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# Transition in Age Pattern of Marital Fertility in India: 1985-2007

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## Abstract

This paper analyses the transition in the age pattern of marital fertility in India and in its constituent states during the period 1985 through 2007 on the basis of the age-specific marital fertility rates available through the sample registration system. The analysis reveals that there has been an increasing concentration of marital fertility in the younger ages of the reproductive period which has implications for a temporary increase in marital fertility momentum effect of population growth. It is argued that in order to mitigate the impact of the observed transition in the age pattern of marital fertility, efforts to limit fertility in India should be directed towards the 'practice' of family planning rather than 'treatment' of high fertility.

## Key Words

India, Marital Fertility, Age Pattern

# 1 Introduction

It is well known that in high fertility situations, childbearing starts at an early age and continues until the late reproductive years so that the age pattern of fertility is essentially platokurtik in shape. Transition in fertility occurs through the decrease in fertility at both ends of the age schedule of fertility resulting in a more convex age pattern. The decrease in fertility at the two ends of the age schedule of fertility is the result of two set of factors. The decrease in fertility at the older ages of the reproductive period is largely determined by the regulation of fertility within the institution of marriage while the decrease in fertility in the younger ages of the reproductive period is largely influenced by the increase in the age at marriage. The age pattern of fertility, therefore, is shaped by the multiplicative combination of the age pattern of fertility within the institution of marriage and the age-specific proportion married. This means that an analysis of the transition in the age pattern of marital fertility and the transition in age-specific proportion married will describe the transition in the age pattern of fertility in greater detail than any analysis of the transition in the age pattern of fertility alone, especially in a country like India where nearly all the fertility is confined within the institution of marriage.

In this paper, we analyse the transition in the age pattern of marital fertility in India and in its constituent states during the period 1985 through 2007. The analysis reveals that has been a shift in the age location of the marital fertility schedule and the concentration of marital fertility around the age location has increased in the country and in most of the states of the country during the period under reference. The observed transition in the age pattern of marital fertility has largely been the result of the official approach towards fertility control and has important policy implications in the context of future fertility reduction and the growth of the population.

The paper is organised as follows. The next section of the paper describes the data source and the methodology adopted for analysing the transition in the age pattern of marital fertility. Essentially, we analyse how the age pattern of marital fertility has changed since 1985 in India and in its constituent states through modelling age-specific marital fertility rates using the relational approach. The third section of the paper presents a brief overview of the transition in marital fertility in India and in its constituent states. The fifth section presents and discusses the findings of the analysis while the sixth section discusses the policy and programme implications of the observed transition in the age pattern of marital fertility in the country. The paper concludes that in order to mitigate the impact of the observed transition in the age pattern of marital fertility, fertility regulation efforts in India should be directed towards the 'practice' of family planning which is based on a spacing strategy instead of 'treating' high fertility through a stopping strategy as is the case at present. Since fertility regulation in India is primarily influenced by the official family planning programme, a shift from the 'treatment' of high fertility to the 'practice' of family planning requires a comprehensive reinvigoration of the official efforts.

## 2 Materials and Methods

The analysis is built upon annual estimates of age specific marital fertility rates available through the sample registration system. These estimates are generally believed to be quite accurate, although there is some under reporting of vital events which varies from state to state. An investigation carried out in 1980-81 reported that around 3.1 per cent for the births were omitted by the system at the national level (Government of India, 1983). Another enquiry conducted in 1985 suggested that the omission rate had decreased to 1.8 per cent for births, although omission rates varied from state to state (Government of India, 1988). Recently, Mari Bhat has estimated that the system has missed about 7 per cent of the births but there has been no substantial change in the completeness (Mari Bhat, 2002).

Estimates available through the sample registration system are known to be associated with year-to-year fluctuations of unknown origin. In order to eliminate the effect of these fluctuations of unknown origin is to use three-year moving average, centred at the middle year of the three-year period instead of annual estimates. We have also adopted the same practice in the present paper also. Thus, the estimates of the age-specific marital fertility rate for the year 1986 use in the analysis is actually the un-weighted average of the age-specific marital fertility rates for the years 1985, 1986 and 1987.

The age pattern of marital fertility can be looked upon as part of the age pattern of fertility in which marital status is not considered. However, literature on modelling the age pattern of marital fertility is relatively scanty than the literature on modelling the age pattern of fertility. Attempts to model the age pattern of marital fertility have been made by Henry (1961), Coale and Trussell (1974) and Valkovics (1984). These attempts are based on the underlying assumption that the age pattern of marital fertility is similar to the age pattern of natural fertility. Natural fertility, according to Henry, is the fertility of the population where birth control is not deliberately practised. Birth control, according to Henry, is defined as a couple's behaviour that is bound to the number of children already born and that is modified when this number reaches the maximum which the couple does not want to exceed. In this definition, birth control excludes factors that may reduce fertility but are independent of the number of children already born (Preston et. al, 2001). Based on the empirical evidence from a number of populations, Henry has also concluded that natural fertility decreases monotonically with age.

An examination of age specific marital fertility rates in India, however, suggests that marital fertility in the country does not decrease monotonically with age. Rather, the age pattern of marital fertility is very similar to the age pattern of fertility - uni-modal and asymmetric. The reason is that, although, females in India are married at an early age, yet there is generally a gap between the age at marriage and the age at the consummation of marriage which decreases with the increase in the age at marriage. This gap in the age at marriage and the age at the consummation of marriage lowers marital fertility in the younger ages of the

reproductive period so that the peak marital fertility is generally observed in the age group 20-24 years and not in the age group 15-19 years as is the case with natural fertility. This means that approaches used for modelling the age pattern of fertility can also be used for modelling the age pattern of marital fertility in the Indian context. Otherwise also, approaches used for modelling uni-modal asymmetric curves can also be used for modelling monotonically increasing or decreasing distributions (Mitra et. al, 1990).

We deploy three approaches to analyse the transition in the age pattern of marital fertility in India and states. First, we analyse the absolute decrease in the age specific marital fertility rates during the period under reference. A faster decrease in the marital fertility rates in older ages indicates that marital fertility is getting concentrated in the younger ages of the reproductive period. A relatively faster decrease in age specific marital fertility rates in the older ages of the reproductive period also results in a decrease in the mean age of the marital fertility schedule.

Second, we analyse the relative concentration of marital fertility by age by using the Lorenz curve and associated Gini concentration ratio (Shryock and Siegel, 1978). We plot the normalised cumulative marital fertility at time *t* against the normalised cumulative marital fertility at time *0*. If the concentration of marital fertility in the younger ages of the reproductive period is relative more at time *t* than at time *0*, then the plot of the normalised cumulative fertility at time *t* is shifted to the left of the diagonal and the Gini concentration ratio is negative. On the other hand, if the concentration of marital fertility in the older ages of the reproductive period is relative more at time *t* than at time *0*, then the plot of the normalised cumulative fertility at time *t* is shifted to the right of the diagonal and the Gini concentration ratio is positive. The magnitude of the Gini concentration ratio indicates the decree of the shift in the age schedule of marital fertility from the diagonal.

Finally, we apply a relational approach to analyse how the age pattern of marital fertility has changed over time. This approach is based on the constant shape assumption which implies that the age schedule of marital fertility observed at any time can be transformed into the schedule observed at any other time by inflating or deflating and/or by shifting the schedule to higher or lower ages (Bongaarts and Feeney, 2006). Two theoretical lines have been put forward for studying the relationship between age distribution of fertility (Petrioli, 1975; 1983). One is established by using the Gompertz function while the other uses the Weibull function and the one based on the log-logistic (Menchiari, 1988). In the present paper, we model the age pattern of marital fertility through the Gompertz transformation.

Let $g(x)$ is the marital fertility rate at age $x$, $G(x)$ is the cumulative marital fertility up to age $x$ and $G$ is the total marital fertility rate (TMFR). If we assume that the cumulative marital fertility, $G(x)$, is represented by the Gompertz's function, then the transformation

$$Y(x) = -ln(-ln(G(x)/G)), \qquad (1)$$

is linear in $x$. In other words,

$$Y(x) = a + bx \quad (2)$$

Let $Y_0(x)$ is the Gompertz transformation of the age specific marital rate at age $x$ during the reference period and $Y_t(x)$ is the Gompertz transformation of the age specific marital fertility rate at age $x$ during any period $t$. It is straightforward to show that $Y_0(x)$ and $Y_t(x)$ can be related through the following equation

$$Y_t(x) = \alpha_t + \beta_t\, Y_0(x) \quad (3)$$

where $\alpha_t$ and $\beta_t$ are the parameters that establish the link between the two age patterns of marital fertility.

Parameters $\alpha_t$ and $\beta_t$ of the model (3) have specific statistical meaning. The parameter $\alpha_t$ reflects the age location of the marital fertility schedule at time $t$ relative to the age location of the marital fertility schedule at time $0$. When $\alpha_t = 0$, the location of the two age schedules is the same. When $\alpha_t < 0$ for a given $t$, the age location of the marital fertility schedule at time $t$ is older than the age location of the marital fertility schedule at time $o$. This implies that the age at which half of the total childbearing in married women occurs at time $t$ is older than the age at which half of the total childbearing in married women occurs at time $0$. The converse is true for $\alpha_t > 0$.

On the other hand, the parameter $\beta_t$ may be interpreted as determining the spread of the age schedule of marital fertility at time $t$ relative to the spread at time $0$. However, $\beta_t = 1$ does not necessarily mean that the variance of the age schedule of marital fertility at time $t$ is the same as the variance of the age schedule marital fertility at time $0$. This is true only when $\alpha_t = 0$ also (United Nations, 1983). When $\beta_t > 1$, the age schedule of marital fertility at time $t$ is steeper than the age schedule of marital fertility at time $0$. Conversely, $\beta_t < 1$ indicates that the variance of the age schedule of marital fertility at time $t$ is larger than the variance of the age schedule of marital fertility at time $0$. Following Yi and others (2000), $\alpha_t$ and $\beta_t$ can be linked to the median age and inter-quartile range of the age schedule of marital fertility so that they represent changes in the timing and age pattern of marital fertility at time $t$ relative to the timing and age pattern at time $0$.

Relational models are now commonly used in demographic analyses. Using this approach, Brass (1975) developed a simple fitting procedure for fitting life tables from the logit relational system and later extended it to the Gompertz fertility system (Brass, 1980; Booth 1984). This procedure has since been adopted for use with migration models (Zaba, 1987). Yi and others (2000) have used this approach to age-period-specific fertility, first marriage, divorce, remarriage and leaving the parental home. They have also observed that the schedule to be fitted and the reference schedule should be proximate to ensure that the model gives a good fit and the parameters of the model are more accurate. In this context, they have suggested that the reference schedule should be based on the data in the recent past. This is the approach that we adopt in the present analysis and assume the age schedule of marital fertility during 1985-87 as the reference schedule for

the country and for each state. This means that we measure all changes in the age schedule of marital fertility from the age schedule of marital fertility during the period 1985-87. This implies that the reference schedule for the application of the relational model (3) is different for different states of the country. As such, the analysis focusses on the state specific change in the age schedule of marital fertility over time only. Because of the difference in the reference schedule, the parameters of the model are not compatible across states.

## 3 Marital Fertility in India

The evidence available through India's sample registration system indicates that marital fertility is declining in the country and its constituent states, albeit the decrease appears to be slower than expected. The total marital fertility rate (TMFR) in India decreased by 1.15 points during the 20 years between 1985-87 and 2005-07 from around 5.5 births in 1985-87 to around 4.4 births per currently married woman of reproductive age in 2005-07. There has however been a considerable slowdown in the decrease in TMFR after 1995-97. Between 1985-87 and 1995-97, TMFR in India decreased by 0.82 points but the decrease was of only 0.33 points between 1995-97 and 2005-07. TMFR in India virtually stagnated during the period 1995 through 2003.

The level and the trend in marital fertility have varied widely across the states during the period under reference. During the period 1985-87, TMFR was the highest in Assam - very close to 7 births per married woman of child bearing age. Besides Assam, Uttar Pradesh and Bihar had a TMFR of more than 6 births per woman. On the other hand, in five states of the country, TMFR was less than 5 births per women with the lowest in Kerala. Between 1985-87, the decrease in TMFR has been the fastest in West Bengal where the TMFR decreased by almost 2 points whereas, it was the slowest in Kerala, the state having the lowest TMFR during 1985-87. The decrease in the TMFR has also been relatively slow in Bihar, Gujarat, Madhya Pradesh, Punjab, Tamil Nadu and Uttar Pradesh. Gujarat and Tamil Nadu had a TMFR of less than 5 during 1985-87 whereas Bihar and Uttar Pradesh had a TMFR of more than 6 births per married woman of reproductive age.

## 4 Age Pattern of Marital Fertility

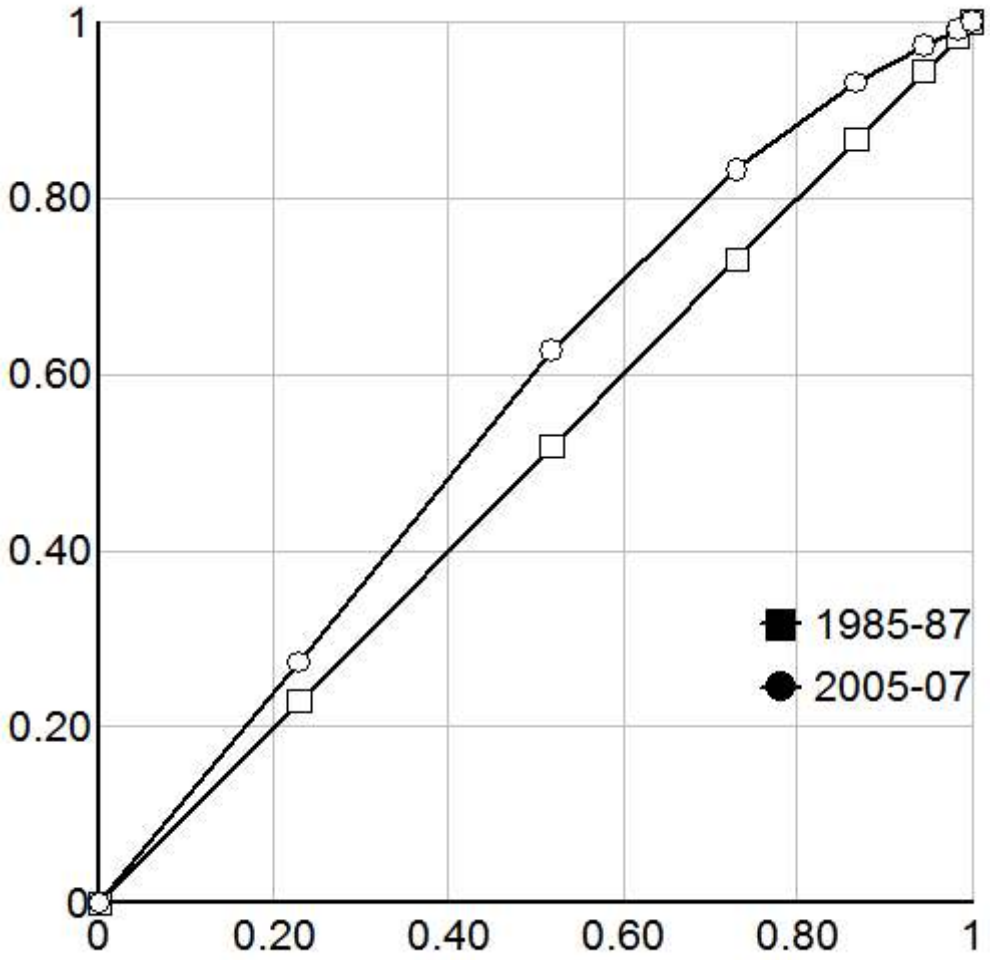
The decrease in TMFR in India and its states since 1985 has been associated with an increasing concentration of the fertility of married women in the younger ages of the reproductive period leading to a shift in the age location of the marital fertility schedule (Table 1). Between 1985-87 and 2005-07, the decrease in TMFR in India has largely been confined to the decrease in the fertility of married women aged 25 years and above and, quite often, the decrease in the fertility of married women aged 25 years and above has been faster than the decrease in TMFR because fertility of married women aged below 25 years actually increased. During the period 1985-87, marital fertility in India was almost equally

divided between the fertility of married women below 25 years of age and the fertility of married women aged 25 years and above. Twenty years later, almost 63 per cent of the marital fertility in the country was accounted by the fertility of married women below 25 years of age while fertility of married women aged 25 years and above accounted for only 37 per cent of the marital fertility. As a result, the mean age of the marital fertility schedule (MAMFS) decreased from about 26.1 years to around 24.3 years indicating a shift in the age location of marital fertility towards the younger ages of the reproductive period. The increased concentration of marital fertility in the younger of ages of the reproductive period is also reflected through the Lorenz curve which plots proportionate cumulative marital fertility during the period 1985-87 against proportionate cumulative marital fertility during the period 2005-07 (Figure 1) and the trend in the Gini concentration ratio.

The increasing concentration of marital fertility in the younger ages of the reproductive period is also reflected through the trend in parameters $\alpha$ and $\beta$ of the relational model (Figure 2). The increase in the parameter $\alpha$ confirms that the age location of the marital fertility schedule in India has shifted towards younger ages of the reproductive period. On the other hand, the increase in the parameter $\beta$ indicates increased concentration of marital fertility around the age location of the marital fertility schedule relative to the period 1985-87.

A similar transition in the age schedule of marital fertility may also be seen in the constituent states of the country, although the transition varies from state to state. In Kerala, less than 60 per cent of the decrease in TMFR during the period under reference was accounted by the decrease in the fertility of married women aged 25 years and above. In Assam, Maharashtra, Tamil Nadu and West Bengal also, the decrease in the fertility of married women aged 25 years and above accounted for less than 75 per cent of the decrease in TMFR. By contrast, in Haryana, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh, the decrease in the fertility of married women aged 25 years and above has been faster than the decrease in TMFR because fertility of married women below 25 years of age increased in these states. Similarly, MAMFS decreased by around 2.8 years in Andhra Pradesh and West Bengal but by less than 1 year in Kerala. In Haryana, Karnataka, Punjab and Rajasthan also, MAMFS decreased by more than two years whereas in Assam, Orissa and Tamil Nadu, the decrease ranged between 1-1.5 years. The Gini concentration ratio also confirms that marital fertility is increasingly concentrated in the younger ages of the reproductive period although the degree of concentration varies from the lowest in Tamil Nadu and Kerala to the highest in West Bengal and Andhra Pradesh. The trend in the parameters $\alpha$ and $\beta$ of the relational model (3) also tells the same story. In most states, both $\alpha$ and $\beta$ have increased. The exceptions are Kerala and Tamil Nadu where the parameter $\alpha$ decreased for most of the years under reference, although in recent years, this parameter has increased in both the states, Assam where the parameter $\beta$ decreased over time indicating a decrease in the concentration of marital fertility around the age location of the marital fertility schedule.

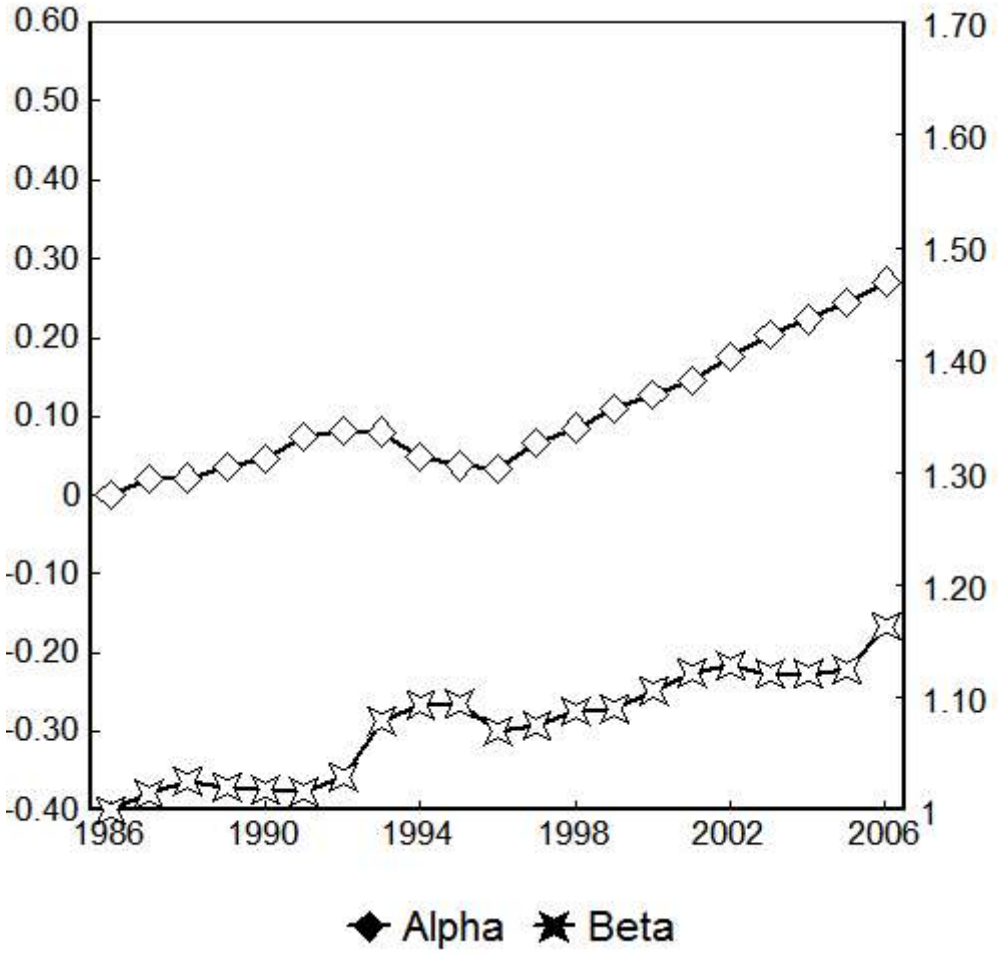
*Figure 1*
*Lorenz Curve of proportionate cumulative marital fertility in 1985-87 (x axis) against proportionate cumulative marital fertility in 2005-07 (y axis) in India*




In table 2, we have classified states according to the level of $\alpha$ and the level of $\beta$ during the period 2005-07. This classification suggests that 15 states of India can be grouped into five clusters. Cluster 1 comprises of Kerala and Tamil Nadu. In these states, the parameter $\alpha$ has followed an over all negative trend which means that the age location of marital fertility in these states has shifted towards older ages. At the same time, the parameter $\beta$ has increased quite substantially which indicates an increased concentration of marital fertility around the age location.

The second cluster comprises of five states, all located in the central part of India - Orissa, Bihar, Madhya Pradesh, Uttar Pradesh and Maharashtra. In these states, increase in $\alpha$ and $\beta$ have been moderate during the period under

*Figure 2*
*Trends in parameters α and β of the relational model in India*




reference. The third cluster, comprising of Rajasthan, Punjab, Haryana and West Bengal, differs from cluster two in terms of the increase in parameter $\alpha$ only. The increase in the parameter $\beta$ has been nearly the same in the two clusters. The fourth cluster, comprising of Karnataka and Andhra Pradesh, on the other hand, is characterised by a very rapid increase in both the parameters of model (3). In Andhra Pradesh, the increase in the parameter $\alpha$ was very rapid up to the period 2001-03 but the trend has reversed after 2001-03. At the same time, a rapid increase in the parameter $\beta$ indicates a very heavy concentration of marital fertility around the age location of the marital fertility schedule in the two states.

Finally, Assam and Gujarat do not conform to any of the four clusters patterns described above. Assam is the only state in the country where the parameter $\beta$ has decreased whereas, in Gujarat, a marginal increase in the parameter $\beta$ has been associated with a very rapid increase in the parameter $\alpha$.

Transition in the age schedule of marital fertility is essentially shaped by the regulation of fertility within the institution of marriage. Regulation of fertility involves both birth stopping and birth spacing behaviour of couples. When fertility regulation is governed largely by birth stopping behaviour, fertility within the institution of marriage gets concentrated in younger ages of the reproductive period as has been the case in India and its states during the period under reference. Such a transition in the age schedule of marital fertility leads to a temporary increase in marital fertility (Bongaarts and Feeney, 2006) and has implications for future population growth as it contributes to an increase in the momentum for population growth.

The observed transition in the age pattern of marital fertility in India and its constituent states revealed through the present analysis reflects the typical fertility regulation regime that is dominated by birth stopping to limit fertility. Under this strategy, couples terminate childbearing at younger ages and tend to concentrate childbearing in the earlier part of the potential childbearing period (Knodel, 1987). As a result the age location of the marital fertility schedule shifts to the younger ages of the reproductive period and the concentration of marital fertility around the age location increases. The evolution and of this strategy in India has roots in the official approach towards population control. This approach has encouraged couples to go for the desired number of children as quickly as possible after the marriage and then stop childbearing through the use of permanent methods of family planning - female or male sterilisation. The evidence of this approach is reflected in terms of the contraceptive method mix. Evidence available through the National Family Health Surveys and district level household surveys indicate that the contraceptive method mix in India continues to be heavily skewed towards the permanent methods of family planning - female and male sterilisation (IIPS, 2007; 2010) which indicates that marital fertility regulation in India is largely governed by birth stopping.

## Policy Implications

From the perspective of fertility reduction and population stabilisation, the foregoing analysis has two important policy implications. The first policy imperative is that there is a need to focus on young married women - married women below 25 years of age - for further reduction in marital fertility and hence in fertility. This is possible only when the focus of the official family planning programme, the mainstay of fertility reduction efforts in India, is shifted from birth limitation to birth planning. Substantial reduction in marital fertility and hence in fertility in India is now possible only when there is a decrease in the fertility of young married women - married women below 25 years of age - as fertility in older married women - women at least 25 years of age - has already reached very low levels in most of the states of the country thanks to the promotion and persistence of the perfect stopping strategy to limit fertility.

Reduction in the fertility of young couples requires a radical change in the orientation of the official family planning efforts. These efforts must be directed

towards the 'practice' of family planning rather than 'treatment' of high fertility as is the case at present. 'Practice' of family planning requires a different service delivery system than the 'treatment' of high fertility. High fertility can be 'treated' through the nearly perfect stopping strategy. For the 'practice' of family planning appropriate spacing strategy is necessary. There is a need to maintain regular contact with couples especially those who are in the process of building their family and to ensure uninterrupted family planning methods that can contribute towards lengthening the interval between successive births and even between marriage and first birth. At present, attempts to promote the 'practice' of family planning are based on a service delivery system that is basically designed and oriented towards 'treating' high fertility. As a result, efforts directed towards promoting the 'practice' of family planning have not been successful as is evident from the low prevalence of spacing methods of family planning.

The observed transition in the age-pattern of marital fertility in India has implications for population stabilisation also. It is well known that even when fertility is brought down to the replacement level with constant mortality and zero migration, population growth will continue to increase because of the young population age structure which keeps the birth rate high (Bongaarts and Bulatao 1999). This age structure effect on population growth is termed as the population momentum (Keyfitz 1971, 1985). Because of the population momentum, there is a time lag between achieving replacement fertility and levelling off the rate of natural increase or achieving population stabilisation. Once the replacement fertility is achieved, it takes about the length of average life expectancy for the population age structure to stabilise. The significance of population momentum may be judged from the observation that nearly half of the projected population growth in the world in the current century will be the result of population momentum (Bongaarts 1994; Bongaarts and Bulatao 1999). In India also, population momentum is now emerging a major component of the future population growth as more and more states are reaching replacement fertility. Chaurasia and Gulati (2008) have observed that the constituent states of India can be grouped into three categories on the basis of prevailing levels of the total fertility rate - states where replacement fertility has already been achieved; states which are on the verge of achieving replacement fertility; and states where fertility still remains well above the replacement level. They have estimated that population momentum will account for around 50-60 per cent of the increase in India's population in the first quarter of the current century.

One option to minimise the effect of population momentum on population growth is to raise the mean age of child bearing (Bongaarts 1994) which requires both increase in the female age at marriage as well as increase in the mean age of marital fertility schedule. It has been observed that fertility in a given year is significantly affected by the shift in the timing of births. When childbearing starts at an early age and spacing between successive births is small, fertility temporarily rises. Ryder (1980) has concluded that much of the temporary rise in fertility in the United States of America during the 1950s was caused by

changes in the timing of fertility rather than by variation in the desired family size. Conversely a delay in the start of childbearing and wider spacing between successive births leads to a temporary decline in fertility and hence in the population growth rate. Viewed in this perspective, the observed transition in the age pattern of marital fertility in India and its constituent states is going to have a negative impact on population stabilisation in India in terms of temporarily increasing fertility and leading to large momentum effect of population growth. In order to mitigate this impact, it is necessary that the decrease in marital fertility is not associated with the increased concentration of the fertility of married women in the younger ages of the reproductive period. This is possible only when fertility limitation efforts are built upon a birth planning strategy rather than the existing birth stopping strategy.

## Conclusions

The transition in the age schedule of marital fertility in India as revealed through the present analysis suggests that the country needs a second fertility transition. The preoccupation with the 'treatment' of high marital fertility through a nearly perfect birth stopping strategy has resulted in a transition in the age schedule of marital fertility which has contributed towards a temporary rise in marital fertility and large momentum effect of population growth. In such a situation, there appears little possibility that the goal of stable population by 2045 as enshrined in the National Population Policy 2000 (Government of India, 2000) will be realised. There is a need to reorient the fertility limitation efforts in the country. Instead of attempting fertility limitation through treating high fertility, the focus of these efforts should be on the 'practice' of family planning directed towards birth planning. Such a reorientation of fertility limitation efforts will also ensure that the transition in the age schedule of marital fertility does not lead to a temporary increase in marital fertility and large momentum effect on the future growth of population.

The 'practice' of family planning requires a different approach of implementation of fertility limitation efforts than the efforts required for 'treating' high marital fertility. High marital fertility can be 'treated' by a perfect stopping strategy alone whereas the 'practice' of family planning essentially relies upon the spacing strategy which contributes to postponing births within the institution of marriage. Appropriate agents for implementing the spacing strategy are already available in the form spacing methods of family planning. What is needed is an appropriate delivery strategy which ensures that agents reach those who need them the most, primarily young couples who are in the process of family formation. This is a major challenge as organisation of fertility limitation efforts in India has traditionally been evolved in the context of 'treating' high marital fertility through nearly perfect birth stopping strategy.

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Table 1: Transition in the age pattern of marital fertility in India and states 1985-2007.

| Country/ State | Decrease in TMFR between 1985-87 and 2005-07 | Decrease in TMFR accounted by the decrease in marital fertility in the age group | | Decrease in MAMFS (years) | Gini concentration ratio 2005-07 | Parameter $\alpha$ 2005-07 | Parameter $\beta$ 2005-07 |
|---|---|---|---|---|---|---|---|
| | | 15-24 | 25-29 | | | | |
| India | 1.150 | 0.123 | 1.027 | 1.8 | -0.121 | 0.271 | 1.164 |
| Andhra Pradesh | 1.528 | 0.268 | 1.260 | 2.8 | -0.198 | 0.417 | 1.606 |
| Assam | 1.528 | 0.440 | 1.082 | 1.3 | -0.102 | 0.297 | 0.916 |
| Bihar | 1.045 | 0.048 | 0.996 | 1.6 | -0.087 | 0.187 | 1.172 |
| Gujarat | 0.913 | 0.111 | 0.802 | 1.5 | -0.133 | 0.308 | 1.069 |
| Haryana | 1.181 | -0.106 | 1.287 | 2.4 | -0.191 | 0.447 | 1.275 |
| Karnataka | 1.245 | 0.117 | 1.128 | 2.4 | -0.170 | 0.367 | 1.383 |
| Kerala | 0.627 | 0.263 | 0.364 | 0.9 | -0.071 | -0.090 | 1.327 |
| Madhya Pradesh | 0.980 | -0.018 | 0.999 | 1.7 | -0.116 | 0.257 | 1.166 |
| Maharashtra | 1.287 | 0.382 | 0.905 | 1.5 | -0.124 | 0.265 | 1.231 |
| Orissa | 1.145 | 0.362 | 0.783 | 1.1 | -0.074 | 0.143 | 1.131 |
| Punjab | 1.033 | -0.036 | 1.069 | 2.1 | -0.193 | 0.480 | 1.115 |
| Rajasthan | 1.172 | -0.076 | 1.248 | 2.1 | -0.148 | 0.337 | 1.131 |
| Tamil Nadu | 0.809 | 0.235 | 0.574 | 1.1 | -0.070 | 0.033 | 1.342 |
| Uttar Pradesh | 0.786 | -0.256 | 1.042 | 1.8 | -0.117 | 0.254 | 1.147 |
| West Bengal | 1.965 | 0.513 | 1.452 | 2.8 | -0.204 | 0.501 | 1.241 |

Source: Author's calculations.

Table 2: Classification of India and states according to parameters $\alpha$ and $\beta$ during 2005-07.

| Parameter $\alpha$ during 2005-07 | Parameter $\beta$ during 2005-07 | | | | | |
|---|---|---|---|---|---|---|
| | < 1.0 | 1.0-1.1 | 1.1-1.2 | 1.2-1.3 | >=1.3 | >=1.4 |
| < 0.0 | | | | | Kerala | |
| 0.0-0.1 | | | | | Tamil Nadu | |
| 0.1-0.2 | | | Orissa<br>Bihar | | | |
| 0.2-0.3 | Assam | | Madhya Pradesh<br>Uttar Pradesh | Maharashtra | | |
| 0.3-0.4 | | Gujarat | Rajasthan | | Karnataka | |
| 0.4+ | | | Punjab | Haryana<br>West Bengal | | Andhra Pradesh |

Source: Author's calculations.

Appendix table: ASMFR, TMFR and MAMFS, Gini ratio and parameters $\alpha$ and $\beta$ in India and states, 1985-2007.

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter $\alpha$ | Parameter $\beta$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | | |
| | | | | | | India | | | | | | |
| 1985-87 | 0.253 | 0.319 | 0.235 | 0.150 | 0.086 | 0.043 | 0.018 | 5.521 | 26.13 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.256 | 0.319 | 0.231 | 0.144 | 0.084 | 0.041 | 0.016 | 5.453 | 25.97 | -0.010 | 0.021 | 1.015 |
| 1987-89 | 0.251 | 0.319 | 0.229 | 0.140 | 0.082 | 0.039 | 0.015 | 5.373 | 25.93 | -0.011 | 0.022 | 1.026 |
| 1988-90 | 0.248 | 0.315 | 0.224 | 0.135 | 0.080 | 0.038 | 0.015 | 5.278 | 25.87 | -0.016 | 0.036 | 1.021 |
| 1989-91 | 0.243 | 0.312 | 0.219 | 0.131 | 0.077 | 0.036 | 0.015 | 5.162 | 25.82 | -0.020 | 0.046 | 1.019 |
| 1990-92 | 0.246 | 0.312 | 0.213 | 0.125 | 0.074 | 0.035 | 0.015 | 5.094 | 25.69 | -0.032 | 0.074 | 1.017 |
| 1991-93 | 0.242 | 0.311 | 0.209 | 0.122 | 0.070 | 0.034 | 0.013 | 5.007 | 25.60 | -0.036 | 0.081 | 1.030 |
| 1992-94 | 0.242 | 0.312 | 0.207 | 0.123 | 0.066 | 0.032 | 0.010 | 4.960 | 25.45 | -0.042 | 0.080 | 1.080 |
| 1993-95 | 0.226 | 0.309 | 0.207 | 0.124 | 0.063 | 0.032 | 0.010 | 4.854 | 25.56 | -0.030 | 0.049 | 1.094 |
| 1994-96 | 0.217 | 0.306 | 0.206 | 0.124 | 0.062 | 0.031 | 0.010 | 4.776 | 25.62 | -0.025 | 0.037 | 1.095 |
| 1995-97 | 0.207 | 0.303 | 0.206 | 0.120 | 0.061 | 0.032 | 0.011 | 4.697 | 25.72 | -0.020 | 0.034 | 1.071 |
| 1996-98 | 0.214 | 0.301 | 0.203 | 0.115 | 0.059 | 0.029 | 0.011 | 4.664 | 25.54 | -0.033 | 0.065 | 1.075 |
| 1997-99 | 0.221 | 0.302 | 0.202 | 0.112 | 0.059 | 0.028 | 0.010 | 4.664 | 25.40 | -0.043 | 0.086 | 1.088 |
| 1998-2000 | 0.227 | 0.306 | 0.202 | 0.109 | 0.058 | 0.026 | 0.010 | 4.691 | 25.28 | -0.053 | 0.109 | 1.090 |
| 1999-01 | 0.231 | 0.313 | 0.202 | 0.108 | 0.057 | 0.025 | 0.009 | 4.721 | 25.14 | -0.062 | 0.128 | 1.106 |
| 2000-02 | 0.231 | 0.319 | 0.201 | 0.104 | 0.054 | 0.023 | 0.008 | 4.699 | 25.02 | -0.070 | 0.146 | 1.122 |
| 2001-03 | 0.236 | 0.322 | 0.198 | 0.100 | 0.051 | 0.022 | 0.008 | 4.684 | 24.86 | -0.082 | 0.176 | 1.128 |
| 2002-04 | 0.236 | 0.314 | 0.194 | 0.096 | 0.047 | 0.020 | 0.008 | 4.579 | 24.74 | -0.092 | 0.204 | 1.121 |
| 2003-05 | 0.234 | 0.312 | 0.187 | 0.094 | 0.042 | 0.019 | 0.008 | 4.484 | 24.65 | -0.100 | 0.223 | 1.121 |
| 2004-06 | 0.235 | 0.303 | 0.184 | 0.090 | 0.039 | 0.018 | 0.008 | 4.385 | 24.54 | -0.108 | 0.245 | 1.125 |
| 2005-07 | 0.239 | 0.309 | 0.181 | 0.086 | 0.037 | 0.016 | 0.006 | 4.371 | 24.34 | -0.121 | 0.271 | 1.164 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Andhra Pradesh | | | | | | |
| 1985-87 | 0.307 | 0.293 | 0.186 | 0.111 | 0.058 | 0.025 | 0.011 | 4.949 | 24.66 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.311 | 0.289 | 0.180 | 0.100 | 0.055 | 0.021 | 0.009 | 4.827 | 24.39 | -0.019 | 0.040 | 1.021 |
| 1987-89 | 0.298 | 0.282 | 0.168 | 0.085 | 0.050 | 0.019 | 0.007 | 4.546 | 24.15 | -0.035 | 0.081 | 1.047 |
| 1988-90 | 0.289 | 0.276 | 0.158 | 0.079 | 0.042 | 0.016 | 0.006 | 4.331 | 23.93 | -0.049 | 0.101 | 1.084 |
| 1989-91 | 0.287 | 0.273 | 0.155 | 0.075 | 0.037 | 0.015 | 0.005 | 4.238 | 23.76 | -0.060 | 0.124 | 1.105 |
| 1990-92 | 0.263 | 0.274 | 0.147 | 0.073 | 0.032 | 0.013 | 0.005 | 4.036 | 23.76 | -0.056 | 0.115 | 1.119 |
| 1991-93 | 0.265 | 0.271 | 0.138 | 0.064 | 0.028 | 0.011 | 0.005 | 3.910 | 23.46 | -0.080 | 0.192 | 1.121 |
| 1992-94 | 0.261 | 0.269 | 0.129 | 0.058 | 0.025 | 0.009 | 0.004 | 3.777 | 23.27 | -0.095 | 0.225 | 1.148 |
| 1993-95 | 0.277 | 0.269 | 0.126 | 0.055 | 0.023 | 0.009 | 0.003 | 3.807 | 23.02 | -0.116 | 0.277 | 1.169 |
| 1994-96 | 0.269 | 0.266 | 0.121 | 0.052 | 0.020 | 0.008 | 0.002 | 3.693 | 22.90 | -0.122 | 0.260 | 1.242 |
| 1995-97 | 0.267 | 0.262 | 0.119 | 0.047 | 0.017 | 0.006 | 0.001 | 3.595 | 22.70 | -0.135 | 0.257 | 1.336 |
| 1996-98 | 0.271 | 0.258 | 0.113 | 0.043 | 0.015 | 0.005 | 0.001 | 3.523 | 22.48 | -0.152 | 0.242 | 1.459 |
| 1997-99 | 0.276 | 0.258 | 0.109 | 0.040 | 0.015 | 0.005 | 0.001 | 3.520 | 22.36 | -0.164 | 0.317 | 1.412 |
| 1998-2000 | 0.283 | 0.264 | 0.107 | 0.039 | 0.014 | 0.004 | 0.001 | 3.557 | 22.24 | -0.174 | 0.355 | 1.416 |
| 1999-01 | 0.286 | 0.273 | 0.106 | 0.034 | 0.012 | 0.004 | 0.001 | 3.581 | 22.11 | -0.185 | 0.427 | 1.408 |
| 2000-02 | 0.300 | 0.280 | 0.104 | 0.031 | 0.010 | 0.002 | 0.001 | 3.632 | 21.87 | -0.205 | 0.486 | 1.468 |
| 2001-03 | 0.316 | 0.281 | 0.100 | 0.025 | 0.009 | 0.002 | 0.001 | 3.672 | 21.64 | -0.226 | 0.592 | 1.466 |
| 2002-04 | 0.312 | 0.273 | 0.099 | 0.026 | 0.008 | 0.002 | 0.001 | 3.597 | 21.63 | -0.228 | 0.587 | 1.473 |
| 2003-05 | 0.289 | 0.272 | 0.099 | 0.026 | 0.008 | 0.003 | 0.001 | 3.491 | 21.79 | -0.210 | 0.537 | 1.464 |
| 2004-06 | 0.270 | 0.267 | 0.102 | 0.029 | 0.008 | 0.003 | 0.000 | 3.396 | 21.96 | -0.193 | 0.424 | 1.530 |
| 2005-07 | 0.272 | 0.274 | 0.101 | 0.027 | 0.007 | 0.002 | 0.000 | 3.421 | 21.89 | -0.198 | 0.417 | 1.606 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Assam | | | | | | |
| 1985-87 | 0.405 | 0.374 | 0.276 | 0.173 | 0.107 | 0.054 | 0.003 | 6.963 | 25.27 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.381 | 0.377 | 0.270 | 0.169 | 0.106 | 0.051 | 0.004 | 6.798 | 25.34 | 0.006 | 0.003 | 0.971 |
| 1987-89 | 0.367 | 0.378 | 0.264 | 0.171 | 0.104 | 0.050 | 0.004 | 6.693 | 25.38 | 0.011 | -0.011 | 0.976 |
| 1988-90 | 0.356 | 0.361 | 0.257 | 0.166 | 0.094 | 0.047 | 0.005 | 6.431 | 25.34 | 0.006 | 0.013 | 0.947 |
| 1989-91 | 0.359 | 0.358 | 0.257 | 0.160 | 0.088 | 0.044 | 0.005 | 6.361 | 25.19 | -0.005 | 0.038 | 0.950 |
| 1990-92 | 0.371 | 0.356 | 0.257 | 0.151 | 0.083 | 0.041 | 0.007 | 6.326 | 25.00 | -0.021 | 0.091 | 0.925 |
| 1991-93 | 0.375 | 0.362 | 0.251 | 0.149 | 0.080 | 0.036 | 0.006 | 6.292 | 24.84 | -0.033 | 0.111 | 0.939 |
| 1992-94 | 0.345 | 0.356 | 0.252 | 0.152 | 0.082 | 0.040 | 0.007 | 6.168 | 25.14 | -0.009 | 0.069 | 0.915 |
| 1993-95 | 0.333 | 0.347 | 0.241 | 0.156 | 0.080 | 0.042 | 0.009 | 6.034 | 25.28 | -0.002 | 0.059 | 0.886 |
| 1994-96 | 0.337 | 0.340 | 0.239 | 0.157 | 0.078 | 0.044 | 0.010 | 6.029 | 25.30 | -0.003 | 0.068 | 0.870 |
| 1995-97 | 0.366 | 0.335 | 0.226 | 0.154 | 0.073 | 0.035 | 0.009 | 5.991 | 24.89 | -0.035 | 0.125 | 0.893 |
| 1996-98 | 0.368 | 0.326 | 0.226 | 0.146 | 0.075 | 0.031 | 0.008 | 5.895 | 24.78 | -0.042 | 0.134 | 0.913 |
| 1997-99 | 0.381 | 0.326 | 0.226 | 0.142 | 0.079 | 0.031 | 0.007 | 5.957 | 24.71 | -0.048 | 0.147 | 0.915 |
| 1998-2000 | 0.388 | 0.326 | 0.229 | 0.132 | 0.079 | 0.031 | 0.007 | 5.961 | 24.60 | -0.057 | 0.175 | 0.918 |
| 1999-01 | 0.398 | 0.337 | 0.228 | 0.128 | 0.075 | 0.029 | 0.005 | 6.002 | 24.38 | -0.071 | 0.197 | 0.955 |
| 2000-02 | 0.409 | 0.343 | 0.228 | 0.124 | 0.070 | 0.026 | 0.004 | 6.024 | 24.16 | -0.086 | 0.224 | 0.982 |
| 2001-03 | 0.419 | 0.352 | 0.221 | 0.125 | 0.064 | 0.024 | 0.004 | 6.052 | 24.00 | -0.099 | 0.256 | 0.984 |
| 2002-04 | 0.380 | 0.329 | 0.223 | 0.127 | 0.060 | 0.023 | 0.008 | 5.751 | 24.29 | -0.079 | 0.235 | 0.914 |
| 2003-05 | 0.334 | 0.315 | 0.215 | 0.129 | 0.055 | 0.024 | 0.009 | 5.412 | 24.56 | -0.057 | 0.187 | 0.896 |
| 2004-06 | 0.324 | 0.307 | 0.214 | 0.124 | 0.052 | 0.021 | 0.010 | 5.268 | 24.55 | -0.059 | 0.200 | 0.882 |
| 2005-07 | 0.373 | 0.318 | 0.205 | 0.112 | 0.051 | 0.020 | 0.007 | 5.435 | 24.01 | -0.102 | 0.297 | 0.916 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter $\alpha$ | Parameter $\beta$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | | |
| | | | | | | Bihar | | | | | | |
| 1985-87 | 0.210 | 0.293 | 0.262 | 0.204 | 0.138 | 0.078 | 0.047 | 6.164 | 28.27 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.214 | 0.294 | 0.266 | 0.202 | 0.139 | 0.075 | 0.044 | 6.173 | 28.14 | -0.006 | 0.014 | 1.015 |
| 1987-89 | 0.214 | 0.289 | 0.267 | 0.204 | 0.141 | 0.077 | 0.042 | 6.167 | 28.18 | -0.001 | 0.005 | 1.025 |
| 1988-90 | 0.210 | 0.282 | 0.261 | 0.196 | 0.137 | 0.074 | 0.036 | 5.981 | 28.05 | -0.004 | 0.015 | 1.050 |
| 1989-91 | 0.201 | 0.272 | 0.242 | 0.184 | 0.132 | 0.070 | 0.031 | 5.664 | 27.99 | -0.006 | 0.024 | 1.060 |
| 1990-92 | 0.194 | 0.280 | 0.235 | 0.177 | 0.125 | 0.069 | 0.029 | 5.548 | 27.87 | -0.013 | 0.038 | 1.068 |
| 1991-93 | 0.192 | 0.286 | 0.266 | 0.177 | 0.120 | 0.067 | 0.027 | 5.674 | 27.75 | -0.016 | 0.043 | 1.100 |
| 1992-94 | 0.172 | 0.284 | 0.280 | 0.179 | 0.119 | 0.067 | 0.026 | 5.639 | 27.91 | -0.001 | 0.004 | 1.127 |
| 1993-95 | 0.152 | 0.281 | 0.275 | 0.186 | 0.115 | 0.067 | 0.023 | 5.491 | 28.06 | 0.014 | -0.037 | 1.157 |
| 1994-96 | 0.133 | 0.276 | 0.250 | 0.185 | 0.115 | 0.064 | 0.023 | 5.233 | 28.26 | 0.028 | -0.071 | 1.158 |
| 1995-97 | 0.147 | 0.284 | 0.245 | 0.187 | 0.110 | 0.062 | 0.020 | 5.274 | 27.94 | 0.008 | -0.027 | 1.183 |
| 1996-98 | 0.166 | 0.279 | 0.251 | 0.178 | 0.111 | 0.056 | 0.021 | 5.313 | 27.70 | -0.012 | 0.020 | 1.162 |
| 1997-99 | 0.178 | 0.283 | 0.247 | 0.181 | 0.111 | 0.058 | 0.022 | 5.396 | 27.63 | -0.019 | 0.037 | 1.151 |
| 1998-2000 | 0.189 | 0.287 | 0.256 | 0.174 | 0.113 | 0.057 | 0.023 | 5.496 | 27.49 | -0.030 | 0.066 | 1.140 |
| 1999-01 | 0.190 | 0.299 | 0.256 | 0.179 | 0.113 | 0.058 | 0.020 | 5.572 | 27.41 | -0.031 | 0.068 | 1.171 |
| 2000-02 | 0.191 | 0.310 | 0.258 | 0.171 | 0.108 | 0.052 | 0.019 | 5.546 | 27.16 | -0.048 | 0.103 | 1.187 |
| 2001-03 | 0.190 | 0.320 | 0.249 | 0.171 | 0.101 | 0.050 | 0.018 | 5.495 | 27.03 | -0.057 | 0.121 | 1.196 |
| 2002-04 | 0.187 | 0.313 | 0.249 | 0.160 | 0.092 | 0.046 | 0.024 | 5.348 | 26.98 | -0.069 | 0.145 | 1.138 |
| 2003-05 | 0.183 | 0.309 | 0.239 | 0.162 | 0.082 | 0.049 | 0.024 | 5.237 | 26.99 | -0.069 | 0.145 | 1.126 |
| 2004-06 | 0.179 | 0.294 | 0.244 | 0.155 | 0.082 | 0.046 | 0.026 | 5.129 | 27.06 | -0.067 | 0.139 | 1.111 |
| 2005-07 | 0.187 | 0.306 | 0.241 | 0.151 | 0.077 | 0.043 | 0.019 | 5.119 | 26.67 | -0.087 | 0.187 | 1.172 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Gujarat | | | | | | |
| 1985-87 | 0.161 | 0.364 | 0.247 | 0.125 | 0.059 | 0.024 | 0.008 | 4.943 | 25.79 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.149 | 0.356 | 0.241 | 0.120 | 0.054 | 0.024 | 0.007 | 4.753 | 25.79 | 0.002 | -0.004 | 1.008 |
| 1987-89 | 0.144 | 0.356 | 0.238 | 0.119 | 0.055 | 0.023 | 0.007 | 4.706 | 25.81 | 0.005 | -0.017 | 1.022 |
| 1988-90 | 0.146 | 0.356 | 0.236 | 0.118 | 0.051 | 0.022 | 0.007 | 4.681 | 25.70 | -0.004 | 0.003 | 1.023 |
| 1989-91 | 0.148 | 0.352 | 0.226 | 0.112 | 0.048 | 0.020 | 0.007 | 4.566 | 25.56 | -0.018 | 0.034 | 1.022 |
| 1990-92 | 0.151 | 0.340 | 0.219 | 0.106 | 0.045 | 0.018 | 0.006 | 4.425 | 25.43 | -0.028 | 0.056 | 1.035 |
| 1991-93 | 0.135 | 0.337 | 0.218 | 0.104 | 0.044 | 0.017 | 0.006 | 4.297 | 25.50 | -0.018 | 0.027 | 1.055 |
| 1992-94 | 0.131 | 0.338 | 0.221 | 0.103 | 0.042 | 0.016 | 0.005 | 4.276 | 25.47 | -0.017 | 0.014 | 1.088 |
| 1993-95 | 0.122 | 0.331 | 0.224 | 0.102 | 0.044 | 0.016 | 0.005 | 4.214 | 25.62 | -0.004 | -0.009 | 1.077 |
| 1994-96 | 0.122 | 0.288 | 0.214 | 0.103 | 0.043 | 0.016 | 0.005 | 3.961 | 25.76 | 0.009 | -0.043 | 1.081 |
| 1995-97 | 0.120 | 0.274 | 0.218 | 0.102 | 0.044 | 0.017 | 0.005 | 3.899 | 25.86 | 0.019 | -0.058 | 1.073 |
| 1996-98 | 0.128 | 0.278 | 0.214 | 0.101 | 0.040 | 0.015 | 0.004 | 3.909 | 25.65 | 0.001 | -0.026 | 1.091 |
| 1997-99 | 0.133 | 0.308 | 0.225 | 0.095 | 0.042 | 0.015 | 0.004 | 4.108 | 25.47 | -0.015 | 0.017 | 1.095 |
| 1998-2000 | 0.141 | 0.309 | 0.225 | 0.096 | 0.043 | 0.014 | 0.004 | 4.156 | 25.39 | -0.022 | 0.028 | 1.107 |
| 1999-01 | 0.148 | 0.309 | 0.222 | 0.093 | 0.040 | 0.015 | 0.004 | 4.154 | 25.27 | -0.035 | 0.064 | 1.094 |
| 2000-02 | 0.147 | 0.313 | 0.217 | 0.092 | 0.037 | 0.014 | 0.004 | 4.120 | 25.16 | -0.043 | 0.075 | 1.115 |
| 2001-03 | 0.146 | 0.324 | 0.214 | 0.090 | 0.033 | 0.012 | 0.003 | 4.112 | 25.01 | -0.056 | 0.101 | 1.131 |
| 2002-04 | 0.162 | 0.318 | 0.207 | 0.088 | 0.032 | 0.010 | 0.003 | 4.106 | 24.78 | -0.078 | 0.147 | 1.136 |
| 2003-05 | 0.175 | 0.318 | 0.197 | 0.085 | 0.029 | 0.011 | 0.004 | 4.093 | 24.60 | -0.099 | 0.210 | 1.091 |
| 2004-06 | 0.196 | 0.306 | 0.192 | 0.079 | 0.028 | 0.011 | 0.004 | 4.078 | 24.35 | -0.125 | 0.276 | 1.079 |
| 2005-07 | 0.193 | 0.309 | 0.189 | 0.072 | 0.028 | 0.010 | 0.004 | 4.029 | 24.27 | -0.133 | 0.308 | 1.069 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Haryana | | | | | | |
| 1985-87 | 0.242 | 0.350 | 0.254 | 0.147 | 0.072 | 0.032 | 0.012 | 5.542 | 25.70 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.242 | 0.349 | 0.246 | 0.136 | 0.068 | 0.029 | 0.012 | 5.412 | 25.54 | -0.013 | 0.034 | 0.996 |
| 1987-89 | 0.241 | 0.346 | 0.244 | 0.134 | 0.067 | 0.028 | 0.011 | 5.351 | 25.48 | -0.017 | 0.038 | 1.009 |
| 1988-90 | 0.241 | 0.344 | 0.232 | 0.126 | 0.063 | 0.026 | 0.010 | 5.206 | 25.30 | -0.031 | 0.069 | 1.019 |
| 1989-91 | 0.253 | 0.345 | 0.232 | 0.118 | 0.062 | 0.025 | 0.009 | 5.212 | 25.11 | -0.047 | 0.104 | 1.031 |
| 1990-92 | 0.259 | 0.345 | 0.219 | 0.109 | 0.057 | 0.022 | 0.010 | 5.111 | 24.89 | -0.069 | 0.169 | 1.000 |
| 1991-93 | 0.259 | 0.343 | 0.222 | 0.109 | 0.054 | 0.023 | 0.009 | 5.096 | 24.85 | -0.070 | 0.169 | 1.016 |
| 1992-94 | 0.240 | 0.349 | 0.217 | 0.105 | 0.049 | 0.021 | 0.009 | 4.945 | 24.84 | -0.068 | 0.164 | 1.030 |
| 1993-95 | 0.221 | 0.349 | 0.224 | 0.101 | 0.047 | 0.021 | 0.007 | 4.845 | 24.90 | -0.058 | 0.140 | 1.056 |
| 1994-96 | 0.212 | 0.355 | 0.221 | 0.093 | 0.043 | 0.020 | 0.007 | 4.752 | 24.81 | -0.064 | 0.159 | 1.068 |
| 1995-97 | 0.197 | 0.349 | 0.221 | 0.092 | 0.041 | 0.020 | 0.006 | 4.622 | 24.88 | -0.054 | 0.133 | 1.088 |
| 1996-98 | 0.204 | 0.355 | 0.208 | 0.089 | 0.038 | 0.017 | 0.005 | 4.579 | 24.63 | -0.075 | 0.174 | 1.111 |
| 1997-99 | 0.206 | 0.352 | 0.200 | 0.088 | 0.035 | 0.015 | 0.005 | 4.508 | 24.51 | -0.085 | 0.195 | 1.119 |
| 1998-2000 | 0.228 | 0.356 | 0.191 | 0.084 | 0.032 | 0.015 | 0.005 | 4.558 | 24.21 | -0.113 | 0.267 | 1.111 |
| 1999-01 | 0.233 | 0.355 | 0.194 | 0.080 | 0.031 | 0.013 | 0.006 | 4.550 | 24.10 | -0.123 | 0.300 | 1.105 |
| 2000-02 | 0.233 | 0.363 | 0.194 | 0.076 | 0.032 | 0.013 | 0.005 | 4.582 | 24.05 | -0.126 | 0.308 | 1.123 |
| 2001-03 | 0.242 | 0.372 | 0.191 | 0.070 | 0.032 | 0.010 | 0.005 | 4.608 | 23.85 | -0.143 | 0.357 | 1.137 |
| 2002-04 | 0.259 | 0.366 | 0.186 | 0.071 | 0.030 | 0.012 | 0.005 | 4.644 | 23.74 | -0.155 | 0.387 | 1.120 |
| 2003-05 | 0.268 | 0.365 | 0.178 | 0.067 | 0.028 | 0.009 | 0.004 | 4.598 | 23.53 | -0.174 | 0.433 | 1.136 |
| 2004-06 | 0.264 | 0.353 | 0.175 | 0.067 | 0.025 | 0.009 | 0.004 | 4.484 | 23.48 | -0.176 | 0.431 | 1.161 |
| 2005-07 | 0.259 | 0.354 | 0.169 | 0.059 | 0.021 | 0.007 | 0.002 | 4.361 | 23.25 | -0.191 | 0.447 | 1.275 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Karnataka | | | | | | |
| 1985-87 | 0.311 | 0.318 | 0.207 | 0.118 | 0.065 | 0.028 | 0.010 | 5.279 | 24.80 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.306 | 0.324 | 0.203 | 0.111 | 0.060 | 0.027 | 0.010 | 5.207 | 24.71 | -0.008 | 0.032 | 0.988 |
| 1987-89 | 0.304 | 0.334 | 0.203 | 0.110 | 0.056 | 0.026 | 0.010 | 5.215 | 24.62 | -0.013 | 0.046 | 0.995 |
| 1988-90 | 0.301 | 0.343 | 0.202 | 0.104 | 0.052 | 0.024 | 0.009 | 5.176 | 24.46 | -0.021 | 0.064 | 1.017 |
| 1989-91 | 0.304 | 0.339 | 0.195 | 0.098 | 0.050 | 0.021 | 0.008 | 5.072 | 24.28 | -0.035 | 0.091 | 1.034 |
| 1990-92 | 0.301 | 0.333 | 0.190 | 0.088 | 0.045 | 0.017 | 0.007 | 4.910 | 24.06 | -0.050 | 0.125 | 1.061 |
| 1991-93 | 0.299 | 0.323 | 0.183 | 0.084 | 0.046 | 0.016 | 0.006 | 4.786 | 23.98 | -0.056 | 0.134 | 1.072 |
| 1992-94 | 0.263 | 0.315 | 0.188 | 0.080 | 0.043 | 0.016 | 0.005 | 4.551 | 24.17 | -0.033 | 0.071 | 1.107 |
| 1993-95 | 0.246 | 0.318 | 0.184 | 0.075 | 0.044 | 0.015 | 0.005 | 4.428 | 24.21 | -0.028 | 0.059 | 1.121 |
| 1994-96 | 0.238 | 0.312 | 0.184 | 0.069 | 0.039 | 0.013 | 0.004 | 4.293 | 24.07 | -0.034 | 0.066 | 1.161 |
| 1995-97 | 0.256 | 0.314 | 0.172 | 0.062 | 0.040 | 0.010 | 0.003 | 4.283 | 23.75 | -0.062 | 0.110 | 1.214 |
| 1996-98 | 0.262 | 0.304 | 0.165 | 0.061 | 0.034 | 0.008 | 0.002 | 4.184 | 23.53 | -0.080 | 0.147 | 1.233 |
| 1997-99 | 0.276 | 0.315 | 0.159 | 0.060 | 0.031 | 0.008 | 0.002 | 4.246 | 23.30 | -0.099 | 0.184 | 1.266 |
| 1998-2000 | 0.286 | 0.315 | 0.161 | 0.061 | 0.023 | 0.008 | 0.002 | 4.281 | 23.14 | -0.112 | 0.227 | 1.265 |
| 1999-01 | 0.291 | 0.324 | 0.162 | 0.060 | 0.021 | 0.008 | 0.002 | 4.340 | 23.05 | -0.118 | 0.233 | 1.297 |
| 2000-02 | 0.288 | 0.323 | 0.161 | 0.058 | 0.020 | 0.007 | 0.002 | 4.291 | 22.99 | -0.122 | 0.240 | 1.319 |
| 2001-03 | 0.294 | 0.328 | 0.158 | 0.055 | 0.018 | 0.006 | 0.001 | 4.302 | 22.84 | -0.134 | 0.259 | 1.364 |
| 2002-04 | 0.293 | 0.320 | 0.156 | 0.052 | 0.016 | 0.005 | 0.001 | 4.218 | 22.75 | -0.141 | 0.274 | 1.386 |
| 2003-05 | 0.284 | 0.315 | 0.149 | 0.051 | 0.015 | 0.005 | 0.002 | 4.103 | 22.75 | -0.142 | 0.296 | 1.351 |
| 2004-06 | 0.291 | 0.307 | 0.142 | 0.048 | 0.014 | 0.004 | 0.001 | 4.033 | 22.58 | -0.158 | 0.339 | 1.366 |
| 2005-07 | 0.299 | 0.306 | 0.137 | 0.046 | 0.014 | 0.003 | 0.001 | 4.034 | 22.45 | -0.170 | 0.367 | 1.383 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Kerala | | | | | | |
| 1985-87 | 0.310 | 0.329 | 0.182 | 0.073 | 0.030 | 0.011 | 0.002 | 4.685 | 23.38 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.302 | 0.316 | 0.173 | 0.068 | 0.029 | 0.009 | 0.003 | 4.499 | 23.30 | -0.008 | 0.041 | 0.978 |
| 1987-89 | 0.274 | 0.310 | 0.182 | 0.068 | 0.027 | 0.008 | 0.003 | 4.364 | 23.49 | 0.016 | -0.022 | 1.000 |
| 1988-90 | 0.263 | 0.298 | 0.180 | 0.067 | 0.023 | 0.008 | 0.003 | 4.205 | 23.48 | 0.018 | -0.033 | 1.014 |
| 1989-91 | 0.256 | 0.290 | 0.177 | 0.063 | 0.020 | 0.007 | 0.002 | 4.067 | 23.38 | 0.013 | -0.057 | 1.066 |
| 1990-92 | 0.262 | 0.284 | 0.156 | 0.054 | 0.016 | 0.005 | 0.001 | 3.891 | 22.99 | -0.024 | -0.008 | 1.131 |
| 1991-93 | 0.239 | 0.276 | 0.150 | 0.053 | 0.015 | 0.004 | 0.001 | 3.684 | 23.05 | -0.013 | -0.098 | 1.204 |
| 1992-94 | 0.224 | 0.276 | 0.149 | 0.051 | 0.014 | 0.003 | 0.000 | 3.592 | 23.09 | -0.004 | -0.163 | 1.266 |
| 1993-95 | 0.219 | 0.271 | 0.154 | 0.053 | 0.015 | 0.003 | 0.001 | 3.581 | 23.22 | 0.008 | -0.138 | 1.201 |
| 1994-96 | 0.238 | 0.274 | 0.154 | 0.054 | 0.014 | 0.003 | 0.001 | 3.692 | 23.06 | -0.011 | -0.078 | 1.180 |
| 1995-97 | 0.251 | 0.269 | 0.156 | 0.057 | 0.014 | 0.002 | 0.001 | 3.750 | 23.01 | -0.018 | -0.076 | 1.184 |
| 1996-98 | 0.255 | 0.273 | 0.152 | 0.057 | 0.013 | 0.002 | 0.001 | 3.763 | 22.91 | -0.026 | -0.148 | 1.282 |
| 1997-99 | 0.248 | 0.265 | 0.155 | 0.058 | 0.013 | 0.002 | 0.000 | 3.702 | 22.98 | -0.017 | -0.236 | 1.350 |
| 1998-2000 | 0.234 | 0.269 | 0.156 | 0.059 | 0.013 | 0.002 | 0.000 | 3.665 | 23.11 | -0.002 | -0.325 | 1.408 |
| 1999-01 | 0.221 | 0.266 | 0.158 | 0.057 | 0.013 | 0.002 | 0.000 | 3.588 | 23.22 | 0.011 | -0.318 | 1.377 |
| 2000-02 | 0.213 | 0.268 | 0.156 | 0.057 | 0.014 | 0.002 | 0.000 | 3.554 | 23.27 | 0.017 | -0.399 | 1.448 |
| 2001-03 | 0.208 | 0.266 | 0.155 | 0.055 | 0.014 | 0.002 | 0.000 | 3.496 | 23.27 | 0.018 | -0.361 | 1.414 |
| 2002-04 | 0.225 | 0.266 | 0.152 | 0.057 | 0.014 | 0.002 | 0.000 | 3.584 | 23.14 | 0.002 | -0.343 | 1.419 |
| 2003-05 | 0.268 | 0.272 | 0.152 | 0.057 | 0.014 | 0.002 | 0.000 | 3.822 | 22.83 | -0.036 | -0.187 | 1.341 |
| 2004-06 | 0.311 | 0.274 | 0.151 | 0.058 | 0.014 | 0.002 | 0.000 | 4.050 | 22.55 | -0.069 | -0.094 | 1.317 |
| 2005-07 | 0.314 | 0.273 | 0.153 | 0.055 | 0.015 | 0.002 | 0.000 | 4.058 | 22.52 | -0.071 | -0.090 | 1.327 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Madhya Pradesh | | | | | | |
| 1985-87 | 0.248 | 0.331 | 0.258 | 0.164 | 0.100 | 0.049 | 0.020 | 5.856 | 26.50 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.248 | 0.328 | 0.247 | 0.155 | 0.095 | 0.048 | 0.017 | 5.687 | 26.32 | -0.011 | 0.025 | 1.015 |
| 1987-89 | 0.237 | 0.331 | 0.253 | 0.155 | 0.090 | 0.043 | 0.015 | 5.621 | 26.24 | -0.011 | 0.014 | 1.055 |
| 1988-90 | 0.245 | 0.339 | 0.253 | 0.153 | 0.089 | 0.044 | 0.014 | 5.687 | 26.13 | -0.019 | 0.034 | 1.059 |
| 1989-91 | 0.243 | 0.337 | 0.254 | 0.153 | 0.085 | 0.041 | 0.014 | 5.634 | 26.09 | -0.022 | 0.036 | 1.065 |
| 1990-92 | 0.265 | 0.334 | 0.240 | 0.145 | 0.083 | 0.039 | 0.015 | 5.604 | 25.82 | -0.047 | 0.097 | 1.045 |
| 1991-93 | 0.260 | 0.328 | 0.231 | 0.140 | 0.078 | 0.036 | 0.013 | 5.434 | 25.70 | -0.054 | 0.110 | 1.061 |
| 1992-94 | 0.258 | 0.324 | 0.224 | 0.136 | 0.076 | 0.037 | 0.014 | 5.347 | 25.69 | -0.057 | 0.123 | 1.040 |
| 1993-95 | 0.247 | 0.321 | 0.227 | 0.137 | 0.072 | 0.036 | 0.013 | 5.269 | 25.74 | -0.051 | 0.105 | 1.056 |
| 1994-96 | 0.237 | 0.322 | 0.227 | 0.137 | 0.071 | 0.037 | 0.014 | 5.223 | 25.82 | -0.046 | 0.094 | 1.050 |
| 1995-97 | 0.239 | 0.323 | 0.226 | 0.134 | 0.069 | 0.035 | 0.010 | 5.183 | 25.64 | -0.053 | 0.098 | 1.111 |
| 1996-98 | 0.244 | 0.325 | 0.219 | 0.130 | 0.066 | 0.034 | 0.009 | 5.134 | 25.49 | -0.065 | 0.127 | 1.109 |
| 1997-99 | 0.246 | 0.327 | 0.220 | 0.129 | 0.065 | 0.032 | 0.009 | 5.137 | 25.40 | -0.070 | 0.134 | 1.131 |
| 1998-2000 | 0.244 | 0.337 | 0.224 | 0.128 | 0.064 | 0.031 | 0.010 | 5.189 | 25.40 | -0.072 | 0.145 | 1.109 |
| 1999-01 | 0.256 | 0.348 | 0.235 | 0.124 | 0.063 | 0.028 | 0.010 | 5.314 | 25.21 | -0.084 | 0.175 | 1.127 |
| 2000-02 | 0.259 | 0.356 | 0.237 | 0.118 | 0.061 | 0.025 | 0.009 | 5.332 | 25.06 | -0.095 | 0.200 | 1.141 |
| 2001-03 | 0.261 | 0.364 | 0.234 | 0.112 | 0.057 | 0.023 | 0.008 | 5.300 | 24.87 | -0.108 | 0.232 | 1.162 |
| 2002-04 | 0.240 | 0.364 | 0.227 | 0.108 | 0.054 | 0.022 | 0.009 | 5.130 | 24.94 | -0.103 | 0.224 | 1.152 |
| 2003-05 | 0.234 | 0.358 | 0.222 | 0.108 | 0.051 | 0.022 | 0.009 | 5.017 | 24.92 | -0.104 | 0.225 | 1.154 |
| 2004-06 | 0.228 | 0.349 | 0.223 | 0.104 | 0.047 | 0.022 | 0.010 | 4.913 | 24.95 | -0.102 | 0.231 | 1.130 |
| 2005-07 | 0.235 | 0.348 | 0.219 | 0.101 | 0.044 | 0.020 | 0.008 | 4.876 | 24.75 | -0.116 | 0.257 | 1.166 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Maharashtra | | | | | | |
| 1985-87 | 0.256 | 0.330 | 0.211 | 0.102 | 0.041 | 0.015 | 0.005 | 4.807 | 24.42 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.268 | 0.334 | 0.212 | 0.098 | 0.040 | 0.013 | 0.006 | 4.860 | 24.28 | -0.014 | 0.047 | 0.983 |
| 1987-89 | 0.260 | 0.331 | 0.209 | 0.096 | 0.037 | 0.013 | 0.006 | 4.760 | 24.24 | -0.016 | 0.045 | 0.998 |
| 1988-90 | 0.263 | 0.326 | 0.203 | 0.093 | 0.037 | 0.012 | 0.004 | 4.692 | 24.13 | -0.024 | 0.043 | 1.033 |
| 1989-91 | 0.245 | 0.313 | 0.197 | 0.087 | 0.034 | 0.011 | 0.003 | 4.453 | 24.11 | -0.020 | 0.001 | 1.097 |
| 1990-92 | 0.237 | 0.313 | 0.188 | 0.081 | 0.034 | 0.010 | 0.002 | 4.324 | 24.04 | -0.025 | 0.010 | 1.113 |
| 1991-93 | 0.220 | 0.310 | 0.187 | 0.079 | 0.032 | 0.009 | 0.002 | 4.198 | 24.10 | -0.017 | -0.004 | 1.116 |
| 1992-94 | 0.225 | 0.317 | 0.184 | 0.078 | 0.029 | 0.009 | 0.003 | 4.220 | 23.98 | -0.029 | 0.038 | 1.099 |
| 1993-95 | 0.225 | 0.322 | 0.186 | 0.079 | 0.028 | 0.008 | 0.003 | 4.256 | 23.98 | -0.029 | 0.053 | 1.081 |
| 1994-96 | 0.231 | 0.330 | 0.179 | 0.076 | 0.024 | 0.009 | 0.003 | 4.261 | 23.81 | -0.044 | 0.094 | 1.086 |
| 1995-97 | 0.219 | 0.334 | 0.176 | 0.071 | 0.024 | 0.009 | 0.003 | 4.177 | 23.81 | -0.043 | 0.100 | 1.089 |
| 1996-98 | 0.213 | 0.328 | 0.172 | 0.067 | 0.022 | 0.008 | 0.002 | 4.060 | 23.76 | -0.045 | 0.096 | 1.118 |
| 1997-99 | 0.203 | 0.321 | 0.166 | 0.063 | 0.023 | 0.007 | 0.002 | 3.921 | 23.75 | -0.045 | 0.083 | 1.144 |
| 1998-2000 | 0.206 | 0.318 | 0.159 | 0.061 | 0.022 | 0.007 | 0.002 | 3.870 | 23.64 | -0.055 | 0.097 | 1.161 |
| 1999-01 | 0.200 | 0.319 | 0.154 | 0.057 | 0.021 | 0.006 | 0.002 | 3.796 | 23.58 | -0.060 | 0.132 | 1.145 |
| 2000-02 | 0.196 | 0.321 | 0.154 | 0.054 | 0.019 | 0.006 | 0.002 | 3.762 | 23.56 | -0.062 | 0.161 | 1.125 |
| 2001-03 | 0.194 | 0.319 | 0.154 | 0.049 | 0.018 | 0.007 | 0.002 | 3.711 | 23.50 | -0.067 | 0.191 | 1.121 |
| 2002-04 | 0.215 | 0.305 | 0.148 | 0.049 | 0.015 | 0.006 | 0.002 | 3.697 | 23.23 | -0.093 | 0.236 | 1.146 |
| 2003-05 | 0.223 | 0.296 | 0.144 | 0.047 | 0.014 | 0.005 | 0.002 | 3.652 | 23.09 | -0.107 | 0.264 | 1.155 |
| 2004-06 | 0.226 | 0.287 | 0.138 | 0.047 | 0.014 | 0.003 | 0.002 | 3.586 | 22.96 | -0.119 | 0.265 | 1.195 |
| 2005-07 | 0.221 | 0.288 | 0.133 | 0.045 | 0.013 | 0.002 | 0.001 | 3.520 | 22.89 | -0.124 | 0.265 | 1.231 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Orissa | | | | | | |
| 1985-87 | 0.279 | 0.314 | 0.236 | 0.136 | 0.070 | 0.026 | 0.011 | 5.358 | 25.29 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.286 | 0.322 | 0.238 | 0.133 | 0.069 | 0.025 | 0.009 | 5.413 | 25.15 | -0.008 | 0.011 | 1.027 |
| 1987-89 | 0.276 | 0.314 | 0.227 | 0.128 | 0.064 | 0.026 | 0.008 | 5.211 | 25.09 | -0.012 | 0.018 | 1.035 |
| 1988-90 | 0.278 | 0.313 | 0.226 | 0.127 | 0.063 | 0.026 | 0.008 | 5.205 | 25.07 | -0.013 | 0.019 | 1.039 |
| 1989-91 | 0.272 | 0.302 | 0.220 | 0.124 | 0.060 | 0.025 | 0.009 | 5.058 | 25.06 | -0.017 | 0.038 | 1.013 |
| 1990-92 | 0.278 | 0.298 | 0.216 | 0.117 | 0.057 | 0.022 | 0.008 | 4.986 | 24.88 | -0.032 | 0.069 | 1.021 |
| 1991-93 | 0.269 | 0.292 | 0.214 | 0.115 | 0.053 | 0.020 | 0.008 | 4.858 | 24.84 | -0.032 | 0.066 | 1.036 |
| 1992-94 | 0.261 | 0.301 | 0.214 | 0.116 | 0.053 | 0.021 | 0.008 | 4.868 | 24.91 | -0.027 | 0.058 | 1.029 |
| 1993-95 | 0.243 | 0.299 | 0.217 | 0.121 | 0.054 | 0.024 | 0.008 | 4.826 | 25.15 | -0.005 | 0.003 | 1.036 |
| 1994-96 | 0.241 | 0.301 | 0.215 | 0.121 | 0.053 | 0.026 | 0.007 | 4.820 | 25.15 | -0.003 | -0.006 | 1.053 |
| 1995-97 | 0.241 | 0.298 | 0.211 | 0.116 | 0.053 | 0.024 | 0.005 | 4.737 | 25.04 | -0.008 | -0.015 | 1.103 |
| 1996-98 | 0.243 | 0.299 | 0.209 | 0.111 | 0.050 | 0.020 | 0.005 | 4.689 | 24.86 | -0.022 | 0.017 | 1.110 |
| 1997-99 | 0.243 | 0.299 | 0.205 | 0.102 | 0.048 | 0.015 | 0.006 | 4.592 | 24.69 | -0.037 | 0.063 | 1.098 |
| 1998-2000 | 0.242 | 0.296 | 0.203 | 0.101 | 0.046 | 0.015 | 0.006 | 4.549 | 24.65 | -0.040 | 0.075 | 1.088 |
| 1999-01 | 0.249 | 0.290 | 0.201 | 0.099 | 0.046 | 0.014 | 0.005 | 4.518 | 24.54 | -0.049 | 0.085 | 1.111 |
| 2000-02 | 0.240 | 0.291 | 0.204 | 0.100 | 0.045 | 0.013 | 0.004 | 4.484 | 24.57 | -0.042 | 0.050 | 1.159 |
| 2001-03 | 0.233 | 0.291 | 0.201 | 0.097 | 0.043 | 0.011 | 0.004 | 4.401 | 24.51 | -0.045 | 0.046 | 1.186 |
| 2002-04 | 0.229 | 0.292 | 0.198 | 0.094 | 0.042 | 0.013 | 0.006 | 4.374 | 24.58 | -0.044 | 0.085 | 1.104 |
| 2003-05 | 0.226 | 0.289 | 0.192 | 0.092 | 0.040 | 0.015 | 0.006 | 4.301 | 24.59 | -0.045 | 0.101 | 1.077 |
| 2004-06 | 0.243 | 0.281 | 0.189 | 0.092 | 0.036 | 0.015 | 0.006 | 4.307 | 24.40 | -0.063 | 0.142 | 1.072 |
| 2005-07 | 0.242 | 0.279 | 0.183 | 0.090 | 0.032 | 0.013 | 0.004 | 4.213 | 24.22 | -0.074 | 0.143 | 1.131 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Punjab | | | | | | |
| 1985-87 | 0.210 | 0.364 | 0.256 | 0.126 | 0.058 | 0.017 | 0.005 | 5.180 | 25.23 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.236 | 0.373 | 0.254 | 0.120 | 0.056 | 0.017 | 0.006 | 5.312 | 24.97 | -0.028 | 0.077 | 0.972 |
| 1987-89 | 0.249 | 0.370 | 0.249 | 0.118 | 0.054 | 0.018 | 0.005 | 5.312 | 24.82 | -0.042 | 0.098 | 0.991 |
| 1988-90 | 0.260 | 0.368 | 0.245 | 0.113 | 0.052 | 0.017 | 0.003 | 5.282 | 24.61 | -0.058 | 0.107 | 1.055 |
| 1989-91 | 0.257 | 0.369 | 0.240 | 0.109 | 0.044 | 0.013 | 0.002 | 5.173 | 24.41 | -0.070 | 0.100 | 1.141 |
| 1990-92 | 0.243 | 0.372 | 0.234 | 0.102 | 0.040 | 0.011 | 0.002 | 5.019 | 24.34 | -0.076 | 0.131 | 1.123 |
| 1991-93 | 0.235 | 0.376 | 0.230 | 0.095 | 0.036 | 0.010 | 0.003 | 4.922 | 24.26 | -0.083 | 0.172 | 1.096 |
| 1992-94 | 0.220 | 0.372 | 0.223 | 0.090 | 0.033 | 0.012 | 0.002 | 4.758 | 24.29 | -0.080 | 0.171 | 1.096 |
| 1993-95 | 0.199 | 0.363 | 0.219 | 0.089 | 0.033 | 0.013 | 0.002 | 4.589 | 24.44 | -0.065 | 0.138 | 1.090 |
| 1994-96 | 0.201 | 0.360 | 0.214 | 0.091 | 0.031 | 0.012 | 0.003 | 4.558 | 24.40 | -0.069 | 0.154 | 1.070 |
| 1995-97 | 0.206 | 0.357 | 0.216 | 0.089 | 0.032 | 0.011 | 0.003 | 4.566 | 24.35 | -0.073 | 0.158 | 1.087 |
| 1996-98 | 0.265 | 0.366 | 0.211 | 0.082 | 0.029 | 0.009 | 0.002 | 4.821 | 23.76 | -0.132 | 0.293 | 1.107 |
| 1997-99 | 0.282 | 0.366 | 0.206 | 0.075 | 0.027 | 0.008 | 0.001 | 4.825 | 23.49 | -0.155 | 0.296 | 1.235 |
| 1998-2000 | 0.297 | 0.375 | 0.200 | 0.068 | 0.023 | 0.006 | 0.001 | 4.853 | 23.21 | -0.182 | 0.388 | 1.218 |
| 1999-01 | 0.291 | 0.368 | 0.204 | 0.066 | 0.022 | 0.004 | 0.001 | 4.782 | 23.20 | -0.180 | 0.367 | 1.272 |
| 2000-02 | 0.297 | 0.371 | 0.210 | 0.064 | 0.019 | 0.003 | 0.001 | 4.832 | 23.11 | -0.187 | 0.402 | 1.266 |
| 2001-03 | 0.315 | 0.375 | 0.212 | 0.063 | 0.017 | 0.004 | 0.001 | 4.932 | 22.98 | -0.200 | 0.443 | 1.259 |
| 2002-04 | 0.297 | 0.359 | 0.202 | 0.060 | 0.016 | 0.004 | 0.001 | 4.698 | 23.00 | -0.198 | 0.450 | 1.242 |
| 2003-05 | 0.280 | 0.342 | 0.188 | 0.058 | 0.015 | 0.005 | 0.002 | 4.447 | 23.05 | -0.197 | 0.475 | 1.163 |
| 2004-06 | 0.249 | 0.318 | 0.176 | 0.055 | 0.015 | 0.005 | 0.002 | 4.102 | 23.18 | -0.184 | 0.455 | 1.131 |
| 2005-07 | 0.256 | 0.325 | 0.171 | 0.057 | 0.014 | 0.005 | 0.002 | 4.147 | 23.11 | -0.193 | 0.480 | 1.115 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | Rajasthan | | | | | | |
| 1985-87 | 0.193 | 0.313 | 0.262 | 0.186 | 0.111 | 0.060 | 0.028 | 5.757 | 27.50 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.191 | 0.304 | 0.250 | 0.168 | 0.100 | 0.052 | 0.025 | 5.452 | 27.22 | -0.020 | 0.043 | 1.007 |
| 1987-89 | 0.200 | 0.306 | 0.249 | 0.163 | 0.097 | 0.047 | 0.024 | 5.429 | 26.99 | -0.036 | 0.076 | 1.018 |
| 1988-90 | 0.201 | 0.303 | 0.245 | 0.160 | 0.096 | 0.046 | 0.023 | 5.368 | 26.94 | -0.040 | 0.085 | 1.018 |
| 1989-91 | 0.197 | 0.312 | 0.249 | 0.162 | 0.098 | 0.046 | 0.023 | 5.437 | 26.96 | -0.037 | 0.079 | 1.025 |
| 1990-92 | 0.203 | 0.318 | 0.237 | 0.160 | 0.094 | 0.044 | 0.023 | 5.397 | 26.80 | -0.050 | 0.106 | 1.020 |
| 1991-93 | 0.209 | 0.327 | 0.237 | 0.158 | 0.090 | 0.042 | 0.020 | 5.414 | 26.57 | -0.063 | 0.134 | 1.047 |
| 1992-94 | 0.188 | 0.317 | 0.236 | 0.160 | 0.090 | 0.042 | 0.023 | 5.278 | 26.86 | -0.044 | 0.088 | 1.034 |
| 1993-95 | 0.157 | 0.313 | 0.239 | 0.162 | 0.089 | 0.046 | 0.021 | 5.137 | 27.17 | -0.016 | 0.023 | 1.055 |
| 1994-96 | 0.132 | 0.303 | 0.247 | 0.158 | 0.088 | 0.046 | 0.023 | 4.995 | 27.49 | 0.007 | -0.030 | 1.043 |
| 1995-97 | 0.143 | 0.311 | 0.243 | 0.149 | 0.085 | 0.043 | 0.018 | 4.957 | 27.10 | -0.016 | 0.024 | 1.083 |
| 1996-98 | 0.147 | 0.309 | 0.244 | 0.140 | 0.084 | 0.039 | 0.016 | 4.900 | 26.92 | -0.029 | 0.053 | 1.092 |
| 1997-99 | 0.162 | 0.318 | 0.237 | 0.142 | 0.081 | 0.039 | 0.015 | 4.968 | 26.69 | -0.046 | 0.090 | 1.104 |
| 1998-2000 | 0.165 | 0.327 | 0.238 | 0.140 | 0.077 | 0.037 | 0.014 | 4.989 | 26.53 | -0.056 | 0.114 | 1.116 |
| 1999-01 | 0.168 | 0.338 | 0.236 | 0.138 | 0.072 | 0.036 | 0.014 | 5.009 | 26.38 | -0.069 | 0.142 | 1.113 |
| 2000-02 | 0.158 | 0.345 | 0.232 | 0.129 | 0.068 | 0.033 | 0.013 | 4.881 | 26.23 | -0.077 | 0.160 | 1.139 |
| 2001-03 | 0.160 | 0.347 | 0.224 | 0.122 | 0.063 | 0.031 | 0.012 | 4.799 | 26.06 | -0.091 | 0.194 | 1.135 |
| 2002-04 | 0.164 | 0.337 | 0.220 | 0.117 | 0.059 | 0.028 | 0.013 | 4.690 | 25.92 | -0.103 | 0.222 | 1.134 |
| 2003-05 | 0.172 | 0.334 | 0.214 | 0.113 | 0.054 | 0.028 | 0.013 | 4.634 | 25.76 | -0.117 | 0.259 | 1.118 |
| 2004-06 | 0.181 | 0.326 | 0.214 | 0.106 | 0.051 | 0.026 | 0.014 | 4.592 | 25.61 | -0.131 | 0.297 | 1.099 |
| 2005-07 | 0.188 | 0.332 | 0.210 | 0.103 | 0.047 | 0.024 | 0.012 | 4.585 | 25.36 | -0.148 | 0.337 | 1.131 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter $\alpha$ | Parameter $\beta$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | | |
| | | | | | | Tamil Nadu | | | | | | |
| 1985-87 | 0.344 | 0.295 | 0.174 | 0.083 | 0.033 | 0.011 | 0.004 | 4.718 | 23.35 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.351 | 0.296 | 0.165 | 0.078 | 0.029 | 0.010 | 0.003 | 4.660 | 23.10 | -0.020 | 0.032 | 1.031 |
| 1987-89 | 0.330 | 0.302 | 0.167 | 0.075 | 0.028 | 0.009 | 0.003 | 4.565 | 23.16 | -0.009 | -0.000 | 1.056 |
| 1988-90 | 0.329 | 0.301 | 0.161 | 0.070 | 0.026 | 0.008 | 0.002 | 4.484 | 23.03 | -0.019 | 0.006 | 1.089 |
| 1989-91 | 0.318 | 0.296 | 0.157 | 0.063 | 0.025 | 0.007 | 0.002 | 4.340 | 22.95 | -0.023 | 0.012 | 1.114 |
| 1990-92 | 0.315 | 0.297 | 0.149 | 0.057 | 0.022 | 0.006 | 0.001 | 4.232 | 22.76 | -0.037 | 0.033 | 1.156 |
| 1991-93 | 0.292 | 0.290 | 0.146 | 0.055 | 0.019 | 0.005 | 0.001 | 4.039 | 22.80 | -0.030 | -0.005 | 1.190 |
| 1992-94 | 0.275 | 0.285 | 0.146 | 0.055 | 0.016 | 0.005 | 0.001 | 3.918 | 22.85 | -0.022 | -0.006 | 1.178 |
| 1993-95 | 0.252 | 0.279 | 0.147 | 0.056 | 0.016 | 0.005 | 0.002 | 3.777 | 23.03 | -0.003 | -0.052 | 1.175 |
| 1994-96 | 0.255 | 0.282 | 0.145 | 0.055 | 0.015 | 0.004 | 0.001 | 3.789 | 22.96 | -0.008 | -0.047 | 1.192 |
| 1995-97 | 0.254 | 0.287 | 0.143 | 0.052 | 0.015 | 0.003 | 0.001 | 3.771 | 22.87 | -0.013 | -0.067 | 1.244 |
| 1996-98 | 0.261 | 0.284 | 0.141 | 0.050 | 0.013 | 0.003 | 0.001 | 3.760 | 22.73 | -0.026 | -0.067 | 1.292 |
| 1997-99 | 0.254 | 0.285 | 0.145 | 0.049 | 0.013 | 0.003 | 0.001 | 3.743 | 22.79 | -0.018 | -0.100 | 1.316 |
| 1998-2000 | 0.268 | 0.287 | 0.150 | 0.051 | 0.014 | 0.003 | 0.000 | 3.866 | 22.75 | -0.023 | -0.186 | 1.409 |
| 1999-01 | 0.280 | 0.295 | 0.151 | 0.052 | 0.015 | 0.003 | 0.001 | 3.986 | 22.72 | -0.028 | -0.111 | 1.339 |
| 2000-02 | 0.292 | 0.297 | 0.151 | 0.051 | 0.015 | 0.003 | 0.001 | 4.045 | 22.63 | -0.037 | -0.075 | 1.328 |
| 2001-03 | 0.294 | 0.301 | 0.150 | 0.048 | 0.013 | 0.003 | 0.001 | 4.044 | 22.53 | -0.046 | -0.026 | 1.321 |
| 2002-04 | 0.272 | 0.290 | 0.148 | 0.049 | 0.013 | 0.003 | 0.001 | 3.884 | 22.68 | -0.030 | -0.086 | 1.333 |
| 2003-05 | 0.278 | 0.290 | 0.143 | 0.049 | 0.013 | 0.003 | 0.001 | 3.879 | 22.59 | -0.039 | -0.054 | 1.323 |
| 2004-06 | 0.272 | 0.287 | 0.138 | 0.046 | 0.013 | 0.003 | 0.001 | 3.796 | 22.59 | -0.040 | -0.032 | 1.305 |
| 2005-07 | 0.298 | 0.293 | 0.133 | 0.043 | 0.012 | 0.002 | 0.001 | 3.908 | 22.29 | -0.070 | 0.033 | 1.342 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter $\alpha$ | Parameter $\beta$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | | |
| | | | | | | Uttar Pradesh | | | | | | |
| 1985-87 | 0.215 | 0.316 | 0.282 | 0.219 | 0.143 | 0.077 | 0.035 | 6.427 | 27.99 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.220 | 0.319 | 0.281 | 0.212 | 0.142 | 0.074 | 0.033 | 6.413 | 27.86 | -0.008 | 0.019 | 1.004 |
| 1987-89 | 0.221 | 0.319 | 0.276 | 0.220 | 0.143 | 0.075 | 0.035 | 6.443 | 27.92 | -0.005 | 0.010 | 0.999 |
| 1988-90 | 0.216 | 0.313 | 0.271 | 0.219 | 0.144 | 0.073 | 0.035 | 6.356 | 27.98 | -0.002 | 0.003 | 0.997 |
| 1989-91 | 0.214 | 0.316 | 0.266 | 0.217 | 0.141 | 0.074 | 0.033 | 6.310 | 27.93 | -0.004 | 0.007 | 1.006 |
| 1990-92 | 0.218 | 0.322 | 0.269 | 0.206 | 0.142 | 0.073 | 0.033 | 6.309 | 27.82 | -0.012 | 0.028 | 0.999 |
| 1991-93 | 0.219 | 0.327 | 0.273 | 0.206 | 0.138 | 0.073 | 0.031 | 6.334 | 27.74 | -0.016 | 0.037 | 1.011 |
| 1992-94 | 0.205 | 0.323 | 0.280 | 0.207 | 0.139 | 0.073 | 0.033 | 6.300 | 27.92 | -0.004 | 0.008 | 1.007 |
| 1993-95 | 0.183 | 0.314 | 0.282 | 0.210 | 0.133 | 0.073 | 0.032 | 6.132 | 28.09 | 0.010 | -0.028 | 1.017 |
| 1994-96 | 0.165 | 0.309 | 0.278 | 0.209 | 0.130 | 0.073 | 0.033 | 5.988 | 28.26 | 0.022 | -0.057 | 1.016 |
| 1995-97 | 0.160 | 0.308 | 0.277 | 0.208 | 0.124 | 0.071 | 0.030 | 5.895 | 28.18 | 0.020 | -0.055 | 1.036 |
| 1996-98 | 0.171 | 0.314 | 0.265 | 0.202 | 0.123 | 0.067 | 0.028 | 5.848 | 27.95 | 0.003 | -0.017 | 1.039 |
| 1997-99 | 0.186 | 0.316 | 0.269 | 0.199 | 0.125 | 0.064 | 0.025 | 5.919 | 27.73 | -0.009 | 0.013 | 1.058 |
| 1998-2000 | 0.197 | 0.331 | 0.266 | 0.195 | 0.129 | 0.061 | 0.024 | 6.023 | 27.54 | -0.023 | 0.045 | 1.062 |
| 1999-01 | 0.207 | 0.343 | 0.273 | 0.196 | 0.129 | 0.060 | 0.024 | 6.152 | 27.39 | -0.033 | 0.066 | 1.072 |
| 2000-02 | 0.203 | 0.353 | 0.271 | 0.191 | 0.124 | 0.057 | 0.023 | 6.109 | 27.26 | -0.041 | 0.082 | 1.080 |
| 2001-03 | 0.203 | 0.353 | 0.275 | 0.187 | 0.117 | 0.056 | 0.022 | 6.065 | 27.16 | -0.048 | 0.097 | 1.084 |
| 2002-04 | 0.213 | 0.349 | 0.276 | 0.175 | 0.106 | 0.052 | 0.022 | 5.955 | 26.89 | -0.069 | 0.145 | 1.079 |
| 2003-05 | 0.215 | 0.355 | 0.266 | 0.169 | 0.093 | 0.047 | 0.020 | 5.829 | 26.61 | -0.088 | 0.187 | 1.092 |
| 2004-06 | 0.223 | 0.350 | 0.264 | 0.158 | 0.086 | 0.042 | 0.019 | 5.709 | 26.34 | -0.107 | 0.231 | 1.101 |
| 2005-07 | 0.215 | 0.367 | 0.258 | 0.153 | 0.081 | 0.039 | 0.015 | 5.641 | 26.14 | -0.117 | 0.254 | 1.147 |

| Period | Age specific marital fertility rate | | | | | | | TMFR | MAMFS | Gini ratio | Parameter | Parameter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | | $\alpha$ | $\beta$ |
| | | | | | | West Bengal | | | | | | |
| 1985-87 | 0.315 | 0.306 | 0.208 | 0.134 | 0.075 | 0.040 | 0.015 | 5.463 | 25.33 | 0.000 | 0.000 | 1.000 |
| 1986-88 | 0.312 | 0.294 | 0.208 | 0.127 | 0.076 | 0.038 | 0.014 | 5.344 | 25.31 | -0.001 | 0.001 | 1.007 |
| 1987-89 | 0.298 | 0.297 | 0.199 | 0.126 | 0.074 | 0.036 | 0.013 | 5.211 | 25.31 | 0.001 | -0.005 | 1.013 |
| 1988-90 | 0.295 | 0.290 | 0.195 | 0.116 | 0.070 | 0.031 | 0.013 | 5.050 | 25.12 | -0.013 | 0.026 | 1.021 |
| 1989-91 | 0.295 | 0.277 | 0.189 | 0.113 | 0.066 | 0.029 | 0.014 | 4.914 | 25.06 | -0.021 | 0.051 | 1.001 |
| 1990-92 | 0.300 | 0.268 | 0.189 | 0.103 | 0.062 | 0.028 | 0.013 | 4.809 | 24.87 | -0.035 | 0.091 | 1.002 |
| 1991-93 | 0.293 | 0.264 | 0.180 | 0.099 | 0.055 | 0.028 | 0.012 | 4.660 | 24.77 | -0.042 | 0.110 | 1.001 |
| 1992-94 | 0.276 | 0.273 | 0.181 | 0.095 | 0.050 | 0.027 | 0.010 | 4.561 | 24.71 | -0.040 | 0.098 | 1.040 |
| 1993-95 | 0.261 | 0.276 | 0.172 | 0.093 | 0.044 | 0.025 | 0.008 | 4.401 | 24.61 | -0.043 | 0.098 | 1.068 |
| 1994-96 | 0.256 | 0.268 | 0.166 | 0.085 | 0.040 | 0.021 | 0.007 | 4.217 | 24.39 | -0.057 | 0.125 | 1.100 |
| 1995-97 | 0.260 | 0.267 | 0.154 | 0.078 | 0.035 | 0.018 | 0.005 | 4.085 | 24.06 | -0.080 | 0.168 | 1.145 |
| 1996-98 | 0.263 | 0.258 | 0.150 | 0.072 | 0.034 | 0.016 | 0.005 | 3.993 | 23.91 | -0.093 | 0.204 | 1.145 |
| 1997-99 | 0.268 | 0.259 | 0.144 | 0.072 | 0.032 | 0.016 | 0.005 | 3.970 | 23.77 | -0.104 | 0.232 | 1.148 |
| 1998-2000 | 0.274 | 0.253 | 0.144 | 0.071 | 0.030 | 0.015 | 0.006 | 3.959 | 23.70 | -0.113 | 0.263 | 1.124 |
| 1999-01 | 0.286 | 0.261 | 0.143 | 0.070 | 0.027 | 0.014 | 0.005 | 4.032 | 23.50 | -0.127 | 0.293 | 1.150 |
| 2000-02 | 0.286 | 0.262 | 0.145 | 0.065 | 0.026 | 0.012 | 0.004 | 3.999 | 23.33 | -0.136 | 0.308 | 1.200 |
| 2001-03 | 0.298 | 0.267 | 0.140 | 0.063 | 0.025 | 0.010 | 0.003 | 4.027 | 23.11 | -0.153 | 0.337 | 1.245 |
| 2002-04 | 0.291 | 0.253 | 0.133 | 0.056 | 0.024 | 0.009 | 0.003 | 3.846 | 23.02 | -0.162 | 0.373 | 1.231 |
| 2003-05 | 0.283 | 0.246 | 0.121 | 0.054 | 0.021 | 0.009 | 0.004 | 3.692 | 22.93 | -0.172 | 0.418 | 1.195 |
| 2004-06 | 0.279 | 0.232 | 0.114 | 0.048 | 0.019 | 0.009 | 0.003 | 3.517 | 22.78 | -0.186 | 0.468 | 1.185 |
| 2005-07 | 0.287 | 0.231 | 0.109 | 0.047 | 0.016 | 0.007 | 0.003 | 3.498 | 22.53 | -0.204 | 0.501 | 1.241 |