CONCLUSION AND SUGGESTIONS
The analysis of the women fertility differential by the social structure revealed some notable characteristics on the basis of which certain conclusions are drawn.

The district recorded a total literacy rate of 72.66 per cent during the time of survey. However, there is a large gap between the male and female literacy rate in the districts as well as in the blocks. The male literacy for the district is 81.73 per cent, whereas the female literacy rate is behind the male literacy rate by almost 20 per cent points at 63.17 per cent. The rural blocks of the district display much more gap in literacy than the urban blocks, thus implying the fact that the rural areas still have much scope for improvement with regard to education of its female population.

The district had highest percentage (45.41%) of population in the labours/daily wagers category in the district. The rest of the occupational status had only 10 to 15 per cent of the total population. Thus, majority of population are employed in low earning occupations. Since the income level follows the occupational status of a person, hence the pattern of income distribution is similar to that of occupational status of the population – 44.95 per cent of the population recorded to be living below the monthly family income of less than Rs. 5000 per month. The higher income categories of Rs. 10001 – 15000 and above Rs. 15000 together had only 32 per cent of population of the district. This scenario was found almost similar in all the blocks of the district.

The fertility status of the district has been evaluated with the help of General Marital Fertility Rate (GMFR), Child Woman Ratio (CWR) and Mean of Child Ever Born (MCEB). The district recorded GMFR of 143.24, CWR of 440.33 and MCEB of 3 children per woman. However there were variations among the blocks. Both Dhanbad and Jharia blocks recorded low GMFR and CWR than the rest of the blocks. This difference in fertility also highlights the rural-urban fertility differential in the district, as Dhanbad and Jharia are the urban blocks of the district. However, the MCEB shows a different picture. Both Dhanbad and Jharia had recorded higher MCEB of 3.1 and 3 children per woman respectively. Since the MCEB is a measure of cumulative fertility, it does not give the current fertility level of the district. However, when age wise MCEB is compared among the blocks, it is seen that Dhanbad and Jharia blocks have lower MCEB in younger cohort of women than the rest of the block. Contraceptive prevalence rate (CPR) for the district was
recorded at 46 per cent. There was not much variation in CPR amongst the blocks, but the there was difference in the methods of contraception. The two urban blocks had comparatively higher percentage (20%) of women practicing temporary method than the rural blocks (8%).

The fertility differentials by social structure have been studied both at block and village levels. The indicators of social structure selected at block level are age of women, age at women’s first marriage, religion, family type and family size, women’s educational attainment, husband’s occupational status and family monthly income. MCEB has been used as measure of fertility to assess the differential at block level. It was observed that fertility increased with increasing age of women, and decreased with increasing age at marriage of women. In most of the blocks it was recorded that fertility of women who married between the age of 20 – 24, was almost half of those women who married below 20 years of age. MCEB of women marrying below 15 years of age was recorded to be 3.8 and that of women marrying after 20 years was 2 children per woman. The district had only 16 per cent women who had married at or after 20 years of age.

Fertility by religion showed that Muslims had higher fertility than Hindus in all the blocks. The fertility of Muslims and Hindus has also been compared with respect to their socio-economic status, i.e. by their education, occupation and income. It was observed that the fertility of Muslims were higher than Hindus even when compared with respect to the socio-economic status of both the communities. However, it was seen that the gap between the fertility of the Hindus and Muslims, narrowed down considerably with increasing educational status of Muslim women. This implies that education is one of the most important factors, determining the level of fertility among a group or subgroup of population.

Fertility by family type in the district illustrated that it was higher for nuclear family type (3.5), followed by extended nuclear families (2.9). Joint family type recorded lowest fertility (2.6). The reason being that nuclear family was mostly prevalent among the poor and illiterate people with large family size and joint family system, though, its prevalence is declining, was mostly found amongst comparatively the well-offs. Similarly the fertility by family size shows that high MCEB (3.5) is
recorded in families with higher family size (7 – 9 members) and a comparatively lower MCEB (2.8) is recorded for family size of 9 and above.

Fertility differential by education in Dhanbad district showed that it decreased considerably with increasing educational status of women. The MCEB of women (1.5) with graduate and above education was almost half of that of illiterate women (3.5). The differential by occupational status showed that fertility was higher for those women (3.1) whose husbands’ are engaged in Government jobs and the lowest for those who were in private sector jobs (2.4). The rest of the occupational groups had MCEB ranging between 2.8 and 2.9 children per woman. Fertility by income displayed that it decreased with increasing income in the district. Highest MCEB was recorded by women (3.0) who lived below monthly income level of less than Rs 5000 and lowest was recorded for higher income groups (2.7). It could be deciphered from the results that the fertility differential was much more pronounced with respect to education than with income and occupation. This is suggestive of two facts. Firstly, the inverse relationship between education and fertility is confirmed and there is a potential for decreasing the fertility level of the district by increasing the educational status of the population. Secondly, it also points out towards the fact that the district is still in the early stage of development, as differentials in fertility by education are characteristics of a society that is yet to develop fully. As the benefits of development become widespread the differentials in fertility gradually disappear.

The social structure-fertility nexus have been analysed studied at village level also. Since the block and village levels are different scale of study, the indicators of social structure at village level have been modified a little. The indicators at village level are religion, sex ratio, family type, literacy rate, female literacy rate, median family income, median age at marriage and contraceptive prevalence rate.

Out of a total of 46 PSUs, 18 had Muslim population and the rest were exclusively Hindu populated PSUs. As compared to villages the urban wards of the district had higher percentage of Muslims. With respect to sex ratio, there was a lot of variations among the PSUs. Out of 46 PSUs, 18 had sex ratio well above 1000, 9 between 900 and 950, 12 between 800 and 900 and 3 much below 800, reaching as low as 579 in Joshnadih. The villages presented a more dismal picture in terms of sex ratio than the urban wards. It could be attributed to negative effect of development.
Nuclear family type is the dominant family system in the district, with most of the urban wards having more than 50 per cent nuclear families. There was only one village which had more than 50 per cent families with joint family system. The percentages of extended nuclear families in almost all the PSUs were in between the percent of nuclear and joint family systems.

The literacy rate of the PSUs varied greatly with urban wards recording higher literacy rate than most of the villages. A total of 12 PSUs have literacy rate above 80 per cent, out of which 75 per cent were urban wards. There are 22 PSUs having literacy rate between 60 – 80 per cent. The PSUs which were in or nearby Dhanbad and Jharia blocks had higher literacy rate than the rest of the PSUs, mainly because, Dhanbad and Jharia represent the educational centres of the district, having majority of colleges and University of entire Dhanbad district. With respect to female literacy rate also Dhanbad and Jharia had higher number of PSUs with higher literacy than the rest of the blocks. There are 6 wards that have literacy rate above 80 percent and they constitute only 14.05 per cent of the sampled population. These wards are dwelled upon by Government employees. Only 9 PSUs had female literacy rate between 70 and 80 per cent. There are only three villages in this category (Panchrukhi, Joshnadih and Mandara). 18 PSUs had female literacy rate between 50 to 70 percent constituting a population of 37.09 percent. Most of the villages in this category belonged to the blocks that are adjacent to Dhanbad and Jharia blocks (Gobindpur, Baliapur and Baghmara). There were 13 villages with female literacy rate below 50 per cent with a sizeable population of 21.45 per cent. Out of these, 5 villages recorded female literacy rate below 30 per cent.

At village level analysis it was observed that, only eight PSUs had median family income above Rs. 10,000 per month with just around 19 per cent people residing in them. Of these most of them are urban wards resided by people in Government jobs. About 48 per cent people live between monthly incomes of Rs. 5000 and Rs. 10,000 in twenty PSUs. Out of these twenty PSUs, seven were urban wards. Eighteen PSUs had median family income less than Rs. 5000 constituting about 33 per cent of sampled population of the district.

The villages were also analysed with respect to age at first marriage of women. The average of marriage for women in Dhanbad district is 16.72, which is very low, in fact
less than the legal age of marriage in India which is at 18 years. There are five wards that record the median age at marriage of 18 years and above and constitute merely one fifth of the population of the district. Most of these wards recorded very high to high literacy rate. Majority of the PSUs record a median age at marriage between 16 – 18 years. The 31 PSUs in this category constitute about 60 percent of the sampled population. The low age at marriage in these units cannot be explained by their low literacy rates, as PSUs ranging between very high to very high literacy rates also falls under this category. The contraceptive prevalence rate of the PSUs did not vary much across the urban and rural regions. The most prevalent method of contraception was the permanent one and it was mostly prevalent in the villages. There were eight PSUs that recorded the CPR of more than 70 percent, out of which only two were urban wards and rest villages. When the CPR was related with female literacy rate of these villages, some of the villages showed medium to low literacy. Thirteen PSUs had CPR between 50 and 60 percent and it constituted around 35 per cent of the total respondents. There were 15 PSUs with CPR between 30 and 50 per cent and this category also included 37 percent of the respondents. Less than 30 percent contraceptive users were found in 10 PSUs and constituted mere 12 percent of the total respondents. It may be noted that the use of contraception was prevalent among the educated, uneducated, rich and poor alike. The knowledge of contraception was universal among the married women in all the PSUs.

The status of fertility of the PSUs have been analysed with respect to the GMFR, CWR and MCEB. A very high GMFR of 300 and above was recorded in seven PSUs and majority of the PSUs had GMFR between 100 and 200. Similar scenario was observed with respect to CWR, where a high CWR of 700 and above was recorded in six PSUs and majority of the units had CWR close to average value for the district, i. e. 430. It was observed that the urban wards of the district recorded lower GMFR and CWR. The MCEB being the measure of cumulative fertility presented a different picture. Most of the urban wards recorded high MCEB of above 3.3 children per woman. Twenty three PSUs have MCEB between 2.7 to 3.3 and only 9 PSUs recorded very low MCEB (below 2.3).

The study of the fertility and social structure nexus was undertaken to understand the fertility behaviour with respect to the indicators of the social structure
for each of the PSUs. Thus an effort has been made to study the fertility differentials at a micro level.

The fertility behaviour of each of the PSUs when studied with respect to literacy and female literacy rate it was observed that none of the PSUs with high to very high literacy rate and female literacy rate had higher GMFR or CWR. Similarly the PSUs with low to very low literacy rate did not record low GMFR or CWR but they had high to medium fertility. In fact most of the units with medium literacy rate had medium to low GMFR and CWR. However, same result could not be seen with respect to cumulative fertility, i.e. MCEB. There are 5 PSUs which record high MCEB even with high literacy and female literacy. Most of the PSUs with medium literacy rate had MCEB ranging from medium to lower fertility. This difference in cumulative and current fertility is mainly due to the nature of these measures. The MCEB takes into account the entire reproductive performance of a woman and tells nothing about the current fertility scenario. This also suggests that decline in fertility is still not widespread in the district.

The behaviour of PSUs with respect to GMFR and income also did not show any obvious relationship. Only three PSUs had high income and low to very low GMFR. But these units were from the urban wards of the district. Since, the urban areas generally had lower GMFR than urban wards, it could not be said for sure whether the low fertility in these districts is due to high median family income. And there are only 4 PSUs that recorded high GMFR and had lower income. Majority of the PSUs with medium family income had medium value of GMFR. With respect to CWR, however, a negative relationship between income and fertility is observed. Most of the PSUs with high income recorded low to medium fertility and most of the PSUs with low family income recorded high to very CWR. The association between MCEB and income is also not very clear. Only two PSUs out of 11 with high income had low MCEB, while the rest had medium MCEB. It was recorded that most of the PSUs with medium to very high to high income had medium level of MCEB.

The relationship between age at marriage of women and fertility, in most literature is found to be an inverse one. The PSUs which had higher median age at marriage had showed lower current fertility as well as cumulative fertility. The PSUs with high to very high median age at marriage recorded medium to very low GMFR.
and CWR. Similarly the units having very low median age at marriage for women recorded higher GMFR and CWR. Even the units with medium age at marriage recorded medium to lower value of current fertility. This scenario was found true for both the urban and rural PSUs. For cumulative fertility the inverse relationship was not very much pronounced as it was in case of current fertility. Majority of the units having higher median age at marriage medium MCEB and also most of the units having lower age at marriage registered high to medium fertility.

The fertility and family type nexus showed different relationship for each of the family types. Joint family system and GMFR did not show any well defined relationship. The units with high to very high percentage of joint families had GMFR ranging from high, medium to low. Also it was observed that units with low percentage of joint families and lower fertility were mostly urban wards. However, the relationship between joint family and CWR presented a different picture. The units with high percentage of joint families recorded higher CWR and PSUs having lower percentage of joint families registered lower CWR. The relationship between joint family type and cumulative was also a distinctive one. The units with high and medium percentage of joint families had mostly medium values for MCEB. And the units with low to very low percentage of joint families registered medium to high MCEB.

Although, not much pronounced, the relationship between nuclear family type and GMFR showed that units with high percentage of nuclear family has medium to low fertility and the units with low percentage of nuclear family had higher fertility. The PSUs with medium percentage of nuclear family also had medium to low GMFR. In terms of CWR it was observed that the urban wards with medium percentage of nuclear families recorded medium to low and very low CWR and the villages with medium nuclear families had high to very high CWR. Fifty per cent of the PSUs having low percentage of nuclear family had high to very high CWR. The fertility differential by nuclear family when child ever born is taken as measure of fertility shows different picture. The units with high to very high percentage of nuclear families recorded, high, medium as well as low fertility. Most of the urban wards registered medium percentage of nuclear families and exhibited high to medium MCEB.
The relationship with extended nuclear families and GMFR clearly shows that the units with high, medium or low percentage of extended nuclear families favour medium value of GMFR. The PSUs with low percentage of extended nuclear families had mostly medium GMFR. The child woman ratio differential was more pronounced with respect to extended family type. More than 50 per cent units under high and very high category of extended nuclear family type displayed high to very high CWR. The units in medium category had more units with low and very low CWR than medium CWR. The relationship between extended nuclear family type and MCEB showed that PSUs having, both high as well as low percentage of this family type recorded medium MCEB.

The contraceptive prevalence rate (CPR) is one of the direct factors affecting fertility of a region. It is believed that higher the prevalence of contraceptives, lower will be the fertility. However, in the district, as mentioned earlier it was observed that permanent methods of contraception are generally practiced once the desired family size is achieved by women. Therefore, no clear relationship between fertility and CPR has been observed. As GMFR takes into account last year births only, hence the effect of CPR is not much perceptible. Out of 10 units with high and very high CPR, only three reported low to very low GMFR, 5 had medium and there were 2 units recorded high GMFR. It is observed that wards had mostly medium to high CPR and low GMFR. The villages presented a slightly different picture. The villages having even high CPR had mostly medium GMFR and those that recorded low CPR had very high to high GMFR.

CPR and CWR showed an inverse relationship. There were 17 PSUs that recorded high to very high CPR and majority of them had lower CWR and the rest had medium. The units that belonged to medium category in CPR had fertility ranging from very high to medium. Most of the units with low prevalence rate had medium CWR. The CPR, however, was found to be directly related with the female literacy rate. Hence, the urban wards in general had higher CPR and also had lower fertility level. The relationship between MCEB and CPR is not found to be well defined in the district. The units, mostly with higher CPR recorded medium MCEB. A total of 15 units in high and very high CPR category had most of the units with medium MCEB and only four units had low to very low MCEB. Even wards with high contraceptive
prevalence had medium MCEB. The units with medium CPR mostly recorded medium to low MCEB.

The above paragraph discussed about the fertility differential by social structure both at block and village level and it is seen that some of the variables of social structure have strong influence on fertility while others have lesser or no effect on fertility. The test of relationship between the variables of social structure and fertility points out that the GMFR was found to be decreasing with increasing male education. Similarly CWR was found to be declining with increasing age at marriage, increasing male and female education, increasing family income and with increasing number of people in business and Government jobs. Higher CWR was recorded with increasing number of people in primary occupation. MCEB was found to be inversely related with age of marriage of women. Since MCEB takes into account both complete and incomplete fertility, therefore, to bring out the true nature of relationship between the variables of social structure and MCEB, it has been broken down by age of women. The MCEB of women in the age group of 45 – 49 represents completed fertility and it was found to be directly related with illiteracy rate of population and number of people engaged as daily labourers/wagers. MCEB (45–49) was also found to be decreasing with increasing literacy rates of both male and female population, higher family income and higher number of people in Government and private jobs. Thus, the hypotheses that were framed for the doctoral work have been tested and are found true with 90 per cent confidence level.

The preceding conclusion of the work can be summarized in following points:

- Social structure of Dhanbad district is characterized by high male literacy, modest female literacy, very low age at marriage and low income for majority of population.
- The district recorded Mean Child Ever Born of 3 children per woman, Child Woman Ratio of 440 per 1000 female in reproductive age group and General Marital Fertility Rate of 143 per 1000 married women.
- Fertility is still much high, if replacement level fertility is taken as the point of reference.
• Significant fertility differential was observed by age of marriage, educational status, occupation and contraceptive prevalence rate.

• There was huge fertility differential by religion as Muslims have higher fertility than Hindus.

• Fertility was found to be significantly and negatively associated with age at marriage, literacy rate, high educational status of women and higher family income.

• Presence of sizeable fertility differential by various parameters of social structure, points out that Dhanbad district is yet to take off for third phase of demographic transition.

  Overall, it may be concluded that there exists wide differentials in fertility with respect to social parameters of the district and fertility is still very high when compared with the goal of achieving the replacement level fertility. With reference to the present scenario following suggestions have been made to help reduce the fertility and its differentials in the district.

• Literacy rate is found to be one of the major factors affecting the fertility of the district and there is huge difference in fertility behaviour among the literates and illiterates. In this regard the female literacy rate is more potent factor in reducing the fertility rate. Thus improving the literacy rate is critical for the reducing fertility rate. However, the focus should not be entirely on increasing mere female literacy rate, but improving the overall status of female education should also be looked into.

• More schools and colleges need to be opened, especially for girls. The girls are often discouraged to go to schools and colleges for receiving higher education, because of long distances. Hence cheap and safe transport facilities should be readily available so that distance does not act as an inhibiting factor for girls.

• Induction of female teachers in schools and provision for hostel facilities would go long way in increasing the female participation in educational institutes. Dropout rates are also one of the pertinent problems affecting education system in India and needs to be seriously dealt with.

• There is a need to specifically focus on increasing the educational status of Muslim women, as only increased education seemed to have a diminishing effect on their fertility. More schools for girls should be set up in Muslim dominated wards and villages. A sincere effort needs to be done to enhance
the overall educational status of Muslims in general and Muslim women in particular.

- The study revealed that people engaged in primary activities and as daily labours have higher fertility. Also, women living below monthly income of less than Rs. 5000 per month recorded higher fertility. Thus increasing the overall educational status of the people in the district would also help in increasing their occupation and income potential, which in turn would help in decline in fertility.

- Provision should be made for imparting skills to men and women who have not been able to receive education. For this vocational training institutes should be established which would increase the occupation prospects of illiterate men and women.

- The rather high mean of children ever born per woman indicates that family planning programmes need to be more intensive in order to create awareness among people in general and women in particular. For making the family welfare programmes a success it is very necessary to educate people about its importance.

- The low age at marriage is also one of the serious impediments in lowering the fertility levels of the district. Although the legal age of marriage for women is 18 years and for men is 21 years but child marriages and early age marriages are very common in many areas, particularly the rural parts of the district. Hence there is an urgent need to enforce the law strictly and make early marriage a punishable offence.

- Once the age at marriage for both men and women is raised the fertility rate would eventually come down.

- Easy access to contraceptives and safe deliveries would go a long way in reducing the fertility levels. For this family welfare and health centres should set up at village level so that women can themselves avail the facilities, without depending on the male members of their families.

- The need of the hour, in view of the world’s population reaching the 7 billion mark and counting, is to reduce the fertility differentials for a sustained fertility decline.

- Once fertility decline becomes widespread and strongly established, fertility differential would gradually disappear.