## FERTILITY INTENTION OF TSUNAMI AFFECTED WOMEN IN SOUTHINDIA

## Introduction

Researching Reproductive Behaviour of women is one of the potentially difficult areas as it is open to all sorts of misunderstandings and objections. The reproductive behavior of women is also much influenced by the natural calamities like Famine, Floods, Earth quake, and Tsunami. Many women also lost their lives in their attempts to save their children and elderly relatives who were with them at the time. Figures collated by Oxfam for this report show that the tsunami killed more women than men in the worst affected districts. In Nagapattinam, the worst affected district of Tamil Nadu in South India, government statistics state that 2,406 women died, compared with 1,883 men. In Cuddalore, the second most affected district, almost three times as many women were killed than men, with 391 female casualties, compared with 146 men.Therefore, the study on fertility behaviour among women, acquires special importance in the context of coastal areas of Tamilnadu where the high rate of mortality of women and children caused due to natural calamities like Cyclone, floods, earth quake and Tsunami.
It is, in this context, an attempt has been made to study the fertility behavior of the women in the Tsunami affected areas of Chidambaram, Tamilnadu. The present study aimed at exploring the Reproductive behavior of women affected by Tsunami in the Coastal villages of Chidambaram and Cuddalore by obtaining information with the help of an interview schedule.

## Objectives

The specific objectives of this study are to
a) study the Reproductive behavior of the women affected by Tsunami
b) assess the Fertility Intentions of women affected by Tsunami
c) assess the linkages between the fertility intentions and their Socio-economic and demographic Characteristics

## Tsunami in Cuddalore and Chidambaram coastal area

Cuddalore District has 57.5 km -long coastline and serves as the natural confluence for seven major rivers - the Kollidam, the Vadavar, the Vellar, the Manimuktha, the Gedilam, the Penniayar and the Paravanar. Within Cuddalore District, Parangipettai and Killai regions in coastal Cuddalore District are located in the estuarine and Delta regions of Tamilnadu. This region has a unique landscape created by rivers and backwaters from the East Coast of Bay of Bengal. Further, these regions are also irrigated from Veeranam Lake - one of the biggest water bodies in Tamilnadu. In other words, this region is surrounded by network of rivers, reservoirs, tanks and irrigation channels, which prove to be a boon in normal times but a bane during the monsoon.

## Selection of the Sample Villages

Sampling is the procedure of selecting a portion of the population to represent the entire population in the study. It is proposed to select the villages in coast of Cuddalore and Chidambaram areas as Cuddalore district was one among the districts worst affected by the Tsunami. The list of affected villages was obtained from the Cuddalore district administration. According to the list there were 24 revenue villages comprising of 58 habitations were affected by the Tsunami. There were 7546 families were listed as affected by the district authorities.

Among the 24 revenue villages and 58 habitations, 18 revenue villages which comprising of 38 habitations were selected as sample area for this study. Among the 7546 families of 58 habitations, 38 habitations were selected from 18 revenue villages on the basis of the number of families in each habitation. Among the selected habitations, 450 families were selected from all the selected villages proportionate to the number of families in each habitation. The number of families in each habitation has been selected randomly. In all 450, families were selected and the married women in the families were contacted and obtained information relating to their fertility intention.

## Data and Methods

A detailed Schedule for adoption of interview method to elicit information on various aspects of fertility intentions of women affected by Tsunami in the study area was administered to all the selected women for this study. The data relating to the socio economic and demographic characteristics, fertility level and behavior and fertility intentions were obtained from the women in the study area. The information was correlated with their socio economic and demographic characteristics and the relationship between these variables were established with the use of SPSS package.

## Fertility History

Women in the study area have been classified according to their number of pregnancies, number of children ever born (Total, Male and Female), number of children living(Total, Male and Female), number of children dead(Total, Male and Female),Ages at birth and respondents intention while giving birth. This type of analysis will pour some light to understand the fertility behavior of women vulnerable to various natural disasters.

## Pregnancies

Women in the study area were probed to obtain information on the pregnancies in their life time up to the time of survey. The responses were classified and tabulated in this following table.

Table-1, Distribution of Respondents by number of Pregnancies

| SI.No. | No. of Pregnancies | No. of Persons | Percentage |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 71 | 15.8 |  |  |  |
| 2 | 2 | 167 | 37.1 |  |  |  |
| 3 | 3 | 132 | 29.3 |  |  |  |
| 4 | 4 | 68 | 15.1 |  |  |  |
| 5 | 5 | 6 | 1.3 |  |  |  |
| 6 | 6 | 4 | 0.9 |  |  |  |
| 7 | 7 | 2 | 0.4 |  |  |  |
| Total |  |  |  |  | 450 | 100.0 |

Average number of Pregnancy is $\mathbf{2 . 5 4}$
From the above table it can be inferred that 37.1 percent of women were pregnant two times.29.3 percent were three times.15.8 and 15.1 per cent were pregnant one and four times
respectively. A meager percentage of women got pregnant five and more times. The average number of pregnancy of the women in the study area has been calculated as 2.54.

## Children Ever Born (CEB)

Children ever born (CEB) to women in a particular age group is the mean number of children born alive to women in that age group. The number of children ever born to a particular woman is a measure of her life time fertility experience up to the moment at which the data are collected. In most cases, the mean number of children ever born is computed as the ratio of the number of children born alive to all women in a particular age group to the number of women.

Table-2,Distribution of Respondents by number of CEB

| SI.No | Total CEB | Male CEB |  | Female CEB |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | :---: |
|  |  | Women | Percent | Women | Percent | Women | Percent |
| 1 | 0 | - | - | 27 | 6.0 | 72 | 16.0 |
| 2 | 1 | $88(088)$ | 19.6 | $282(282)$ | 62.7 | $321(321)$ | 71.4 |
| 3 | 2 | $115(230)$ | 25.6 | $75(150)$ | 16.7 | $42(084)$ | 9.3 |
| 4 | 3 | $178(534)$ | 39.6 | $39(117)$ | 8.7 | $11(033)$ | 2.4 |
| 5 | 4 | $60(240)$ | 13.2 | $22(088)$ | 4.8 | $3(012)$ | 0.7 |
| 6 | 5 | $9(045)$ | 2.0 | $5(025)$ | 1.1 | $1(005)$ | 0.2 |
| Total |  |  |  |  |  |  |  |
| $450(1137)$ |  | 100.0 | $450(682)$ | 100.0 | $450(455)$ | 100.0 |  |

Average number of Children Ever Born is 2.53, CEB (M) is1.52, CEB (F) is1.01

The above table shows the percentage distribution of women with their total number of children ever born, number of male children ever born and number of female children ever born. It is inferred from the above table that there were 39.6 per cent of the women with three children, 25.6 per cent of the women with two children and 19.6 per cent of the women with only one child in the study area during the survey. 13.2 and 2.0 percent of the women were with four and five children ever born respectively in the study area. While the women in the study area classified with the number of male ever born children, 62.7 per cent of women were with one male child and 16.7 percent were with two male children. As far as the female children are concerned, 71.4 per cent of women in the study area were with only one female child. Alarmingly, 16.0 per cent of the women were without female children. The average number of Children ever born, male children ever born and female children ever born have been calculated as 2.53, 1.52 and 1.01 respectively.

## Children living (CL)

A Woman gains respect when she is married and has children, thereby improving her bargaining position in the household. The offspring guarantees the women status and respect.

Table-3, Distribution of Respondents by number of CL

| SI.No | CL | Total CL |  | Male CL |  | Female CL |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
|  |  | Women | Percent | Women | Percent | Women | Percent |
| 1 | 0 | - | - | 36 | 8.0 | 89 | 19.8 |
| 2 | 1 | 122 | 27.1 | 247 | 54.9 | 345 | 76.7 |


| 3 | 2 | 136 | 30.2 | 116 | 25.8 | 09 | 2.0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 3 | 129 | 28.7 | 34 | 7.6 | 04 | 0.9 |
| 5 | 4 | 56 | 12.4 | 14 | 3.1 | 02 | 0.4 |
| 6 | 5 | 7 | 1.6 | 3 | 0.6 | 01 | 0.2 |
|  | Total | $450(1040)$ | 100.0 | $450(652)$ | 100.0 | $450(388)$ | 100.0 |

Average number of Children living is $2.31, \mathrm{CL}(\mathrm{M})$ is1.45, CL (F) is 0.86
Hence, we may expect a woman to continue child bearing activities throughout her reproductive span. On the other hand high costs of child-raising play an important role to decide for number of children. More over number of living children to a woman is also an important indicator to measure the fertility level. Women in the study area have been classified with their number of living children.

The above table shows the distribution of women in the study area with their total number of living children, total number of male living children and total number of female living children. It can be revealed that, more than 30.0 per cent of the women were with two living children. 28.7 per cent of the women were with three living children. Another 27.1 per cent of the women were with only one living children. Only, 12.4 and 1.6 per cent of women were with four and five living children. The average number of living children per women has been calculated as 2.31. Women in the study area was also classified with their living male and female children. 54.9 per cent of the women were with only one male living children. 25.8 per cent of the women were with two living male children. Only, 7.6 per cent of the women were with four male living children. 8.0 per cent of the women were without male child. The average number of male living children per woman has been calculated as 1.45.As far as the female child was concerned, it is inferred from the table that 76.7 per cent of women were with only one female living child. Another 19.8 per cent of the women were without female children. The average number of female living children per woman has been calculated as 0.86 .

## Children Dead (CD)

Number of Dead Children of a household is a meaningful indicator of the health and nutritional status of the members in those households. Hence the women in the study area were probed about the children dead and the information obtained was tabulated and analyzed. The following table shows the percentage distribution of women in the study area with their dead children. 87.8 per cent of the women in the study area were without dead children. 6.7 per cent of the women were with only one dead child. Another 2.9, 1.5 and 1.1 per cent of the women were with two, three and four dead children respectively. The average number of children dead per woman has been calculated as 0.22 . Like the earlier analysis, women were distributed according to their male and female dead children.

Table-4, Distribution of Respondents by number of CD

| SI.No | CD | Total CD |  | Male CD |  | Female CD |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  |  | Women | Percent | Women | Percent | Women | Percent |
| 1 | 0 | 395 | 87.8 | 429 | 95.3 | 404 | 89.8 |
| 2 | 1 | 30 | 6.7 | 14 | 3.1 | 28 | 6.2 |


| 3 | 2 | 13 | 2.9 | 5 | 1.1 | 15 | 3.3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| 4 | 3 | 7 | 1.5 | 2 | 0.4 | 3 | 0.7 |
| 5 | 4 | 5 | 1.1 | - | - | - | - |
| 6 | 5 | - | - | - | - | - | - |
|  | Total | $450(97)$ | 100.0 | $450(30)$ | 100.0 | $450(67)$ | 100.0 |

Average number of Children Dead is $0.22, C D(M)$ is 0.07 , and $C D(F)$ is 0.15

More than 95.0 per cent of the women were reported that they had no male dead children. Only, 3.1, 1.1 and 0.4 percentages of women were with one, two and three male dead children. The average number of male dead children per woman has been calculated as 0.07 . At the same time, 89.8 per cent of the women in the study area reported that they had no female dead children. But 6.2, 3.3 and 0.7 per cent of the women in the sample area were with one, two and three female dead children. The average number of female dead children per woman has been calculated as 0.15 .

## Age of mothers at Births

Age of mother at the time of birth is one of the important demographic characteristics to be considered to assess the fertility behavior of women. In the study area, women were probed to obtain information about their age at birth orders. The information collected from the women was tabulated and analyzed. Women in the study area were classified according to their birth orders. From the following table, it can be inferred that almost all the women in the study area were with at least one child. Out of 450 women, 39.6 per cent were give birth to their first child at the age of 20 years and another 27.5 percent were give birth to their first child at the age of 19 years. The age at first birth of mothers ranges between the ages of 15 and 25 years. The average age at first birth of the women in the study area has been calculated as 19.3 years. Among the women studied, 362 women were with two children. Among them $111(30.7 \%)$ women reported that they gave birth to their second children at the age of 21 years. 28.7 percent of women reported that they gave birth to their second children at the age of 20 years. 19.9 per cent of women reported that their age at second birth was 19 years. The age of mothers at their second birth was ranges from 17 and 27 years. The average age of mothers at their second birth has been calculated as 20.5 years. In the study area, 247 mothers were with three children. Among the 247 mothers, 107(43.3\%) mothers reported that their age at third birth was 22 years. 14.6 per cent were reported that their age at their third birth was 23 years. The age of the mothers at their third birth ranges between the ages of 18 and 29 years. The average age of mothers at their third birth has been calculated as 22.0 years. 69 women in the study area reported that they were with four children. Among them $9(13.0 \%)$ women reported that their age at their fourth was 25 years.

Table-5, Distribution of Respondents by their Age at Birth

| SI.No. | Age | I Birth | II Birth | III Birth | IV Birth | V Birth |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 15 | $12(02.7)$ | - | - | - | - |
| 2 | 16 | $27(06.0)$ | - | - | - | - |
| 3 | 17 | $21(04.7)$ | $5(1.4)$ | - | - | - |


| 4 | 18 | $24(05.3)$ | $13(3.6)$ | $7(02.8)$ | - | - |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 19 | $124(27.5)$ | $72(19.9)$ | $18(07.3)$ | - | - |
| 6 | 20 | $178(39.6)$ | $104(28.7)$ | $16(06.5)$ | - | - |
| 7 | 21 | $40(08.9)$ | $111(30.7)$ | $27(10.9)$ | - | - |
| 8 | 22 | $12(02.7)$ | $27(07.5)$ | $107(43.3)$ | $6(08.7)$ | - |
| 9 | 23 | $7(01.6)$ | $14(03.9)$ | $36(14.6)$ | $7(10.1)$ | - |
| 10 | 24 | $3(00.7)$ | $7(01.9)$ | $18(07.3)$ | $8(11.6)$ | - |
| 11 | 25 | $2(00.4)$ | $4(01.1)$ | $8(03.2)$ | $9(13.0)$ | - |
| 12 | 26 | - | $3(00.8)$ | $6(02.4)$ | $8(11.6)$ | - |
| 13 | 27 | - | $2(00.6)$ | $1(00.4)$ | $6(08.7)$ | $1(11.1)$ |
| 14 | 28 | - | - | $1(00.4)$ | $7(10.1)$ | $2(22.2)$ |
| 15 | 29 | - | - | $2(00.8)$ | $7(10.1)$ | - |
| 16 | 30 | - | - | - | $6(08.7)$ | - |
| 17 | 31 | - | - | - | $3(04.3)$ | $3(33.3)$ |
| 18 | 32 | - | - | - | $2(02.9)$ | - |
| 19 | 33 | - | - | - | - | $3(33.3)$ |
|  | Total | $450(100.0)$ | $362(100.0)$ | $247(100.0)$ | $69(100.0)$ | $9(100.0)$ |

## Note: Average age of women at I Birth is 19.34, at II Birth is 20.48, at III Birth is 22.02, at IV Birth is $\mathbf{2 6 . 3 2}$ and V Birth is $\mathbf{3 0 . 5 5}$ years.

The age of mothers at their fourth birth ranges between 22 and 32 years. The average age of mothers at their fourth birth has been calculated as 26.3 years. Among 450 women studied, 9 of them reported that they gave birth to five children. The age of mothers at their fifth birth ranges between 27 and 33 years. The average age of mothers at their fifth birth has been calculated as 30.5 years. The age gap between the first birth and second birth has been calculated as 1.14 years. The age gap between the second and third birth was 1.54 years. The age gap between third and fourth was 4.3 years. Similarly, the gap between fourth and fifth birth was 4.23 years. It can be noted that the gap between births i.e., the inter birth interval is increasing with the increase in birth order.

## Parity of women

Parity of women refers to the number of live born children a woman has delivered. The following table shows the distribution of women in the study area with the number of children delivered. Among 450 women studied, 39.6 per cent of the women were three parity women. Another 25.6 per cent of the women were two parity women. $88(19.6 \%)$ mothers reported that they have delivered only one child. Another 13.3 and 2.0 per cent of the women were four and five parity women. The average parity of women in the study area has been calculated as 2.53 .

Table-6, Distribution of women by parity

| Sl.No | Parity | Number of Mothers | Percentage |
| :--- | :--- | :--- | :--- |
| 1 | I | 88 | 19.6 |
| 2 | II |  | 115 |


| 3 | III | 178 | 39.6 |
| :--- | :--- | :--- | :--- |
| 4 | IV | 60 | 13.3 |
| 5 | V | 9 | 2.0 |
| Total |  | 450 | 100.0 |

## Intention to have Children

The respondents in the study area were probed about their intention at the time of their births so as to assess the extent of unwanted children which might have prevented. The intention of the women for each child have been obtained and tabulated in the following table. The responses were classified as intended then, intended to have later and not at all intended.

Table-7, Distribution of Respondents by their intention to have Children

| SI.No | Births | Whether intended to have Children |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Intended to <br> have later | Not at all <br> intended | Total |  |
|  | I | $430(95.6)$ | $20(04.4)$ | - | $450(100.0)$ |
| 2 | II | $250(69.1)$ | $112(30.9)$ | - | $362(100.0)$ |
| 3 | III | $107(43.3)$ | $131(53.0)$ | $9(03.7)$ | $247(100.0)$ |
| 4 | IV | $9(13.0)$ | $42(60.9)$ | $18(26.1)$ | $69(100.0)$ |
| 5 | V | $2(22.2)$ | - | $7(77.8)$ | $9(100.0)$ |

It can be inferred from the above analysis that, among 450 women studied, 95.6 per cent of them reported that they have intended then to have child as it was first birth. Rest of the respondents reported that they have intended later. Whereas in the second birth, out of 362 women who gave birth to second children, 69.1 per cent of women were intended then to have the second children. 30.9 per cent were intended to have later the second children. Out of 247 women who gave birth to third children, only 43.3 per cent of women intended then to have the third children and 53.0 per cent of them intended to have the third children later. Moreover, 3.7 per cent were not at all intended to have the third children. Among the women (69) who gave birth to fourth children, 42 women (60.9\%) were intended to have it later.26.1 percent were not at all intended to have the fourth children. Only 13.0 per cent of women intended then for their fourth children. Similarly, out of 9 women who gave birth to five children, $7(77.8 \%)$ were not at all intended then to have the fifth children. From the analysis, it can be inferred that, the percentage of women who intended then to have children is decreases with the higher order births. Similarly, the percentage of women who intended to have their children later and not at all intended to have children increases with the higher order births. Hence, an indirect relation has been established between intention to have children and order of birth of children.

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Table-8, Distribution of Respondents by their intention to have Children

| SI.No | Births | Whether intended to have Children |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Intended to <br> have later | Not at all <br> intended | Total |  |
|  | I | $430(95.6)$ | $20(04.4)$ | - | 450(100.0) |
| 2 | II | $250(69.1)$ | $112(30.9)$ | - | $\mathbf{3 6 2 ( 1 0 0 . 0 )}$ |
| 3 | III | $107(43.3)$ | $131(53.0)$ | $9(03.7)$ | $\mathbf{2 4 7 ( 1 0 0 . 0 )}$ |
| 4 | IV | $9(13.0)$ | $42(60.9)$ | $18(26.1)$ | $\mathbf{6 9 ( 1 0 0 . 0 )}$ |
| 5 | V | $2(22.2)$ | - | $7(77.8)$ | $\mathbf{9 ( 1 0 0 . 0 )}$ |

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## Intention of women while having children and their Socio-Economic and Demographic Characteristics

Fertility intentions play a central role in explaining contemporary fertility trends: they are among the strongest predictors of subsequent fertility and operate as key proximate variables in predicting fertility behaviour (Schoen et al. 1999; Ajzen 1991). The complex effect of education on fertility has been widely studied in the literature, and is a highly relevant topic in research on reproductive behaviour (Kohler and Rodgers 2003). The diffusion of modern contraception has not leveled the socio-economic differentials in completed fertility (Sweet and Rindfuss 1983), as women who are college graduates still tend to have fewer children than women with high school degrees or lower levels of education (Yang and Morgan 2003). Fertility intentions are an important channel through which education affects fertility. However, the relationship between fertility intentions and education is not necessarily the same as the relationship between actual fertility and education and little empirical research has been devoted to this issue. Empirical evidence indicates that highly educated people intend to have
more children than less educated women (Heiland et al. 2008), but they ultimately have fewer children (Quesnel-Vallée and Morgan 2003; Bongaarts 2001). Moreover, highly educated women revise their birth intentions downwards more frequently than less educated women (lacovou and Tavares 2011), especially when they are near the end of their fertile years (Liefbroer 2009).

A positive and statistically significant cross-country correlation between the mean ultimately intended family size (the number of children already born plus the number of children the individual plans to have in the future) and the proportion of highly educated women of reproductive ages (20-45) has been observed in the three cross-sectional rounds of the Euro barometer (EB) survey conducted in 2001, 2006, and 2011 (Testa and Grilli 2006; Testa 2010; Testa 2012). It would be particularly valuable to gain more knowledge about the impact of socio economic and demographic characteristics of women on fertility decision-making in the study area.
Table-9, Distribution of women by their intention during their child births and socio economic and demographic characteristics

| SED <br> Variables | Intention while having children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I |  |  | II |  |  | III |  |  | IV |  |  | V |  |  |
|  | IT | IL | Tot | IT | IL | Tot | IT | IL | Tot | IL | NI | Tot | IL | NI | Tot |
| Present Age15-19 | 9 | 0 | 9 | 9 | 0 | 9 | 9 | 0 | 9 | 0 | 0 | 9 | 2 | 5 | 8 |
| 20-24 | 75 | 0 | 75 | 75 | 0 | 75 | 75 | 0 | 75 | 42 | 18 | 69 | 0 | 1 | 1 |
| 25-29 | 139 | 0 | 139 | 139 | 0 | 139 | 23 | 116 | 139 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 83 | 0 | 83 | 27 | 56 | 83 | 0 | 15 | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35-39 | 67 | 0 | 67 | 0 | 56 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40-44 | 44 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45-49 | 13 | 20 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Age at Marriage <18 | 39 | 0 | 39 | 39 | 0 | 39 | 39 | 0 | 39 | 30 | 9 | 39 | 2 | 6 | 9 |
| 18 | 87 | 0 | 87 | 87 | 0 | 87 | 68 | 19 | 87 | 12 | 18 | 30 | 0 | 0 | 0 |
| 19 | 102 | 0 | 102 | 102 | 0 | 102 | 0 | 102 | 102 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | 89 | 0 | 89 | 22 | 67 | 89 | 0 | 10 | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 | 64 | 0 | 64 | 0 | 45 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 | 19 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | 15 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24< | 0 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Duration Marital Life 0-4 | 93 | 0 | 93 | 93 | 0 | 93 | 93 | 0 | 93 | 42 | 18 | 69 | 2 | 6 | 9 |
| 5-9 | 125 | 0 | 125 | 125 | 0 | 125 | 14 | 111 | 125 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-14 | 101 | 0 | 101 | 32 | 69 | 101 | 0 | 20 | 29 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-19 | 79 | 0 | 79 | 0 | 43 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20-24 | 32 | 11 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 25-29 | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30-34 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Occupation Housewife | 428 | 0 | 428 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Agri.Labourer | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fish Marketing | 0 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Government job | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others(Business) | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Family TypeNuclear | 420 | 0 | 420 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Joint | 10 | 20 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Educational Status Illiterate | 132 | 0 | 132 | 132 | 0 | 132 | 107 | 25 | 132 | 42 | 18 | 69 | 2 | 6 | 9 |
| Literate without Schooling | 16 | 0 | 16 | 16 | 0 | 16 | 0 | 16 | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary | 163 | 0 | 163 | 102 | 61 | 163 | 0 | 90 | 99 | 0 | 0 | 0 | 0 | 0 | 0 |
| Secondary | 113 | 0 | 113 | 0 | 51 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Higher Secondary | 6 | 20 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Birth Place Rural | 430 | 13 | 443 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Urban | 0 | 7 | 7 | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Spouse Occupation Agri.Labourer | 9 | 0 | 9 | 9 | 0 | 9 | 9 | 0 | 9 | 0 | 0 | 9 | 2 | 5 | 8 |
| Agriculture | 2 | 0 | 2 | 2 | 0 | 2 | 2 | 0 | 2 | 2 |  | 2 | 0 | 1 | 1 |
| Fishing | 419 | 4 | 423 | 239 | 112 | 351 | 96 | 131 | 236 | 40 | 18 | 58 | 0 | 0 | 0 |
| Government job | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others(Business) | 0 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Spouse Education Illiterate | 141 | 0 | 141 | 141 | 0 | 141 | 107 | 34 | 141 | 42 | 18 | 69 | 2 | 6 | 9 |
| Literate without Schooling | 14 | 0 | 14 | 14 | 0 | 14 | 0 | 14 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary | 146 | 0 | 146 | 95 | 51 | 146 | 0 | 83 | 92 | 0 | 0 | 0 | 0 | 0 | 0 |
| Secondary | 128 | 0 | 128 | 0 | 61 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Higher Secondary | 1 | 17 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Higher Education | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 430 | 20 | 450 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |
| Annual | 383 | 0 | 383 | 250 | 112 | 362 | 107 | 131 | 247 | 42 | 18 | 69 | 2 | 6 | 9 |


| Income $<1000$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| $10000-20000$ | 47 | 11 | $\mathbf{5 8}$ | $\mathbf{0}$ | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ |
| $20000-30000$ | 0 | 8 | $\mathbf{8}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ |
| $30000+$ | 0 | 1 | $\mathbf{1}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ |
| Total | $\mathbf{4 3 0}$ | $\mathbf{2 0}$ | $\mathbf{4 5 0}$ | $\mathbf{2 5 0}$ | $\mathbf{1 1 2}$ | $\mathbf{3 6 2}$ | $\mathbf{1 0 7}$ | $\mathbf{1 3 1}$ | $\mathbf{2 4 7}$ | $\mathbf{4 2}$ | $\mathbf{1 8}$ | $\mathbf{6 9}$ | $\mathbf{2}$ | $\mathbf{6}$ | $\mathbf{9}$ |

Note: IT-Intended then, IL-Intended later, NI-Not at all intended, Tot-Total

The abovetable shows the distribution of women by their intention at the time of giving birth to their children and socio economic and demographic characteristics. The women in the study area were probed to elicit information relating to the intention of the women during their child births. "Intended then, Intended later and Not at all intended" were the options given to them to choose. The responses of the women were tabulated in the above table. According to the responses given by the women in the study area, the analysis has been made for five children as the maximum family size was five in the study area.

## Summary of Findings and Conclusion

## Intention at the time of first birth

Intention of women at the time of their first birth was cross classified with their socio economic and demographic characteristics. The cross classification with their present age shows that, out of 450 women studied, 430 ( $95.6 \%$ ) were reported that they were intended to have the first child then. Remaining 4.3 per cent reported that they intended to have it later. They were belonging to the age group of 45-49 years and to the age at marriage group of 24+ years. Women with higher duration of marital duration (20-34 years), women engaged in fish marketing, women belong to joint families, women educated higher secondary level and above, urban born women and women belong to higher income group families were reported that they intended to have their first child later. As it was the first child the percentage of women reported the third choice (Not at all intended) was very meager. Hence the above analysis shows that women in the study area were not willing to postpone their first child birth after marriage. A very low percentage of women reported that they intended to have after some time.
In developed countries, delayed child bearing particularly the first child has attracted much attention in recent years. Gradually the thinking has been to delay the age at marriage so that the first childbirth occurs during twenties and early thirties. The gap between marriage and first live birth is termed as "first birth interval". First childbirth, an important event in the reproductive life of a female, has a direct relationship with number of factors such as couples' educational and occupational status, age at marriage etc. In addition to these factors, incomplete conceptions occurring prior to the live birth also have a definite bearing on this. For instance, in some rural parts of India, the first birth is usually delayed because of temporary separation of married partners with the female partners going over to their parents' place for some time even after marriage. This social custom plays an important role in delaying the first birth. The age at which women in developing countries like India have their first child has important consequences on the demographic character of the population. Early child bearing contributes to population growth in two ways. Firstly, in the absence of any intentional contraceptive practices, women who begin bearing children early in their life have more births
than equally fecund women who begin so at older ages. Secondly, child births occurring at younger ages imply a higher rate of fertility and population growth because of the shorter length of time between generations. Moreover, countries like India, couples are under strong social pressure to have a child, especially a son, as soon as possible after getting marriage. The long first birth interval, therefore, poses an interesting puzzle for the study of the relationship between actual and ideal demographic behavior. It is inferred from the statistical result that the calculated Chi-square values are significant at 0.001 levels. Therefore it is concluded that there is an association between present age, age at marriage ,duration marital life, occupation, family type, education status, literate without schooling, birth place, spouse occupation, spouse education, and annual income and Intention of having I Child.
Intention at the time of second birth
Intention of women at the time of their second birth was cross classified with their socio economic and demographic characteristics. The cross classification with their present age shows that, among 450 women studied, 362 ( $80.4 \%$ ) women gave birth to second child. Among them 69.1 per cent of women intended to have the children then. The remaining 30.9 per cent of women intended to have the second children later. The age group of the women who have unintended birth was 30-39 years. Majority of women who intended to have the second child later were belong to the age at marriage category of 20 and 21years, 10 to 19 years of marital duration, engaged as housewives, belong to nuclear families, educated up to primary and secondary level of education, rural born, wives of spouses engaged in fishing as their occupation, and belong to the families of low income category. The spouses` educational status is also an important factor in the fertility decision making. The wives of the spouses with primary and secondary level of education have intended to have the second child later. It is inferred from the statistical result that the calculated Chi-square values are significant at 0.001 levels. Therefore it is concluded that there is an association between present age, age at marriage, duration marital life, occupation, family type, education status, birth place, spouse occupation, spouse education and annual income and the intention to have II children.

## Intention at the time of third birth

Out of 450 women studied in the study area, only ( 247 women) 54.9 per cent of the women gave birth to three children. Out of 247 women who have given birth to three children, only 43.3 per cent of women intended then to have the third children. The remaining 56.7 per cent of women intended their third children later. Hence, it is inferred that majority of women in the study area were not intended their third children then. These may be considered as unintended births. The proportion of women in the age group of $25-34$ years, women of low age at marriage, women of 5-14 years of marital duration, women engaged as housewives, women belong to nuclear families, Illiterate women, rural born women, women engaged as housewives and women of low educational status were high among those intended their third children later. Hence, there is an urgent need to study the reasons for the unintended births in the study area and measures should be taken to curb the increasing rate of unintended births. Nine women in the study area reported that they have not at all intended to have the third children. It is inferred from the statistical result that the calculated Chi-square values are significant at 0.001 levels. Therefore it is concluded that there is an association between present age, age at marriage, duration marital life, occupation, family type, education status, birth place, spouse occupation, spouse education, and annual income and Intention to have children III.

## Intention at the time of fourth birth

69 Women, out of 450 were reported that they gave birth to four children. Among them, 9 women reported that they have intended to have the fourth children then. 60.9 per cent of the women, who gave birth to four children, were reported that they were intended to have the fourth children later and not then. More than one fourth of them (26.0\%) reported that they were not at all intended to have the fourth children. Hence, nearly 87.0 per cent of them were not intended to have the fourth children. It is inferred from the statistical result that the calculated Chi-square values are significant at 0.001 levels. Therefore it is concluded that there is an association between present age, age at marriage, duration marital life, occupation, family type, education status, birth place, spouse occupation, spouse education, and annual income and Intention to have children IV.

## Intention at the time of fifth birth

Out of 450 women studied, only 9 women reported that they gave birth to five children. Among the women who gave birth to five children, 6 women have reported that they have not at all intended to have the fifth children. 2 women reported that they have intended their fifth children only later. Only one woman reported that she has intended to have then. It is concluded from the statistical result that the calculated Chi-square values are significant at 0.001 levels. Therefore it is concluded that there is an association between present age, age at marriage, duration marital life, occupation, family type, education status, birth place, spouse occupation, spouse education, and annual income and Intention to have children V .
From the above analysis it can be inferred that majority of women in the study area gave birth to their higher order children unintentionally. Measures should be taken to control the unintentional births by meeting out the unmet need of family planning methods.

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