.20]
Grand total	251 [51.54]	236 [48.45]	487

() Percentage out of column total [] Percentage out of grand total

Fig. 1: Population Pyramid**Table 2 Relationship between present age and mean age at marriage of ever married persons at Sardarpara**

Age group (in years)	Mean age at marriage (male)	Mean age at marriage (female)
10-14	-	14 (n=1)
15-19	15 (n=1)	15.62 (n=8)
20-24	19.54(n=11)	17.47 (n=23)
25-29	22.6 (n=10)	16.92 (n=14)
30-34	22.22 (n=9)	17.27 (n=11)
35-39	26.11 (n=18)	18.00 (n=14)
40-44	24.6 (n=10)	17.94 (n=18)
45-49	28.05 (n=17)	17.90 (n=11)
50-54	23.9 (n=10)	20.87 (n=8)
55-59	30 (n=6)	21 (n=6)
60-64	29.5 (n=4)	17.25 (n=4)
65-69	34 (n=5)	14.75 (n=4)
70-74	37 (n=2)	17.33 (n=3)
75-79	24 (n=2)	15 (n=1)
80-84	29 (n=1)	-
85-89	22 (n=1)	-
Overall mean	25.50 (N=107)	17.68 (N=126)

n= number of individuals in each age group.

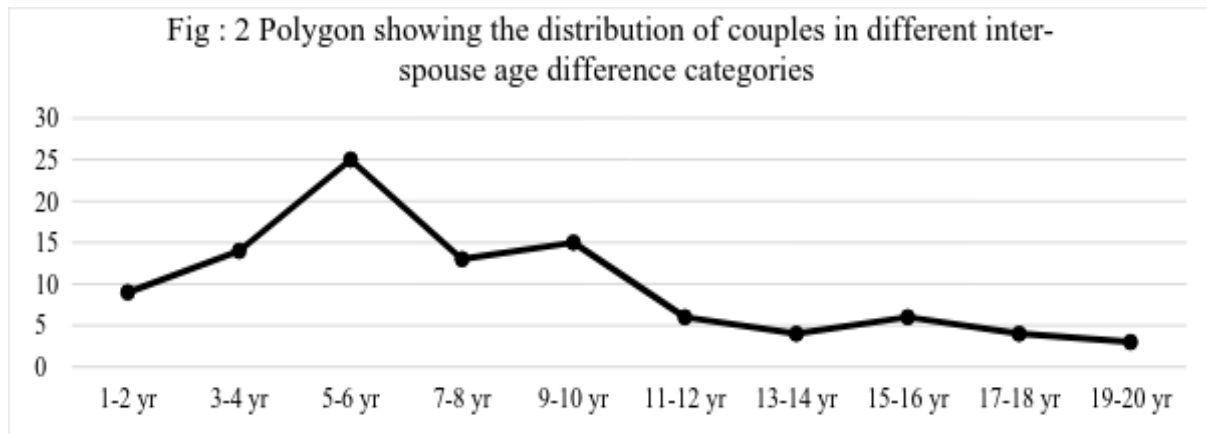
N= total number of individuals in each sex whose age at marriage was available.

Note: One male individual was found to have two wives married at different times so his age at marriage has been counted twice in the subsequent tables. Data on age at marriage for 8 males and 14 females could not be collected in the field.

Table 3 Distribution of couples in different inter-spouse age difference categories

Inter-spouse age difference (in years)	No of ever married couples
1-2	9 (9.09)
3-4	14 (14.14)
5-6	25 (25.25)
7-8	13 (13.13)
9-10	15 (15.15)
11-12	6 (6.06)
13-14	4 (4.04)
15-16	6 (6.06)
17-18	4 (4.04)
19-20	3 (3.03)
Grand total	99

() represents percentage out of Grand total



More interestingly, nearly a quarter (about 23%) of the couples married spouses having 1-4 years of age difference with her/his marriage partner. Forty eight per cent of the Munda couples have an inter-spouse age difference of 1-6 years. The highest percentage of couples (about 25%) showed an age difference between 5-6 years. The other side of the story of course revealed a very traditional scenario. More than 51% of the couple in this Munda village have inter-spouse age difference ranging between 7-20 years and we have found a substantial number of couples (about 15%) having an age difference of 9-10 years. There is of course a clear trend of declining frequency of couples as we move from lower to higher in the inter-spouse age difference categories. (Fig.2).

In tables 4A and 4B we have made an attempt to understand the relationship between present age of males and females and inter-spouse age difference. It is clear from the tables that in case of both males and females younger persons (10-24 years) have married spouses who were within an age difference of 1-4 years. Of ninety nine couples about twenty have their spouses within the age difference category of 1-4 years and they belonged to the age at

marriage category of 10-24. Notably, we do not find any male in the present age group 10-24 who married a girl having 9 years or more younger than him. As we move to the next higher age group, i.e. 25-39, we find fifteen females whose husbands were 9-20 years older than them, although among the females about 10 per cent belonging to the age group 25-54 have an inter-spouse age difference of 1-4 years.

Table 4A Present age of the males with the inter-spouse age difference

Present age (in years)	Inter-spouse age differences (in years)				
	1-4	5-8	9-12	13-16	17-20
10-24	(34.78) 8 [8.08]	(7.89) 3 [3.03]	0	0	0
25-39	(47.82) 11 [11.11]	(42.10) 16 [16.16]	(23.80) 5 [5.05]	(30) 3 [3.03]	(28.57) 2 [2.02]
40-54	(8.69) 2 [2.02]	(42.10) 16 [16.16]	(42.85) 9 [9.09]	(40) 4 [4.04]	(28.57) 2 [2.02]
55-69	(4.34) 1 [1.01]	(7.89) 3 [3.03]	(28.57) 6 [6.06]	(10) 1 [1.01]	(42.85) 3 [3.03]
70-84	(4.34) 1 [1.01]	0	(4.76) 1 [1.01]	(20) 2 [2.02]	0
Grand total	23[23.23]	38[38.38]	21[21.21]	10[10.10]	7[7.07]

Table 4B Present age of the females with the inter-spouse age difference

Present age (in years)	Inter-spouse age differences (in years)				
	1-4	5-8	9-12	13-16	17-20
10-24	(52.17) 12 [12.12]	(23.68) 9 [9.09]	(9.52) 2 [2.02]	(30) 3 [3.03]	(28.57) 2 [2.02]
25-39	(26.08) 6 [6.06]	(39.47) 15 [15.15]	(42.85) 9 [9.09]	(40) 4 [4.04]	(28.57) 2 [2.02]
40-54	(17.39) 4 [4.04]	(34.21) 13 [13.13]	(33.33) 7 [7.07]	(10) 1 [1.01]	(42.85) 3 [3.03]
55-69	0	(2.63) 1 [1.01]	(9.52) 2 [2.02]	(20) 2 [2.02]	0
70-84	(4.34) 1 [1.01]	0	(4.76) 1 [1.01]	0	0
Grand total	23[23.23]	38[38.38]	21[21.21]	10[10.10]	7[7.07]

In both the tables of 4A & 4B () represents percentage out of column total and [] represents percentage out of grand total

In tables 5A and 5B we have cross-tabulated inter-spouse age difference with age at marriage separately for males and females and found that there were no males with inter-spouse age difference of greater than eight years who have married between 10-19 years of age, whereas within the same age at marriage category among the females, we have found twenty eight wives (about 28.28% of the total) having a difference of more than eight years with their husbands. In case of both sexes, no individual was found under the age at marriage categories, 30-34, 35-39 and 40-44 respectively having an inter-spouse age difference between 1-4 years. On the other hand, majority of the females who have higher inter-spouse age difference ranging between 9-20 years were found to be concentrated in age at marriage categories between 15-24 years but we have found only three males under the same age at marriage categories who have inter-spouse age difference of 9-20 years. By and large, males

and females in this tribal population showed contrasting features in the relationship between age at marriage and inter-spouse age difference. Put in simple terms males at higher age at marriage categories also tended to marry much younger wives while the females who married at lower ages tended to marry much older husbands, although the Pearson correlation values for males was found to be significant while for the females it was not significant.

5A Age at marriage of males with inter-spouse age difference

Age at marriage (in years)	Inter-spouse age differences (in years)				
	1-4	5-8	9-12	13-16	17-20
10-14	(4.34) 1 [1.01]	0	0	0	0
15-19	(34.78) 8 [8.08]	(13.15) 5 [5.05]	0	0	0
20-24	(56.52) 13 [13.13]	(50) 19 [19.19]	(14.28) 3 [3.03]	0	0
25-29	(4.34) 1 [1.01]	(26.31) 10 [10.10]	(57.14) 12 [12.12]	(30) 3 [3.03]	0
30-34	0	(5.26) 2 [2.02]	(14.28) 3 [3.03]	(50) 5 [5.05]	(42.85) 3 [3.03]
35-39	0	(5.26) 2 [2.02]	(4.76) 1 [1.01]	(10) 1 [1.01]	(57.14) 4 [4.04]
40-44	0	0	(9.52) 2 [2.02]	(10) 1 [1.01]	0
Grand total	23 [23.23]	38 [38.38]	21 [21.21]	10 [10.10]	7 [7.07]

Pearson correlation coefficient value of age at marriage of males with inter-spouse age difference is $r = +0.7569$ and was found to be significant at 0.05 level

5B Age at marriage of females with inter-spouse age difference

Age at marriage (in years)	Inter-spouse age differences (in years)				
	1-4	5-8	9-12	13-16	17-20
10-14	(17.39) 4 [4.04]	(21.05) 8 [8.08]	(23.80) 5 [5.05]	(30) 3 [3.03]	(28.57) 2 [2.02]
15-19	(56.52) 13 [13.13]	(55.26) 21 [21.21]	(42.85) 9 [9.09]	(40) 4 [4.04]	(71.42) 5 [5.05]
20-24	(21.73) 5 [5.05]	(18.42) 7 [7.07]	(19.04) 4 [4.04]	(20) 2 [2.02]	0
25-29	(4.34) 1 [1.01]	(2.63) 1 [1.01]	(9.52) 2 [2.02]	(10) 1 [1.01]	0
30-34	0	(2.63) 1 [1.01]	(4.76) 1 [1.01]	0	0
35-39	0	0	0	0	0
40-44	0	0	0	0	0
Grand total	23 [23.23]	38 [38.38]	21 [21.21]	10 [10.10]	7 [7.07]

In both the table of 5A & 5B () represents percentage of column total and [] represents percentage out of Grand total

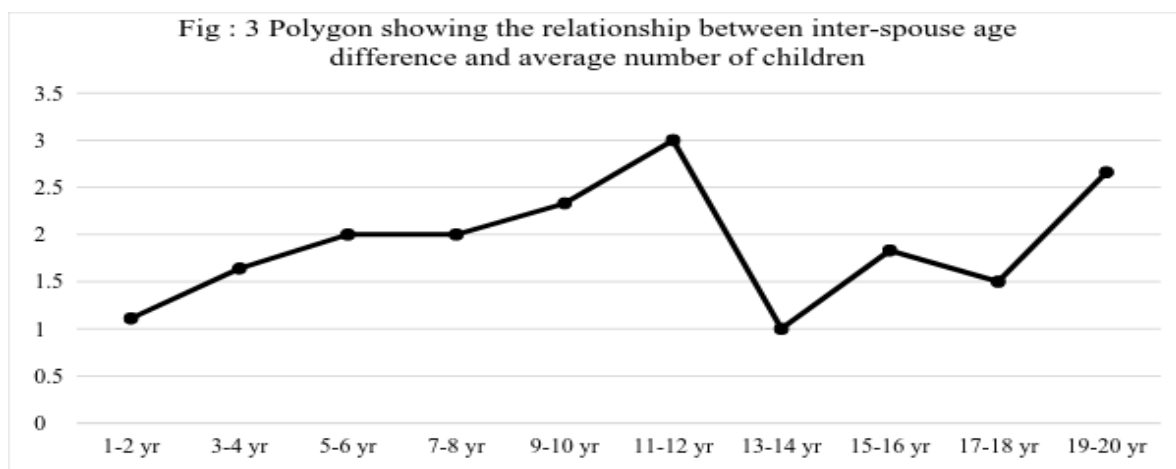
Pearson correlation coefficient value of age at marriage of females with inter-spouse age difference is $r = -0.0406$ and was found to be non-significant at 0.05 level

6 Relationship between inter-spouse age difference and average number of children

Inter-spouse age difference (in years)	Mean of the inter-spouse age difference	Average no of children
1-2	1.77(n=9)	1.11
3-4	3.35(n=14)	1.64
5-6	5.52(n=25)	2
7-8	7.53(n=13)	2
9-10	9.73(n=15)	2.33
11-12	11.5(n=6)	3
13-14	13.25(n=4)	1
15-16	15.16(n=6)	1.83
17-18	17.25(n=4)	1.5
19-20	19.33(n=3)	2.66

n= number of individuals in each age group

Pearson correlation coefficient value of mean of the inter-spouse age difference with average number of children is $r = +0.4413$ and was found to be significant at $p=0.05$ ($N=99$).



In table 6 we have attempted to find out the relationship between inter-spouse age difference of the couples and their number of surviving children. We have not however collected data through a pregnancy outcome schedule but have only counted the number of surviving children of the couples as found during the taking of household census. The methodology of the computation of data was simple. We have calculated the arithmetic means of the inter-spouse age differences of the couples and the corresponding average number of surviving children of those couples and arranged these two sets of quantitative data in the second and the third columns of table 6. We have also represented the data in the frequency polygon in

Fig.3 and have computed the Pearson correlation coefficient value(r) and tested the value at 0.05 level of significance. Let us now enumerate our findings. It was found that the average of number of children gradually increased as inter-spouse age difference also increased. The average number of children reached its peak at 11-12 years (3 children per couple) of inter-spouse age difference and then it declined slowly, although at the greatest inter-spouse age difference the average number of children rose again up to 2.66 children. The Pearson correlation of mean of the inter-spouse age difference with average number of children also showed a positive relation ($r= +0.4413$) which was found to be significant at $p=0.05$.

CONCLUSION

In this micro-level demographic study with special reference to inter-spouse age difference in a Sundarban village inhabited by the Mundas we have found some interesting features of the inter-spouse age difference among the couples which are enumerated below.

1. The overall mean age at marriage of the males and females were found to vary by 8 years. Interestingly, the cross-tabulation of present age with mean age at marriage revealed a decline among the younger individuals over the years in case of both sexes.
2. The highest percentage of couples (about 25%) showed an age difference between 5-6 years. The other side of the story of course revealed a very traditional scenario. More than 51 per cent of the couples in this Munda village have inter-spouse age difference ranging between 7-20 years and we have found a substantial number of couples(about 15%) having an age difference of 9-10 years.
3. In case of both males and females younger persons (10-24 years) have married spouses who were within an age difference of 1-4 years. Of ninety nine couples about twenty have their spouses within the age difference category of 1-4years and they belonged to the age at marriage category of 10-24.
4. Males and females in this tribal population showed contrasting features in the relationship between age at marriage and inter-spouse age difference. Put in simple terms, males at higher age at marriage categories also tended to marry much younger wives while the females who married at lower ages tended to marry much older husbands.
5. The average of number of children gradually increased as inter-spouse age difference also increased. The average number of children reached its peak at 11-12 years (3 children per couple) of inter-spouse age difference and then it declined slowly, although at the greatest inter-spouse age difference the average number of children rose again up to 2.66 children

REFERENCES

- Bandyopadhyay, A and Guha, A 2016. Subsistence strategies of the Mundasin a village of Sundarban, West Bengal. *Journal of the Indian Anthropological Society* 51(3):128-144
- Casterline, John, B., Williams, L. and McDonald, Peter 1986. The Age Difference Between Spouses: Variations among Developing Countries. *Population Studies* 40(3): 353-374.
- Jalais, A.2010. *Forests of Tigers: People, Politics & Environment in the Sundarban*, New Delhi: Routledge
- Sarkar, P and Mukherjee, D.P. 2010. Patterns of Marriage among a Hindu Caste Population of the Southern Part of West Bengal, Bordering Bangladesh. *Anthropos*. 105(2): 583-587.

ACKNOWLEDGEMENTS

We are greatly indebted to the villagers of Sardarpara and the surrounding areas without whose help and cooperation the fieldwork could not have been conducted. We also owe our debts to the 2014 batch of 2nd semester students of the Department of Anthropology, Vidyasagar University who sincerely collected the data in the field a part of which was used for this paper. Our special thanks go to the WWF staff at Sundarban, particularly, Anurag Danda, Chiranjib Chakrabarty and Pankaj Sarkar who not only encouraged us to undertake fieldwork at Sardarpara but they also provided all kinds of support during our stay in the field. Last but not the least we would like to express our sincerest thanks to Professor Subir Biswas of the Department of Anthropology, West Bengal State University for kindly inviting us to write this paper for the inaugural issue of the departmental journal of WBSU.