

## C O N T E N T S

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## CHAPTER 1

### INTRODUCTION

India is the world's most critical country from the demographic point of view. Its current population estimated at about 930 million people, is growing at a rate of two per cent per year. If present trend continues, India will surpass China as the most populous country early in the 21st century. With its young age structure and continuing increase in women of childbearing age, speedy reduction in fertility to a replacement level would have a positive impact on the quality of life of India's population. Therefore, increasing the pace of fertility decline in India is very much important not only for the improvement of health and quality of life of India's women and children but also for the sustainable future.

The demographic profile of the sub-continent is as diverse as its culture and norms. Results of recent National Family Health Survey (IIPS, 1995)<sup>1</sup> and Sample Registration System (SRS) suggest that there has been a clear declining trend in fertility almost throughout the country. Demographers opined that, at the aggregate all India level, fertility has declined at a faster rate than expected in the recent past (Bhat, 1994; Visaria and Visaria, 1994). But, there are major regional differences in the pace of fertility decline. In the Southern and Western part of the country, birth rates have fallen significantly and total fertility rate (TFR) has declined to two to three children. But

in the North Indian states TFR has not declined as fast as Southern and Western states and the TFR is still around four children. Within the Southern and Western part of the country, fertility declined very fast in the former (Kerala, Tamil Nadu and Andhra Pradesh) than in the latter (Maharashtra and Gujarat). Though Maharashtra and Tamil Nadu share some comparable features of socio-economic environment, fertility has declined at higher pace in Tamil Nadu than in Maharashtra.

State-wise TFR as obtained by National Family Health Survey (NFHS) for the year 1992-93 and SRS for the year 1993 for rural and urban areas are given in Table 1.1. There are wide variations in fertility levels among the states. Fertility is below the national average in Southern and Western India, where three states (Kerala, Tamil Nadu and Goa) have already achieved replacement level fertility. From the Table, it can be noticed that, among the major states, TFR is below 2.5 in Kerala and Tamil Nadu; 2.5 to 3 in Andhra Pradesh, Karnataka, Maharashtra, Gujarat, Orissa, West Bengal, Punjab and Himachal Pradesh; and above 3 in the remaining major states of India (Madhya Pradesh, Uttar Pradesh, Bihar, Rajasthan, Haryana and Jammu & Kashmir). These inter-regional diversity in the demographic behaviour of the people provide useful opportunities to study the determinants of demographic outcome in India.

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#### Fertility decline in Tamil Nadu and Maharashtra during 1971-91

India as a whole, fertility has declined by about 29 per cent, from a TFR of 5.2 in 1970-72 to a TFR of 3.7 in 1990-92 (Table 1.2). Understandably, as in other countries, the decline in rural fertility during 1971-1991 has been slower than the urban fertility (Table 1.2). For instance, rural fertility declined by only 20 per cent from 1971-91 but urban fertility in India declined by 36 per cent during the same period.

As mentioned earlier, the pace of fertility decline in Southern and Western regions of India is not uniform. For example, fertility decline in Tamil Nadu is faster than the decline of fertility in Maharashtra in the eighties. Fertility decline in Maharashtra and Tamil Nadu during 1971-91 showed that Tamil Nadu experienced 41 per cent decline in fertility and Maharashtra experienced only 33.3 per cent decline, a difference of about 8 percentage points. Fertility decline in rural Tamil Nadu during the same period is remarkably high (43 per cent) than the rural Maharashtra (28 per cent). Pace of fertility decline in urban areas of Tamil Nadu and Maharashtra during this period is almost identical, a decline of 35 per cent in both the states. TFR of Tamil Nadu and Maharashtra during the period 1971-93 (Table 1.3) are presented in the form of graph (Figure 1). It shows that, though the TFR of Tamil Nadu in 1970 is considerably lower than the TFR of Maharashtra, the latter experienced a considerable decline in fertility than the former during the seventies. For example, TFR declined from 4.4 in 1970 to 3.7 in 1980 in

Maharashtra but, TFR declined in Tamil Nadu from 3.8 in 1970 to 3.4 in 1980. After 1980, however, Maharashtra witnessed a very slow decline of TFR and Tamil Nadu underwent a dramatic decline in TFR particularly after 1984.

Some of the demographic and socio-economic indicators with respect to Maharashtra, Tamil Nadu and India are given in Table 1.4. Maharashtra can be compared with Tamil Nadu in terms of proportion of population living in urban areas, female literacy level, infant mortality rate, couple protection rate, and proportion of SC/ST population. But in terms of economic development Maharashtra is better placed than Tamil Nadu. Maharashtra is considered one of the most developed and industrialized states in India. For example, economic indicators like gross domestic product, state domestic product, per capita income, population below poverty line, and electricity consumption speak good for Maharashtra than for Tamil Nadu (Table 1.4). In fact, income and poverty level of Tamil Nadu are even worse than the all-India figures. Though the economic position of Tamil Nadu is not very impressive, as far as TFR is concerned the rate is considerably lower in Tamil Nadu than in Maharashtra. For the year 1992-93, NFHS and SRS give lower TFR for Tamil Nadu (2.5 and 2.1 respectively) than for Maharashtra (2.9 and 2.9 respectively). Maharashtra's relatively better position in terms of economic development did not help to bring down its TFR to the level of Tamil Nadu. Thus Maharashtra and Tamil Nadu provide an interesting ground to understand the complexities involved in the decline of fertility. In the above context, Tamil Nadu and

Maharashtra were selected for analyzing their respective fertility and family planning behaviour.

The results of recently completed NFHS provide a very rare opportunity to analyze the inter-state variations in fertility and family planning behaviour in greater detail. Hence, this comparative study tries to explain the reasons for differential fertility and family planning behaviour in the light of the available published results of Maharashtra and Tamil Nadu from the NFHS<sup>2</sup>.

**Objectives:** The specific objectives of the study are:

1. To compare the demographic and socio-economic characteristics of households and couples in Maharashtra and Tamil Nadu from NFHS data;
2. To analyze the observed levels and differentials of fertility family planning and fertility preferences in NFHS in Tamil Nadu and Maharashtra; and
3. To identify the factors that could have caused the inter-state variations in fertility and family planning practice in Maharashtra and Tamil Nadu.

#### **Chapterization**

The report has been divided into six chapters. The first chapter discusses the rationale for the comparative study based on the NFHS results from Maharashtra and Tamil Nadu. Chapter two contains a profile of demographic and socio-economic characteristics of the households and individual respondents.

Chapter three discusses the pattern of age at marriage in the two states. Chapter four presents a description of fertility levels and differentials by socio-demographic characteristics. Chapter five discusses the family planning acceptance levels and differentials and fertility preferences. Chapter six provides the summary of findings and conclusions.

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**Notes:**

1. The NFHS, a major survey, collected information on a range of demographic and health topics. The survey was conducted under the auspices of Ministry of Health and Family Welfare to provide national and state-level estimate of fertility, infant mortality, family planning practice, maternal and child health and the utilization of MCH services available to mothers and children. The International Institute for Population Sciences (IIPS), Bombay, conducted the NFHS in cooperation with various consulting organizations and 18 Population Research Centres throughout India. East-West Centre in Honolulu, Hawaii, and Macro International, U.S.A. provided technical assistance for all of the survey operations. The funding for the NFHS was provided by the USAID, New Delhi. The NFHS covered 24 states and National Capital Territory of Delhi, which comprise 99 per cent of the total population of India. In all, 89,777 ever-married women age 13-49 and 88,562 households were covered, using uniform questionnaires, sample design and field procedures. The data collection was carried out on a state-by-state basis from April 1992 to September 1993. For complete detail see: IIPS (1995).

2. The NFHS, in Maharashtra, conducted between 23 November 1992 and 18 March 1993, gathered information from a representative sample of 4,106 ever-married women age 13-49 from 4,063 households. The Population Research Centre at Gokhale Institute of Politics and Economics, Pune conducted the survey in Maharashtra in collaboration with the Centre for Management of Development Programmes (CMDP) of Hyderabad. For complete detail see: PRC-GIPE and IIPS (1994).

The NFHS, in Tamil Nadu, conducted between 18 April and 28 July 1992, gathered information on a representative sample of 3,948 ever-married women age 13-49 from 4,287 households. The Population Research Centre at the Gandhigram Institute of Rural Health and Family Welfare Trust, Gandhigram conducted the survey in Tamil Nadu in collaboration with the Centre for Development Research and Training (CFDRT) of Madras. For complete detail see: PRC-GIRH & FWT and IIPS (1994).



Table 1.1. Total fertility rates (TFRs) by residence, India and Major States: NFHS (1992-93) and SRS (1993).

States	NFHS, 1992-1993			SRS, 1993		
	Total	Rural	Urban	Total	Rural	Urban
Andhra Pradesh	2.6	2.7	2.4	2.7	2.8	2.5
Assam	3.5	3.7	2.5	3.3	3.4	2.5
Bihar	4.0	4.2	3.3	4.6	4.7	3.7
Gujarat	3.0	3.2	2.7	3.2	3.3	3.0
Haryana	4.0	4.3	3.1	3.7	3.9	3.2
Himachal Pradesh	3.0	3.1	2.0	2.8	2.9	2.2
Jammu Kashmir	3.1	3.4	2.1	—	—	—
Karnataka	2.9	3.1	2.4	2.9	3.1	2.5
Kerala	2.0	2.1	1.8	1.7	1.7	1.7
Madhya Pradesh	3.9	4.1	3.3	4.2	4.6	2.9
Maharashtra	2.9	3.1	2.5	2.9	3.2	2.6
Orissa	2.9	3.0	2.5	3.1	3.2	2.7
Punjab	2.9	3.1	2.5	3.0	3.2	2.6
Rajasthan	3.6	3.9	2.8	4.5	4.7	3.8
Tamil Nadu	2.5	2.5	2.4	2.1	2.2	2.0
Uttar Pradesh	4.8	5.2	3.6	5.2	5.4	4.5
West Bengal	2.9	3.3	2.1	3.0	3.4	2.1
India	3.4	3.7	2.7	3.5	3.8	2.8

Source: IIPS, 1995; Office of the Registrar General, 1995.

Table 1.2. Changes in total fertility rate in Maharashtra, Tamil Nadu, and India, 1970-1991.

	Total Fertility Rate			Per cent Decline		
	70-72	80-82	90-92	71-81	81-91	71-91
<b>All areas</b>						
India	5.2	4.5	3.7	13.5	17.8	28.8
Maharashtra	4.5	3.7	3.0	17.8	18.9	33.3
Tamil Nadu	3.9	3.4	2.2	12.8	35.3	41.0
<b>Rural Areas</b>						
India	5.5	4.8	4.4	12.7	8.3	20.0
Maharashtra	4.7	4.0	3.4	14.9	15.0	27.7
Tamil Nadu	4.2	3.7	2.4	11.9	35.1	42.9
<b>Urban Areas</b>						
India	4.2	3.4	2.7	14.3	20.6	35.7
Maharashtra	3.9	3.0	2.5	23.1	16.7	35.7
Tamil Nadu	3.1	2.8	2.0	9.7	28.6	35.5

Source: Office of the Registrar General. Sample Registration System: Fertility and Mortality Indicators. Relevant Years. New Delhi: Office of the Registrar General, Ministry of Home Affairs.

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Tamil Nadu	4.2	3.7	2.4	11.9	35.1	42.9
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Table 1.4. Comparative demographic and socioeconomic indicators for Maharashtra, Tamil Nadu and India, 1981-1993.

Indicators	Maharashtra	Tamil Nadu	India
<b>Demographic Indicators</b>			
Population in millions, 1991	78.9	55.9	846.3
Per cent population increase, 1981-91	25.7	15.4	23.9
Population density (S.Km), 1991	257	429	273
Per cent urban, 1991	38.7	34.2	26.1
Sex ratio, 1991	934	974	927
Per cent 0-14 years old, 1981	38.3	35.0	39.6
1991	34.9	30.9	36.3
Per cent 65+ years old, 1981	3.8	3.7	3.8
1991	3.8	4.1	3.8
Per cent scheduled caste, 1991	11.3	19.2	16.7
Per cent scheduled tribe, 1991	9.3	1.0	8.0
Per cent literate, 1991			
Male	76.6	73.8	64.1
Female	52.3	51.3	39.3
Total	64.9	62.7	52.2
Crude birth rate, 1994	24.9	19.0	28.6
Crude death rate, 1994	7.4	7.9	9.2
Exponential growth rate, 1981-91	2.29	1.43	2.14
Total fertility rate, 1993	2.9	2.1	3.6
Infant mortality rate, 1993	50	56	74
Life expectancy, 1986-91			
Male	61.9	60.8	58.1
Female	62.9	60.8	59.1
Couple protection rate, 1992	55.3	57.3	43.5

table contd.....

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Per cent scheduled caste, 1991	11.3	19.2	16.7
Per cent scheduled tribe, 1991	9.3	1.0	8.0
Per cent literate, 1991			
Male	76.6	73.8	64.1
Female	52.3	51.3	39.3
Total	64.9	62.7	52.2
Crude birth rate, 1994	24.9	19.0	28.6
Crude death rate, 1994	7.4	7.9	9.2
Exponential growth rate, 1981-91	2.29	1.43	2.14
Total fertility rate, 1993	2.9	2.1	3.6
Infant mortality rate, 1993	50	56	74
Life expectancy, 1986-91			
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Per cent scheduled tribe, 1991	9.3	1.0	8.0
Per cent literate, 1991			
Male	76.6	73.8	64.1
Female	52.3	51.3	39.3
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Crude death rate, 1994	7.4	7.9	9.2
Exponential growth rate, 1981-91	2.29	1.43	2.14
Total fertility rate, 1993	2.9	2.1	3.6
Infant mortality rate, 1993	50	56	74
Life expectancy, 1986-91			
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table contd.....

## CHAPTER 2

### HOUSEHOLD AND RESPONDENT BACKGROUND CHARACTERISTICS IN MAHARASHTRA AND TAMIL NADU

In this chapter, socio-economic and demographic profile of the households and individual respondents covered in the NFHS are presented for Maharashtra and Tamil Nadu as well as for all India for comparison purposes. After examining the age distribution, sex ratio, marital status, literacy and educational attainment of the household population, the chapter discusses the characteristics of the respondents, i.e., the ever-married women age 13-49 in the NFHS.

#### Characteristics of the household population

Table 2.1 shows the distribution of the de facto (the place each person slept the night before the NFHS survey interview) population by age and marital status in the NFHS household sample of Maharashtra, Tamil Nadu and India. It also gives the sex ratio of the de facto household population. The total de facto sample population is 21,840 in Maharashtra and 19,543 in Tamil Nadu. The proportion of urban sample population in NFHS is higher (43 per cent) in Maharashtra than in Tamil Nadu (36 per cent).

The age distribution of Maharashtra is typical of a population with moderately high fertility, with a high proportion of population in the younger age groups. Whereas the age distribution of Tamil Nadu is typical of a population that has

been experiencing fertility decline in recent years. The proportion of population below 15 years of age accounted for 36 per cent in Maharashtra and 32 per cent in Tamil Nadu. In other words, under 15 population of Tamil Nadu is 12 per cent lower than the under 15 population of Maharashtra. Further, the difference is more pronounced if we look the proportion of child population aged 0-4 in the two states. Tamil Nadu's child population (0-4) is 18 per cent lower than the child population of Maharashtra. Population age above 60 constitute 8 per cent of the total population in both Maharashtra and Tamil Nadu.

The sex ratio of the de facto population (females per 1000 males) is 970 in Maharashtra, 1032 in Tamil Nadu and 954 in India as a whole. These figures indicate that sex ratio has been more favourable to females in Tamil Nadu than in Maharashtra or the country as a whole. The higher proportion of males than females in Maharashtra could be due to male dominated migration particularly to the more developed western part of the state. Table 2.1 also shows the marital status distribution of the de facto female household population age six and above. In general, the marital status distribution of the population is more or less identical in both Maharashtra and Tamil Nadu. For example, among females aged 6 and above 35 per cent are never married in both the states. The proportion of currently married women is slightly higher in Maharashtra (54.3 per cent) than in Tamil Nadu (51.5 per cent). Corresponding to this, the proportion of widows is slightly higher in Tamil Nadu (11.5 per cent) than in Maharashtra



(10 per cent). An equal, but small, proportion of females is divorced (0.3 per cent) and separated (1.4 per cent) in the two states.

Proportion of females who marry at young ages is an indicator of fertility trends in the population. Table 2.1 provides the proportion of ever-married females age 6 and above by age. It shows that marriage is very rare for females under age 15 in Tamil Nadu: only one per cent of the females are ever-married in Tamil Nadu in the age group 6-14. But the proportion ever-married for the same age group in Maharashtra is 7 per cent. Further, at age 15-19 also, the proportion of females ever-married is 25 per cent in Tamil Nadu but 38 per cent in Maharashtra. Thus, it is clear that a considerable proportion of females enter into reproduction much earlier in Maharashtra than in Tamil Nadu. By age 30-34 marriage is nearly universal for females and the proportion of females ever-married reaches 98 per cent in Maharashtra and 97 per cent in Tamil Nadu. The proportion of population aged 0-14 and proportion of ever-married females aged below 20 indicate a lower fertility and higher female age at marriage in Tamil Nadu than in Maharashtra.

Table 2.2 shows the per cent distribution of households by characteristics of the household head (religion and caste), the extent of literacy and the level of education of the de facto female population age 6 and above as well as the information on the housing characteristics. Distribution of household heads by religion shows that the proportion of Hindu households are higher in (88 per cent) Tamil Nadu than in Maharashtra (77.3 per cent).

But the population of Muslim constitute considerably higher proportion in Maharashtra (11 per cent) than in Tamil Nadu (5.4 per cent). Higher proportion of Hindus and lower proportion of Muslims in Tamil Nadu than in Maharashtra might have some influence in the demographic characteristics of the state. Concentration of scheduled castes and scheduled tribes are slightly higher in Tamil Nadu (20 per cent) than in Maharashtra (17 per cent).

Education is a key determinant of life style and status. It affects almost all aspects of life, including demographic and health behaviour. Studies have consistently shown that educational attainment has strong effects on reproductive behaviour, contraceptive use, fertility, infant and child mortality, morbidity and issues related to family health and status of women. Table 2.2 shows the extent of literacy and the level of educational attainment among female household population age 6 and above. Female illiteracy is of the same order in Maharashtra and Tamil Nadu: 44 per cent of female household population is illiterate in both the states. Female illiteracy is 57 per cent for India as per NFHS. The proportion of women with at least a high school level education is also same (12 per cent) in Maharashtra and Tamil Nadu. But there exists a difference between Maharashtra and Tamil Nadu in the median number of years of schooling completed by females. In NFHS, the median number of years of schooling completed by females is 2.6 in Maharashtra and 3.6 in Tamil Nadu, a difference of one year of schooling. Though the level of female literacy is same both in Maharashtra and

Tamil Nadu the literate females in Tamil Nadu are attained one year more schooling than their counterparts in Maharashtra. But this difference is not pronounced if we look into the gender-wise school attendance rates for school-age household population age 6-14 (Table 2.2). In the country as a whole, only 68 per cent of children age 6-14 are attending school. As expected the school attendance rate is higher for males than for females. The school attendance rates are much higher and equal (82 per cent) both in Maharashtra and Tamil Nadu than the country as a whole. Gender-wise attendance rates are also more or less equal in Maharashtra and Tamil Nadu.

Information on housing characteristics such as electricity, source of drinking water, sanitation facility, type of cooking fuel, type of house and number of rooms in the house is available in NFHS. The data on housing characteristics are summarized in Table 2.2. Maharashtra's relatively better economic condition than Tamil Nadu is reflected in its housing characteristics. The table shows that Maharashtra has better position than Tamil Nadu in almost all housing characteristics. For example, the proportion of households with electricity is 74 per cent in Maharashtra, whereas the same is only 64 per cent in Tamil Nadu. Seventy-nine per cent of households in Maharashtra have access to pump/piped water for drinking while it is only 75 for Tamil Nadu. Forty-one per cent of households in Maharashtra have toilet/latrine facility, whereas only 29 per cent have this facility in Tamil Nadu. In Maharashtra only 55 per cent of households rely on wood as a fuel for cooking, but in Tamil Nadu

for 78 per cent of households, wood is the most common fuel for cooking. Percentage of pucca houses is also higher in Maharashtra (31 per cent) than in Tamil Nadu (23 per cent). However, the households in Tamil Nadu are less crowded than the households in Maharashtra: the mean number of persons per room is 2.5 and 3.5 in Tamil Nadu and Maharashtra respectively. Further, the average number persons per household in Tamil Nadu is lower (4.6) than the persons in Maharashtra (5.5). From this information on housing characteristics it appears that housing conditions in Maharashtra are better than in Tamil Nadu.

Table 2.3 gives a number of measures related to socioeconomic status of the household (ownership of agricultural land, livestock and durable goods). It shows that landlessness is very high in Tamil Nadu than in Maharashtra. The proportion owning no agricultural land is 68 per cent in Tamil Nadu and only 47 per cent in Maharashtra. However, the status of land in terms of irrigation differs widely between the states. For instance, among those who own land 55 per cent of Tamil Nadu households but only 31 per cent of Maharashtra households have some irrigated land. Per cent of households owning at least any one of the livestock (bullock, cow, buffalo, goat, sheep, camel, others) is also higher in Maharashtra (38 per cent) than in Tamil Nadu (28 per cent).

Information on possession of durable goods, an another indicator of a household's economic status, is also available in NFHS (Table 2.3). In Maharashtra more number of households are

found to own sewing machine, television and refrigerator than in Tamil Nadu. In items like clock/watch, motor cycle/scooter and car, Maharashtra have an edge over Tamil Nadu. An equal proportion of households own radio in both the states. More number of households own bicycle in Tamil Nadu than in Maharashtra. Altogether, it appears that, more number of households in Maharashtra own consumer durable items than the households in Tamil Nadu.

#### **Background characteristics of respondents**

This section examines selected background characteristics of primary respondents of NFHS, i.e., ever-married women age 13-49, in Maharashtra and Tamil Nadu. Table 2.4 shows the distribution of ever-married women age 13-49 by important background characteristics like age, marital status, education, religion, caste/tribe, work status and husband's education as obtained from the NFHS. Proportion of ever-married women interviewed under age 30 accounts for 50 per cent in Maharashtra and 45 per cent in Tamil Nadu. The percentage of respondents in each age group increases up to age 25-29, reflecting the increase in the proportion married in successive age groups. The percentages decrease after age 20-24, by which time most women have already married, reflecting the normal pyramidal shape of the age distribution. The distribution of marital status for ever-married women is similar in Maharashtra and Tamil Nadu. More than 90 per cent of the ever-married women are currently married and among the rest most of them are widowed. Three per cent are separated and less than half a per cent are divorced.

One-half of the respondents are illiterates and less than 15 per cent completed high school both in Maharashtra and Tamil Nadu. The distribution of respondents by religion and caste/tribe is similar to the distribution of households by the same characteristics. In NFHS, work is defined as any kind of job for which women is paid in cash or kind as well as unpaid work on a family farm or business. Both in Maharashtra and Tamil Nadu, a little more than half of the respondents are not working except for performing their own household work. Higher proportion of women in Maharashtra (20 per cent) are working in family farm/business than the women in Tamil Nadu (9 per cent), whereas more women in Tamil Nadu (35 per cent) are likely to work for someone else or outside of the home than the women in Maharashtra (26 per cent). Only two to three per cent of women are self-employed both in Maharashtra and Tamil Nadu.

Literacy and educational attainment of the husbands show that they are more educated than their spouses. Illiteracy among husbands are slightly higher in Tamil Nadu (29 per cent) than in Maharashtra (25 per cent). The proportion of husbands with at least a high school education is also little higher in Maharashtra (30 per cent) than in Tamil Nadu (26 per cent).

NFHS also gathered information on exposure of respondents to mass media. It shows that more women in Tamil Nadu are exposed to media than their counterparts in Maharashtra. Proportion of women not regularly exposed to any kind of mass media (television, radio or cinema) is much higher in Maharashtra (37 per cent) than

in Tamil Nadu (22 per cent). More women are exposed to media in general, and particularly to cinema, in Tamil Nadu than in Maharashtra: forty-three per cent of women visit cinema/theatre at least once a month in Tamil Nadu as against 15 per cent of women in Maharashtra. The higher exposure of women to media in Tamil Nadu than their counterparts in Maharashtra could have some influence in their life-style and, of course, demographic behaviour.

### Conclusion

The conclusions drawn from the analysis of NFHS's household and respondent background characteristics in Maharashtra and Tamil Nadu are discussed below. The proportion of household population age below 15 indicates a lower level of fertility in Tamil Nadu than in Maharashtra. Distribution of ever-married female household population by age shows that a considerable proportion of females are entering into reproduction before age 20 in Maharashtra than in Tamil Nadu. This further indicates a higher female age at marriage and consequently lower fertility in Tamil Nadu than in Maharashtra.

In NFHS, higher proportion of household heads are Hindus in Tamil Nadu than in Maharashtra. Maharashtra has a higher proportion of Muslim household heads than Tamil Nadu. Female literacy and educational attainment of a similar order in Maharashtra and Tamil Nadu. Though the level of female literacy is same in the two states, females in Tamil Nadu stay one year longer in schools than the females in Maharashtra. School attendance rates for school-age population are same in two states.

From the information on housing characteristics it appears that the housing conditions in Maharashtra are better than in Tamil Nadu. Proportions of households owning landed and livestock wealth are also higher in Maharashtra than in Tamil Nadu. Further, more number of households in Maharashtra own consumer durable items than the households in Tamil Nadu. The above economic characteristics of the households reflect the Maharashtra's superiority in economic conditions over Tamil Nadu. The households in Maharashtra are bigger in size than the households in Tamil Nadu.

Examination of characteristics of ever-married women age 13-49 indicate more or less similar distribution in age, marital status, literacy, educational attainment, religion and caste both in Maharashtra and Tamil Nadu. Among the working women, higher proportion of them are working outside the household in Tamil Nadu than in Maharashtra. Exposure of women to mass media is a measure of modernity and it helps the women to understand the importance of health and family welfare, among other things. NFHS's information on this aspect reveals that more women in Tamil Nadu are exposed to mass media than the women in Maharashtra.

The socioeconomic and demographic profiles of households and individual respondents in NFHS reveal that relatively Tamil Nadu has some desirable demographic features though the households in Maharashtra are economically better-off than the households in Tamil Nadu.



Table 2.1. Per cent distribution of de facto household population by age and marital status: Maharashtra, Tamil Nadu and India, 1992-93

Age group	Maharashtra	Tamil Nadu	India
0-4	12.0	10.1	12.5
5-9	12.5	11.0	13.4
10-14	11.7	10.8	12.1
15-19	9.8	10.3	10.3
20-24	9.9	9.5	9.1
25-29	8.0	8.5	8.0
30-34	6.6	7.2	6.5
35-39	6.2	6.4	5.9
40-44	4.8	5.7	4.5
45-49	3.9	4.4	3.8
50-54	3.5	3.8	3.1
55-59	3.3	3.7	3.1
60-64	2.9	3.3	2.9
65+	4.9	5.1	4.8
0-14	36.2	31.9	38.0
15-59	56.0	59.5	54.3
60+	7.8	8.4	7.7
Sex ratio of the de facto population	966	1000	944
Marital status of the de facto female household population age 6 and above			
Never married	34.9	35.2	36.5
Currently married	53.3	51.5	53.6
Widowed	10.0	11.5	8.8
Divorced	0.3	0.3	0.2
Separated	1.4	1.4	0.9
Don't know/missing	0.1	0.1	0.1
Per cent of ever-married women age 6 and above			
6-12	0.6	0.2	1.0
13-14	6.6	0.8	5.0
15-19	37.9	25.0	39.1
20-24	81.8	74.1	81.6
25-29	94.8	92.6	95.3
30-34	98.2	96.7	98.2
35-39	98.9	99.2	99.0
40-44	99.4	98.7	99.1
45-49	99.5	99.5	99.3
50-54	99.5	99.7	99.4
55-59	--	99.5	99.6
60+	99.4	99.4	99.3
Total number of households	4063	4287	88562
Total de facto population	21840	19543	494939
Per cent of urban sample	43	36	26

Table 2.2 Per cent distribution of households by selected characteristics of household head, household population and housing: Maharashtra, Tamil Nadu and India, 1992-93

Characteristics	Maharashtra	Tamil Nadu	India
<b>Religion of the household head</b>			
Hindu	77.3	88.1	82.3
Muslim	11.1	5.4	11.4
Christian	1.0	6.3	2.7
Sikh	0.2	-	1.8
Jain	1.8	0.2	0.5
Buddhist	7.7	-	0.8
Other	4.0	-	0.4
<b>Caste/tribe of the household head</b>			
Scheduled caste	6.6	19.8	12.6
Scheduled tribe	10.0	0.3	9.1
Other	83.4	79.9	78.3
<b>Educational level of female household population age 6 and above</b>			
Illiterate	44.1	43.9	56.7
Literate <primary complete	19.7	14.9	15.1
Primary school complete	16.2	18.9	12.1
Middle school complete	7.7	10.1	6.9
High school complete	8.5	9.4	6.6
Above high school	3.7	2.7	2.6
Missing	0.1	-	0.1
Median number or years of schooling	2.6	3.6	-
<b>Percent of household population age 6-14 attending school</b>			
Male	86.2	86.0	75.5
Female	76.6	78.7	58.9
Total	81.5	82.4	67.5
<b>Housing characteristics of households</b>			
Per cent with electricity	73.6	63.8	50.9
Per cent with drinking water from pump/pipe	78.5	74.6	68.2
Per cent with any toilet/latrine facility	40.8	29.4	30.3
Per cent using wood as fuel for cooking	55.2	77.7	63.9
Per cent with pucca house construction	30.6	22.7	23.7
Mean number of persons per room	3.2	2.5	2.8
Mean household size	5.5	4.6	5.7

Table 2.3. Household ownership of agricultural land, livestock and durable goods: Maharashtra, Tamil Nadu and India, 1992-93

Item owned	Maharashtra	Tamil Nadu	India
Per cent landless	47.4	68.4	48.4
Irrigated land only	6.2	9.7	18.9
Non-irrigated land only	36.3	14.3	22.0
Irrigated and non-irrigated land	10.3	7.7	10.8
Per cent who owns livestock	38.1	28.1	52.4
<b>Consumer durable goods</b>			
Sewing machine	17.5	8.4	18.0
Clock/watch	56.6	53.3	52.9
Radio	43.0	43.9	39.3
Television	30.4	20.0	20.7
Refrigerator	10.3	4.0	6.8
Bicycle	33.2	37.1	41.8
Motor cycle/scooter	8.8	7.5	8.1
Car	1.7	0.8	1.1
Number of households	4063	4287	88562

**Table 2.4. Background characteristics of respondents**

Per cent distribution of ever-married women age 13-49, by selected background characteristics: Maharashtra, Tamil Nadu and India, 1992-93

Characteristics	Maharashtra	Tamil Nadu	India
<b>Age</b>			
13-14	0.7	0.1	0.4
15-19	9.7	6.6	10.1
20-24	21.3	18.4	20.0
25-29	18.6	19.5	19.4
30-34	15.6	16.8	16.3
35-39	14.9	15.0	13.9
40-44	10.8	13.5	10.9
45-49	8.5	10.2	9.0
<b>Marital status</b>			
Currently married	93.0	92.1	94.3
Widowed	4.1	5.0	4.0
Divorced	0.4	0.3	0.4
Separated	2.5	2.6	1.5
<b>Education</b>			
Illiterate	50.2	50.1	63.1
Literate, < primary	10.5	6.9	6.7
Primary school complete	16.6	17.6	11.7
Middle school complete	8.0	10.3	7.2
High school complete	10.4	12.1	7.9
Above high school	4.4	3.1	3.4
<b>Religion</b>			
Hindu	76.4	87.6	82.0
Muslim	12.6	6.3	12.0
Christian	0.8	5.9	2.4
Sikh	0.2	-	1.9
Jain	1.9	0.1	0.5
Buddhist	7.4	-	0.8
Other	0.7	0.1	0.4
<b>Caste/tribe</b>			
Scheduled caste	6.4	19.8	12.2
Scheduled tribe	9.5	0.3	8.8
Other	84.1	79.9	78.9

**Table 2.4. Background characteristics of respondents**

Per cent distribution of ever-married women age 13-49, by selected background characteristics: Maharashtra, Tamil Nadu and India, 1992-93

Characteristics	Maharashtra	Tamil Nadu	India
<b>Age</b>			
13-14	0.7	0.1	0.4
15-19	9.7	6.6	10.1
20-24	21.3	18.4	20.0
25-29	18.6	19.5	19.4
30-34	15.6	16.8	16.3
35-39	14.9	15.0	13.9
40-44	10.8	13.5	10.9
45-49	8.5	10.2	9.0
<b>Marital status</b>			
Currently married	93.0	92.1	94.3
Widowed	4.1	5.0	4.0
Divorced	0.4	0.3	0.4
Separated	2.5	2.6	1.5
<b>Education</b>			
Illiterate	50.2	50.1	63.1
Literate, < primary	10.5	6.9	6.7
Primary school complete	16.6	17.6	11.7
Middle school complete	8.0	10.3	7.2
High school complete	10.4	12.1	7.9
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Hindu	76.4	87.6	82.0
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Christian	0.8	5.9	2.4
Sikh	0.2	-	1.9
Jain	1.9	0.1	0.5
Buddhist	7.4	-	0.8
Other	0.7	0.1	0.4
<b>Caste/tribe</b>			
Scheduled caste	6.4	19.8	12.2
Scheduled tribe	9.5	0.3	8.8
Other	84.1	79.9	78.9

**Table 2.4. Background characteristics of respondents**

Per cent distribution of ever-married women age 13-49, by selected background characteristics: Maharashtra, Tamil Nadu and India, 1992-93

Characteristics	Maharashtra	Tamil Nadu	India
<b>Age</b>			
13-14	0.7	0.1	0.4
15-19	9.7	6.6	10.1
20-24	21.3	18.4	20.0
25-29	18.6	19.5	19.4
30-34	15.6	16.8	16.3
35-39	14.9	15.0	13.9
40-44	10.8	13.5	10.9
45-49	8.5	10.2	9.0
<b>Marital status</b>			
Currently married	93.0	92.1	94.3
Widowed	4.1	5.0	4.0
Divorced	0.4	0.3	0.4
Separated	2.5	2.6	1.5
<b>Education</b>			
Illiterate	50.2	50.1	63.1
Literate, < primary	10.5	6.9	6.7
Primary school complete	16.6	17.6	11.7
Middle school complete	8.0	10.3	7.2
High school complete	10.4	12.1	7.9
Above high school	4.4	3.1	3.4
<b>Religion</b>			
Hindu	76.4	87.6	82.0
Muslim	12.6	6.3	12.0
Christian	0.8	5.9	2.4
Sikh	0.2	-	1.9
Jain	1.9	0.1	0.5
Buddhist	7.4	-	0.8
Other	0.7	0.1	0.4
<b>Caste/tribe</b>			
Scheduled caste	6.4	19.8	12.2
Scheduled tribe	9.5	0.3	8.8
Other	84.1	79.9	78.9

**Table 2.4. Background characteristics of respondents**

Per cent distribution of ever-married women age 13-49, by selected background characteristics: Maharashtra, Tamil Nadu and India, 1992-93

Characteristics	Maharashtra	Tamil Nadu	India
<b>Age</b>			
13-14	0.7	0.1	0.4
15-19	9.7	6.6	10.1
20-24	21.3	18.4	20.0
25-29	18.6	19.5	19.4
30-34	15.6	16.8	16.3
35-39	14.9	15.0	13.9
40-44	10.8	13.5	10.9
45-49	8.5	10.2	9.0
<b>Marital status</b>			
Currently married	93.0	92.1	94.3
Widowed	4.1	5.0	4.0
Divorced	0.4	0.3	0.4
Separated	2.5	2.6	1.5
<b>Education</b>			
Illiterate	50.2	50.1	63.1
Literate, < primary	10.5	6.9	6.7
Primary school complete	16.6	17.6	11.7
Middle school complete	8.0	10.3	7.2
High school complete	10.4	12.1	7.9
Above high school	4.4	3.1	3.4
<b>Religion</b>			
Hindu	76.4	87.6	82.0
Muslim	12.6	6.3	12.0
Christian	0.8	5.9	2.4
Sikh	0.2	-	1.9
Jain	1.9	0.1	0.5
Buddhist	7.4	-	0.8
Other	0.7	0.1	0.4
<b>Caste/tribe</b>			
Scheduled caste	6.4	19.8	12.2
Scheduled tribe	9.5	0.3	8.8
Other	84.1	79.9	78.9

and 1981 censuses, and from the NFHS for Maharashtra, Tamil Nadu and India (IIPS, 1995). For India as a whole, the values of SMAM from the NFHS are 21.5 years for urban areas, 19.3 for rural areas and 20 overall. The NFHS values of SMAM show that females in Tamil Nadu marry 1.2 years later than the females in Maharashtra. The difference is more pronounced in SMAM for rural females. Females in rural Tamil Nadu marry 2.1 years later than the rural females in Maharashtra. The difference in SMAM for urban women is not significant: 21 years for Maharashtra and 21.3 years for Tamil Nadu. SMAM values of Maharashtra are even lower than the values of all India. Table 3.2 also indicates that there has been a steady increase in female age at marriage over the years. Census and NFHS SMAMs indicate that between 1961 and 1992-93, the SMAM for females rose by 3.5 years in Maharashtra (from 15.8 years in 1961 to 19.3 years in 1992-93) and 2.1 years in Tamil Nadu (from 18.4 years in 1961 to 20.5 years in 1992). For the country as a whole SMAM rose by 4.1 years during the same period (from 15.9 years in 1961 to 20 years in 1992-93).

More detailed information on age at first marriage is shown in Table 3.3. The percentage of all women who were ever-married by specified exact ages indicates a clear trend toward rising age at marriage, with especially larger declines in marriage age at very young ages. Marriage before age 15 is not common in Maharashtra and particularly in Tamil Nadu. The proportion marrying by age 13 in Maharashtra and Tamil Nadu declines from 32 per cent and 6 per cent respectively in the 45-49 cohort to just 1.4 per cent and 0.3 per cent respectively in the 13-14



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cohort, and the proportion marrying by age 15 declines from 51 per cent and 22 per cent respectively in the 45-49 cohort to 16 per cent and 4 per cent respectively in the 15-19 cohort. Although the marriages before age 15 have declined considerably in recent years, marriages before legal minimum age at marriage of 18 years are still quite common in both the states and particularly in Maharashtra. For instance, 54 per cent of women in Maharashtra and 36 per cent of women in Tamil Nadu currently age 20-24 married by age 18. The proportion marrying by age 18 in Maharashtra and Tamil Nadu declined from 78 per cent and 63 per cent respectively in the 45-49 age cohort to 54 per cent and 36 per cent respectively in the 20-24 age cohort. This table further indicates that a higher proportion of women got married earlier in Maharashtra than in Tamil Nadu. For example, 15 per cent of women in Maharashtra, but only 3 per cent in Tamil Nadu got married by age 13. Women who got married by age 15 is also much higher in Maharashtra (34 per cent) than in Tamil Nadu (13 per cent).

Table 3.4 shows median age at first marriage for females by age and selected background characteristics in Maharashtra and Tamil Nadu. Median age at first marriage for females in Maharashtra is 16 years and in Tamil Nadu 18 years. The median age at first marriage in Maharashtra and Tamil Nadu increases steadily from 15.3 years and 17.1 years respectively for women in the 40-49 age cohort to 17.5 years and 19.3 years respectively in the 20-24 age cohort, a rise of 2.2 years in both the states. The median age at marriage for women in Tamil Nadu is 2 years

higher than the women in Maharashtra in all the age groups.

The median age at first marriage is higher among women currently living in urban areas than in rural areas in the two states. But the difference in age at marriage between rural and urban women is higher in Maharashtra than in Tamil Nadu. In Maharashtra urban women marry about three years later than the rural women, but in Tamil Nadu urban women marry only 1.7 years later than the rural women. Even the urban women of Tamil Nadu marrying 1.3 years later than their counterparts in Maharashtra. The difference is still higher in rural areas: rural women of Tamil Nadu marrying 2.5 years later than the rural women of Maharashtra.

The median age at first marriage is higher among the more educated women and, clearly, education has a positive association with age at marriage in both the states. The difference in median age at marriage between the illiterate and the women with at least high-school education is 5.4 years in Tamil Nadu and 7 years in Maharashtra. In each educational level the median age at marriage for females is higher in Tamil Nadu than in Maharashtra. But the difference is lower in higher educational categories than in the lower educational categories.

There is no difference in the age at marriage between Hindus and Muslims within Maharashtra and Tamil Nadu. But Muslims and Hindus of Tamil Nadu are marrying about 2 years later than their counterparts in Maharashtra. For example median age at marriage for Muslims is 18 years in Tamil Nadu and 16.2 years in

Maharashtra. In Tamil Nadu Christians are marrying two and half years later than Hindus and Muslims. The median age at first marriage is lower among SC/ST women than non-SC/ST women in both the states. But the SC women in Tamil Nadu are getting married about 2 years later than the SC women in Maharashtra.

The differentials in age at marriage show that though the relationship between background characteristics and marriage age is in the expected direction within the states, the women possessing the same characteristics in the two states show that women in Tamil Nadu are marrying later than the women with the same characteristics in Maharashtra.

Marriage between relatives has implications for fertility as well as mortality and morbidity. There are evidences for higher fertility and morbidity and mortality in consanguineous marriages than the non-consanguineous marriages (IIPS, 1995; Banerjee and Roy, 1996). Table 3.5 provides information on marriage between relatives. It shows that in Tamil Nadu nearly one-fourth of the ever-married women married a first cousin (on either their father's or mother's side) and about 22 per cent married a second cousin, uncle or other blood relatives. In Maharashtra 21 per cent married a first cousin and 5 per cent married a second cousin, uncle or other blood relatives. Thus, it is clear that the consanguineous marriages are common in the two states, but the prevalence is much higher in Tamil Nadu (48.2 per cent) than in Maharashtra (28.3 per cent). The implication of this difference in marriage practices on observed fertility patterns in these states need further detailed investigation.

The analysis of marriage patterns (proportion of women currently married by age, SMAM, age at first marriage and median age at first marriage) revealed that though the female age at marriage increased over the years in the two states, still higher proportion of females are entering into reproduction early in Maharashtra than in Tamil Nadu. Further, women with a same background characteristics in the two states show that women in Tamil Nadu marry almost two years later than their counterparts in Maharashtra in almost all the characteristics. Incidence of consanguinity is observed to be higher in Tamil Nadu than in Maharashtra.

Table 3.1 Per cent distribution of women age 15-49 currently married: Maharashtra, Tamil Nadu and India, NFHS 1992-93.

Age	Per cent currently married		
	Maharashtra	Tamil Nadu	India
13-14	6.5	0.8	-
15-19	36.5	24.4	38.4
20-24	78.3	71.4	79.4
25-29	89.0	88.2	91.9
30-34	92.3	88.8	93.2
35-39	91.1	89.2	92.2
40-44	87.6	87.2	88.5
45-49	86.2	82.2	85.3
Total	70.6	66.3	77.4

Table 3.2 Singulate Mean Age at Marriage (SMAM) of females from selected sources: Maharashtra, Tamil Nadu and India, NFHS 1961-93.

Source	Maharashtra	Tamil Nadu	India
<b>Census</b>			
1961 census	15.8	18.4	15.9
1971 census	17.6	19.6	17.2
1981 census	18.8	20.3	18.4
<b>NFHS</b>			
Rural	17.9	20.0	19.3
Urban	21.0	21.3	21.5
Total	19.3	20.5	20.0

Table 3.3 Percentage of women married by specific exact ages, by current age: Maharashtra and Tamil Nadu, NFHS 1992-93

Current Age	Percentage ever-married before age						Per cent never married
	13	15	18	20	22	25	
<u>Maharashtra</u>							
13-14	0.3	NA	NA	NA	NA	NA	99.2
15-19	0.4	3.5	-	NA	NA	NA	75.1
20-24	0.7	7.4	36.1	58.0	-	NA	25.9
25-29	1.9	12.7	41.6	63.4	75.9	88.1	7.5
30-34	2.5	10.0	42.0	64.1	79.5	90.8	3.5
25-39	4.0	16.4	50.6	71.7	82.9	90.9	0.9
40-44	5.4	20.6	58.7	79.8	88.5	93.2	1.3
45-49	5.7	21.7	62.9	82.2	93.3	98.0	0.5
20-49	2.9	13.4	46.1	67.5	79.7	87.3	8.8
25-49	3.6	14.4	49.3	70.5	82.6	91.5	3.3
<u>Tamil Nadu</u>							
13-14	1.4	NA	NA	NA	NA	NA	93.5
15-19	4.6	15.9	-	NA	NA	NA	62.1
20-24	7.6	24.4	53.9	73.3	-	NA	18.1
25-29	12.0	30.5	62.2	77.9	87.1	94.0	4.9
30-34	14.6	32.2	67.6	81.2	88.1	94.4	1.6
25-39	17.9	38.3	69.3	83.3	89.0	94.5	1.1
40-44	23.6	43.6	69.9	82.2	90.5	96.6	0.9
45-49	31.8	51.3	78.2	90.2	95.6	99.1	0.6
20-49	15.2	33.7	64.3	79.6	86.6	91.5	6.5
25-49	18.0	37.1	68.1	82.0	89.3	95.2	2.2

**Table 3.4. Median age at first marriage by background characteristics**

Median age at first marriage among women age 20-49 years, by selected background characteristics: Maharashtra, Tamil Nadu and India, NFHS 1992-93.

Background characteristics	Maharashtra	Tamil Nadu	India
<b>Age</b>			
20-24	17.5	19.3	17.4
25-29	16.6	18.7	16.6
30-34	16.4	18.6	16.3
35-39	16.1	18.0	15.9
40-49	15.3	17.1	15.5
<b>Residence</b>			
Rural	15.0	17.5	15.5
Urban	17.9	19.2	18.1
<b>Education</b>			
Illiterate	14.5	16.8	15.0
Literate, <middle	16.4	18.2	16.8
Middle school complete	18.2	18.8	18.4
High school & above	21.4	22.2	21.3
<b>Religion</b>			
Hindu	16.1	17.9	15.9
Muslim	16.2	18.0	15.9
Christian	-	20.6	20.0
Buddhist	15.0	-	-
Sikh	-	-	19.5
Other	19.6	-	17.1
<b>Caste/tribe</b>			
Scheduled caste	14.7	16.6	15.0
Scheduled tribe	15.1	-	15.8
Other	16.4	18.4	16.3
<b>Median age at first marriage</b>	<b>16.1</b>	<b>18.1</b>	<b>16.1</b>

**Table 3.4. Median age at first marriage by background characteristics**

Median age at first marriage among women age 20-49 years, by selected background characteristics: Maharashtra, Tamil Nadu and India, NFHS 1992-93.

Background characteristics	Maharashtra	Tamil Nadu	India
<b>Age</b>			
20-24	17.5	19.3	17.4
25-29	16.6	18.7	16.6
30-34	16.4	18.6	16.3
35-39	16.1	18.0	15.9
40-49	15.3	17.1	15.5
<b>Residence</b>			
Rural	15.0	17.5	15.5
Urban	17.9	19.2	18.1
<b>Education</b>			
Illiterate	14.5	16.8	15.0
Literate, <middle	16.4	18.2	16.8
Middle school complete	18.2	18.8	18.4
High school & above	21.4	22.2	21.3
<b>Religion</b>			
Hindu	16.1	17.9	15.9
Muslim	16.2	18.0	15.9
Christian	-	20.6	20.0
Buddhist	15.0	-	-
Sikh	-	-	19.5
Other	19.6	-	17.1
<b>Caste/tribe</b>			
Scheduled caste	14.7	16.6	15.0
Scheduled tribe	15.1	-	15.8
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<b>Median age at first marriage</b>	<b>16.1</b>	<b>18.1</b>	<b>16.1</b>



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25-29	16.6	18.7	16.6
30-34	16.4	18.6	16.3
35-39	16.1	18.0	15.9
40-49	15.3	17.1	15.5
<b>Residence</b>			
Rural	15.0	17.5	15.5
Urban	17.9	19.2	18.1
<b>Education</b>			
Illiterate	14.5	16.8	15.0
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High school & above	21.4	22.2	21.3
<b>Religion</b>			
Hindu	16.1	17.9	15.9
Muslim	16.2	18.0	15.9
Christian	-	20.6	20.0
Buddhist	15.0	-	-
Sikh	-	-	19.5
Other	19.6	-	17.1
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Scheduled caste	14.7	16.6	15.0
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indicate that rural CBR (28.4) is 16 per cent higher than urban CBR (24.4).

A TFR of 2.86 children for Maharashtra and 2.48 children for Tamil Nadu are observed for the three year period preceding the survey for both the 15-44 and 15-49 age range. The TFR of Maharashtra is 15 per cent higher than the TFR of Tamil Nadu. The TFR of rural Maharashtra (3.12) is 23 per cent higher than the TFR of rural Tamil Nadu (2.54). Although the proportion of urban sample population covered by the NFHS in Maharashtra (43 per cent) is higher than that of Tamil Nadu (36 per cent), its urban TFR (2.54) is eight per cent higher than the urban TFR (2.36) of Tamil Nadu. Rural and urban TFRs within the states reveal that rural TFR (2.54) of Tamil Nadu is only 8 per cent higher than the urban TFR (2.36), but in Maharashtra rural TFR (3.12) is 23 per cent higher than the urban TFR (2.54). In other words, rural women of Maharashtra would on an average have approximately half a child more than urban women. But there is no difference in the rural and urban TFR of Tamil Nadu. TFR of rural Tamil Nadu and TFR of urban Maharashtra are the same (2.54). As mentioned earlier the TFR in NFHS is related to a three-year period: 1990-92 for Maharashtra and 1989-91 for Tamil Nadu. Normally the TFR estimated from the SRS is related to one year. A comparison of NFHS and SRS TFRs reveal that in 1993 fertility has come down to a replacement (2.1) level in Tamil Nadu and there is no change in Maharashtra (Office of the Registrar General, 1995).

Age-specific fertility rates (ASFR) follow the usual pattern in both the states. Fertility reaches its maximum in the age

group 20-24 both in rural and urban areas and declines sharply after age 30 and reaches very low levels after age 40. In both Maharashtra and Tamil Nadu 85 per cent of fertility is concentrated in the 15-29 age-group. But there exists a marked difference between the states in the contribution of women to the TFR before age 25 (Figure 2). For example, states as a whole, 59 per cent of births in Tamil Nadu, but 66 per cent of births in Maharashtra are accounted for women age less than 25. In rural areas the contribution of women age less than 25 to total births is 62 per cent in Tamil Nadu and 72 per cent in Maharashtra. The contribution of births below age 25 in urban areas also slightly higher in Maharashtra than in Tamil Nadu.

Current fertility is characterized by a substantial amount of early childbearing in the two states: on the whole, 18 per cent of total births in Tamil Nadu and 27 per cent of total births in Maharashtra are accounted for births to women age less than 20 years. Thirty-two per cent of births in rural Maharashtra and 20 per cent of births in rural Tamil Nadu are accounted for women age below 20. It is clear that though early childbearing is a common practice in both the states, its proportion is considerably higher in Maharashtra than in Tamil Nadu. In Maharashtra, up to age 20-24, age-specific fertility rates and the contribution of women to the TFR are considerably higher than in Tamil Nadu and this is true for both rural and urban areas. For example, in Maharashtra, ASFR of women age 15-19 (0.141) is 62 per cent higher than the ASFR of women age 15-19 in Tamil Nadu (0.087). In rural Maharashtra ASFR of women age 15-19 (0.183) is

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fertility has declined TFR will be lower than the mean number of CEB to women age 40-44. Difference between these two measures would indicate the extent of fertility decline during the last three decades. Table 4.2 reveals that, on the whole, mean number of CEB to women age 40-44 is nearly same for both Maharashtra (4.25) and Tamil Nadu (4.21) and the TFR is much lower than the CEB in Maharashtra (2.86) and Tamil Nadu (2.48). The difference between the TFR and CEB clearly indicates that fertility has declined substantially in the two states and the decline is being more in Tamil Nadu (1.73 children) than in Maharashtra (1.39 children) during the past three decades.

Table 4.2 also provides information on the differentials and trends in fertility by socio-demographic variables. Differentials in TFR and CEB by residence, education, religion and caste/tribe are quite substantial in both the states. Both in Maharashtra and Tamil Nadu TFR declining sharply from 3.47 and 2.84 for illiterate women to 2.08 and 2.04 children for women with at least a high school education. It is clear that TFR decreases with the increase in the level of education of the women. Women with at least a high-school education have a replacement level of fertility both in Maharashtra (2.08) and Tamil Nadu (2.04).

In Tamil Nadu, rural-urban and religious differentials in fertility are not much pronounced but it is substantial in Maharashtra. Muslims have highest fertility in Maharashtra, whereas no difference is existing in fertility between Hindus and Muslims in Tamil Nadu. The TFR for Muslims (4.11) is higher than

that for Hindus (2.69) by 53 per cent in Maharashtra. For Muslims, the current fertility is only 0.4 child higher than the replacement level fertility in Tamil Nadu, but their current fertility is 2 children higher than the replacement level in Maharashtra. The TFR of scheduled caste/tribe is higher than that of non-scheduled caste/tribe in both the states.

The difference between TFR and CEB indicates that fertility has declined uniformly in rural and urban areas of Maharashtra and Tamil Nadu. Fertility decline is more among illiterates than literates in Maharashtra. No clear pattern could be observed between the level of education and decline of fertility in Tamil Nadu. Among the all background variables, fertility decline is highest among Muslims in Tamil Nadu, whose TFR of 2.48 is less than half of the 5.37 CEB. In Maharashtra, fertility decline is more among Hindus than Muslims. There is no difference in fertility decline between SC/STs and non-SC/STs in Tamil Nadu, whereas the decline in Maharashtra is higher among STs than others.

The gap between the TFR and CEB in all the background characteristic indicates that fertility has declined in the cross-sections of the society in the past three decades and the pace of decline is higher in Tamil Nadu than in Maharashtra. For example, the TFR of illiterate women in Tamil Nadu is 22 per cent lower (more than half child) than their counterparts in Maharashtra. The Muslims of Tamil Nadu have 66 per cent lower TFR (more than one and a half children) than their counterparts in

Maharashtra. Even the TFR of scheduled caste women is marginally lower in Tamil Nadu than in Maharashtra.

Examination of age-specific fertility rates over a period of time is the most direct way of studying fertility transition. To examine this NFHS has calculated ASFRs for the 20 year period preceding the survey is calculated (for four five-year time periods) from the birth history information. Table 4.3 shows that in almost every age-group, fertility has declined steadily from the 5-9 years preceding the survey in Maharashtra and 15-19 years preceding the survey in Tamil Nadu. It indicates that acceleration of fertility decline has started in Tamil Nadu almost 10 years earlier than the acceleration of fertility decline in Maharashtra. Further, fertility has not declined uniformly for women of all reproductive ages in Maharashtra and Tamil Nadu as can be seen from the last column of the Table 4.3. The column compares the ASFR of each age-group in 15-19 and 0-4 years preceding the NFHS. Fertility decline is higher and more or less uniform for women above the age of 25 in Maharashtra and Tamil Nadu. But for women age below 25 fertility decline is significantly higher in Tamil Nadu than in Maharashtra during the 20 year period preceding the NFHS. For women age 15-19 fertility has declined 32 per cent in Tamil Nadu, whereas, the decline for the same women in Maharashtra is 20 per cent, and ASFR for women age 20-24 declined 26 per cent in Tamil Nadu and 19 per cent in Maharashtra. Even for above age 25, ASFR decline is slightly higher in Tamil Nadu than in Maharashtra.

In NFHS, cumulative fertility calculated for women at age 40 for the period 0-4 years before the survey (figures not shown in table) was 2.4 children per women in Tamil Nadu and 3 children in Maharashtra. Corresponding values for the periods 5-9 years and 10-14 years before the survey respectively are 3.10 and 3.62 in Tamil Nadu and 3.9 and 4.4 in Maharashtra. It further confirms that a major decline in fertility took place during the 20 year period preceding the survey in Tamil Nadu and 10 year period preceding the survey in Maharashtra.

Further evidence of fertility transition is analyzed in NFHS by calculating the fertility rates of ever-married women by duration of marriage. Table 4.4 shows the marital duration specific fertility rates for four five-year time periods preceding the survey. Marital duration specific fertility rates for the twenty-year period prior to the survey also confirms that fertility has declined greatly during the past two decades in Tamil Nadu and during the past 10 years in Maharashtra. Except in 0-4 years marital duration group, fertility has declined substantially over time in all the marital duration groups in Maharashtra and Tamil Nadu. The pace of fertility decline increases with the increase in marital duration. For the 0-4 years marital duration group, fertility has not declined during the past 20 years, in fact, it has registered a 12 per cent increase in Maharashtra. This is mainly due to the fact that with the increase in age at marriage the habit of having children immediately after marriage has also continued among the couples. In almost all the marital duration groups fertility has declined



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married women age 15-19 with at least one child is 62 per cent in Maharashtra and 50 per cent in Tamil Nadu. Further, proportion of women age 13-49 have given birth to four and above number of children is 34 per cent in Maharashtra and 29 per cent in Tamil Nadu. It is clear that higher proportion of women start childbearing earlier in Maharashtra than their counterparts in Tamil Nadu. The main reason for the higher prevalence of early childbearing in Maharashtra than in Tamil Nadu could be the difference in the nuptiality patterns between the states.

Women age 13-49 in Maharashtra and Tamil Nadu have had on an average of 3 and 2.7 children respectively. On an average, women by their late twenties have given birth to about 3 children in Maharashtra and 2.2 children in Tamil Nadu, women by their late thirties given birth to 3.8 children in Maharashtra and 3.4 children in Tamil Nadu and by the end of their childbearing years women given birth to equal number of children (4.7) in the two states. The differentials in the mean number of CEB at various ages confirm that fertility decline has started in Tamil Nadu earlier than in Maharashtra and the difference in fertility between Maharashtra and Tamil Nadu become wider only in the past 10 or 15 years than the earlier periods. The Table 5.6 also shows that child survival is marginally higher in Maharashtra than in Tamil Nadu: on an average, the number of dead children (difference between CEB and CL) per women is 0.3 child in Maharashtra and 0.4 child in Tamil Nadu, representing about 11 per cent and 14 per cent of CEB respectively.

The percentage of women age 45-49 who have never had children provides an indicator of the level of primary infertility -- the proportion of women who are unable to bear children at all. Since voluntary childlessness is rare in the Indian context, it is likely that married women with no births are unable to bear children. The NFHS results suggest that primary infertility at the end of reproductive years (45-49) is little higher in Tamil Nadu (2.1 per cent) than in Maharashtra (1.3 per cent). Further, the proportion of currently married women age 40-44 with no CEB is also higher in Tamil Nadu (3.4 per cent) than in Maharashtra (2.1 per cent). The higher proportion of women who are unable to bear children during the childbearing period in Tamil Nadu than in Maharashtra could cause some differentials in the observed fertility levels between the states.

To provide additional information on fertility patterns in the two states, Table 4.7 shows differentials in the number of CEB and living (standardized for age) by background characteristics of currently married women. The differentials in background characteristics seen in Table 4.7 are similar to those observed earlier in Table 4.2 (for TFR and CEB to women age 45-49): CEB is higher in rural areas, among the illiterates and less educated, Muslims and scheduled caste and scheduled tribes. The differentials in CEB by education are more pronounced in both the states. These standardized measures of fertility, as indicated by CEB and children living, also show the higher fertility among the rural, illiterate and less educated and Muslim women in Maharashtra than their counterparts in Tamil Nadu.

### **Birth Order**

The distribution of births by order of birth and proportion of higher order births are useful indicators of current fertility levels. The distribution of births during the three-year period before survey by birth order is shown in Table 4.8. Consistent with Tamil Nadu's low level of fertility, the proportion of births of order 4 or higher are relatively low, constituting only 9 per cent of births in urban areas and 17 per cent of births in rural areas and 14 per cent in the state as a whole. But the proportion of births of order 4 or higher in Maharashtra are 20.6 per cent in urban areas, 24.5 per cent in rural areas and 23 per cent in the state as a whole. Lower order births (births of order 1 and 2) constitute 68 per cent of all births in Tamil Nadu and 57 per cent of all births in Maharashtra, indicating that the distribution of births in Tamil Nadu is more skewed towards lower order births than that of Maharashtra.

### **Birth Intervals**

Information on birth intervals provide birth-spacing patterns which have an impact on both fertility and child survival. Research has shown that lower the birth interval higher the risk of dying at an early age for an infant. Table 4.9 shows the per cent distribution of births of order two or greater that occurred in the five-year period preceding the NFHS by the number of months since the previous birth. The data show that birth intervals are marginally longer in Tamil Nadu than in Maharashtra. Thirty-three per cent of births in Maharashtra but 40 per cent of births in Tamil Nadu occurs three or more years

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In the two states, the differentials in median age at first birth by background characteristics (data not shown in table) indicate that median age at first birth has increased faster in urban areas than in rural areas. But the median age first birth of rural women in Tamil Nadu (19.6 years) is higher than their counterparts in Maharashtra (18.1 years). This is also true for urban women for both the states (21 years in Tamil Nadu and 20.3 years in Maharashtra). The median age at first birth of illiterate women is also higher in Tamil Nadu (19 years) than their counterparts in Maharashtra (17.7 years). Though the incidence of too early childbearing (below age 15) is not very common for any of the age groups of women in the two states it is marginally higher in Maharashtra than in Tamil Nadu.

#### **Childbearing at Younger Ages**

Early childbearing, particularly among teen-agers (those under 20 years of age) leads to severe complications during delivery which result in higher morbidity and mortality for both mothers and babies. Table 4.10 shows the percentage of teen-agers age 15-19 who are mothers or pregnant with their first child (the sum of these two percentages is taken as the proportions of ever married teen-age women who have begun childbearing). In the two states, among women who marry as teen-agers, childbearing starts early. At the time of NFHS, 58 per cent of ever married women age 13-19 in Maharashtra and 48 per cent in Tamil Nadu had already become mothers and another 10 per cent in Maharashtra and 17 per cent in Tamil Nadu were pregnant with their first child. The main reason for the higher proportion of teen-age mothers in

Maharashtra than in Tamil Nadu might be the result of lower age at marriage among the women in Maharashtra than in Tamil Nadu. The sum of proportion of mothers and pregnant with first child indicate that two in three teen-age women have begun childbearing in Maharashtra and Tamil Nadu.

#### Conclusion

The above discussion on fertility levels, trends and differentials based on the NFHS reveals that fertility in Maharashtra is about 15 per cent higher than in Tamil Nadu and the difference is still higher between rural Maharashtra and rural Tamil Nadu. Both CBR and TFR in rural Maharashtra are higher than in rural Tamil Nadu. Further, rural-urban fertility differentials are narrowed down in Tamil Nadu and still is existing in Maharashtra. Rural TFR of Maharashtra is 23 per cent (or more than half children) higher than the urban TFR. Rural TFR of Tamil Nadu and urban TFR of Maharashtra are same. ASFRs up to age 24 are considerably higher in Maharashtra than in Tamil Nadu: ASFR of women age 15-19 and 20-24 are 62 per cent and 12 per cent respectively, higher than the ASFR of the same women in Tamil Nadu; and in rural areas of Maharashtra it is 85 per cent and 19 per cent respectively, higher than in Tamil Nadu. Trends in ASFRs during the twenty-year period preceding the NFHS reveal that although fertility has declined in almost all the age-groups in Maharashtra and Tamil Nadu, its decline is more among women age 25 and above. Further, among women age below 25, fertility decline is more in Tamil Nadu than in Maharashtra. Trends in ASFRs indicate that fertility has declined greatly during the

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#### Conclusion

The above discussion on fertility levels, trends and differentials based on the NFHS reveals that fertility in Maharashtra is about 15 per cent higher than in Tamil Nadu and the difference is still higher between rural Maharashtra and rural Tamil Nadu. Both CBR and TFR in rural Maharashtra are higher than in rural Tamil Nadu. Further, rural-urban fertility differentials are narrowed down in Tamil Nadu and still is existing in Maharashtra. Rural TFR of Maharashtra is 23 per cent (or more than half children) higher than the urban TFR. Rural TFR of Tamil Nadu and urban TFR of Maharashtra are same. ASFRs up to age 24 are considerably higher in Maharashtra than in Tamil Nadu: ASFR of women age 15-19 and 20-24 are 62 per cent and 12 per cent respectively, higher than the ASFR of the same women in Tamil Nadu; and in rural areas of Maharashtra it is 85 per cent and 19 per cent respectively, higher than in Tamil Nadu. Trends in ASFRs during the twenty-year period preceding the NFHS reveal that although fertility has declined in almost all the age-groups in Maharashtra and Tamil Nadu, its decline is more among women age 25 and above. Further, among women age below 25, fertility decline is more in Tamil Nadu than in Maharashtra. Trends in ASFRs indicate that fertility has declined greatly during the

Maharashtra than in Tamil Nadu might be the result of lower age at marriage among the women in Maharashtra than in Tamil Nadu. The sum of proportion of mothers and pregnant with first child indicate that two in three teen-age women have begun childbearing in Maharashtra and Tamil Nadu.

#### Conclusion

The above discussion on fertility levels, trends and differentials based on the NFHS reveals that fertility in Maharashtra is about 15 per cent higher than in Tamil Nadu and the difference is still higher between rural Maharashtra and rural Tamil Nadu. Both CBR and TFR in rural Maharashtra are higher than in rural Tamil Nadu. Further, rural-urban fertility differentials are narrowed down in Tamil Nadu and still is existing in Maharashtra. Rural TFR of Maharashtra is 23 per cent (or more than half children) higher than the urban TFR. Rural TFR of Tamil Nadu and urban TFR of Maharashtra are same. ASFRs up to age 24 are considerably higher in Maharashtra than in Tamil Nadu: ASFR of women age 15-19 and 20-24 are 62 per cent and 12 per cent respectively, higher than the ASFR of the same women in Tamil Nadu; and in rural areas of Maharashtra it is 85 per cent and 19 per cent respectively, higher than in Tamil Nadu. Trends in ASFRs during the twenty-year period preceding the NFHS reveal that although fertility has declined in almost all the age-groups in Maharashtra and Tamil Nadu, its decline is more among women age 25 and above. Further, among women age below 25, fertility decline is more in Tamil Nadu than in Maharashtra. Trends in ASFRs indicate that fertility has declined greatly during the

Maharashtra than in Tamil Nadu might be the result of lower age at marriage among the women in Maharashtra than in Tamil Nadu. The sum of proportion of mothers and pregnant with first child indicate that two in three teen-age women have begun childbearing in Maharashtra and Tamil Nadu.

#### Conclusion

The above discussion on fertility levels, trends and differentials based on the NFHS reveals that fertility in Maharashtra is about 15 per cent higher than in Tamil Nadu and the difference is still higher between rural Maharashtra and rural Tamil Nadu. Both CBR and TFR in rural Maharashtra are higher than in rural Tamil Nadu. Further, rural-urban fertility differentials are narrowed down in Tamil Nadu and still is existing in Maharashtra. Rural TFR of Maharashtra is 23 per cent (or more than half children) higher than the urban TFR. Rural TFR of Tamil Nadu and urban TFR of Maharashtra are same. ASFRs up to age 24 are considerably higher in Maharashtra than in Tamil Nadu: ASFR of women age 15-19 and 20-24 are 62 per cent and 12 per cent respectively, higher than the ASFR of the same women in Tamil Nadu; and in rural areas of Maharashtra it is 85 per cent and 19 per cent respectively, higher than in Tamil Nadu. Trends in ASFRs during the twenty-year period preceding the NFHS reveal that although fertility has declined in almost all the age-groups in Maharashtra and Tamil Nadu, its decline is more among women age 25 and above. Further, among women age below 25, fertility decline is more in Tamil Nadu than in Maharashtra. Trends in ASFRs indicate that fertility has declined greatly during the

Table 4.4 Fertility by marital duration

Fertility rates for ever-married women by duration since first effective marriage (in years) for five-year periods preceding the survey: Maharashtra and Tamil Nadu, NFHS

Duration of effective marriage	Years preceding the survey				% decline in ASFR between 15-19 & 0-4 years preceding NFHS
	0-4	5-9	10-14	15-19	
Maharashtra					
0 - 4	0.321	0.336	0.308	0.288	+11.5
5 - 9	0.211	0.250	0.279	0.293	-27.3
10-14	0.100	0.132	0.189	0.207	-51.7
15-19	0.040	0.068	0.102	0.155	-74.2
20-24	0.016	0.034	0.068	*	*
25-29	0.006	0.013	*	*	*
Tamil Nadu					
0 - 4	0.312	0.323	0.327	0.324	- 3.7
5 - 9	0.160	0.197	0.230	0.276	-42.0
10-14	0.061	0.116	0.148	0.190	-67.9
15-19	0.028	0.044	0.088	0.159	-82.4
20-24	0.011	0.026	0.042	*	*
25-29	0.002	0.006	*	*	*

\* rates not shown: based on fewer than 125 person-years of exposure

Table 4.5 Outcome of pregnancy

Distribution of all pregnancies of ever-married women by their outcome, according to residence, Maharashtra and Tamil Nadu: NFHS

Outcome of pregnancy	Maharashtra			Tamil Nadu		
	Urban	Rural	Total	Urban	Rural	Total
Spontaneous abortion	4.9	3.6	4.1	7.7	6.6	7.0
Induced abortion	2.0	0.4	1.0	4.9	4.0	4.3
Still-birth	1.9	2.0	2.0	2.5	2.8	2.7
Live birth	91.2	94.0	92.9	84.8	86.6	86.0
Total	100	100	100	100	100	100

Table 4.6 Children ever born and living

Per cent distribution of currently married women by number of children ever born and mean number of children ever born (CEB) and living, according to age: Maharashtra and Tamil Nadu, NFHS

Age	Children ever born											Total %	Mean CEB	Mean children living
	0	1	2	3	4	5	6	7	8	9	10+			
<b>MAHARASHTRA</b>														
13-14	85.2*	14.8*	—	—	—	—	—	—	—	—	—	100	0.15	0.15
15-19	38.3	39.5	16.8	4.7	0.3	0.3	—	—	—	—	—	100	0.90	0.82
20-24	14.7	25.7	28.6	21.3	7.2	1.4	1.1	—	—	—	—	100	1.89	1.76
25-29	4.6	11.9	24.2	28.5	20.4	6.9	2.1	1.1	0.4	—	—	100	2.85	2.59
30-34	2.3	6.0	18.9	27.6	22.6	11.8	5.3	3.3	1.0	1.0	0.2	100	3.50	3.17
35-39	3.6	5.0	15.5	24.2	19.6	16.4	7.0	4.1	1.6	1.1	2.0	100	3.82	3.35
40-44	2.1	4.9	13.6	21.0	21.0	14.4	9.5	7.9	2.6	1.3	1.8	100	4.16	3.60
45-49	1.3	4.7	8.3	17.6	17.3	19.3	13.3	5.6	6.3	3.7	2.7	100	4.70	3.80
Total	9.8	14.5	19.8	21.9	15.4	8.9	4.5	2.6	1.2	0.7	0.7	100	2.95	2.62
<b>TAMIL NADU</b>														
13-14	—	—	—	—	—	—	—	—	—	—	—	100	—	—
15-19	51.4	42.4	5.5	0.8	—	—	—	—	—	—	—	100	0.56	0.52
20-24	19.5	33.9	32.3	12.2	1.7	0.4	—	—	—	—	—	100	1.44	1.32
25-29	8.1	18.6	34.3	25.3	9.6	3.1	1.0	0.1	—	—	—	100	2.24	2.03
30-34	5.2	9.3	25.7	30.3	15.4	10.3	2.3	1.0	0.2	—	0.3	100	2.90	2.58
35-39	4.5	6.8	18.6	25.9	20.1	13.3	6.9	3.4	0.6	—	—	100	3.38	2.91
40-44	3.4	4.5	11.3	20.2	17.9	18.3	10.0	8.7	3.6	1.9	0.2	100	4.20	3.42
45-49	2.7	3.9	9.0	15.6	18.9	15.0	14.7	10.2	5.7	1.2	3.0	100	4.67	3.74
Total	11.3	16.7	22.8	20.4	11.8	8.1	4.2	2.8	1.1	0.4	0.4	100	2.72	2.34

\* based on 25-49 cases  
 - less than 0.05 per cent



Table 4.6 Children ever born and living

Per cent distribution of currently married women by number of children ever born and mean number of children ever born (CEB) and living, according to age: Maharashtra and Tamil Nadu, NFHS

Age	Children ever born											Total %	Mean CEB	Mean children living
	0	1	2	3	4	5	6	7	8	9	10+			
<b>MAHARASHTRA</b>														
13-14	85.2*	14.8*	—	—	—	—	—	—	—	—	—	100	0.15	0.15
15-19	38.3	39.5	16.8	4.7	0.3	0.3	—	—	—	—	—	100	0.90	0.82
20-24	14.7	25.7	28.6	21.3	7.2	1.4	1.1	—	—	—	—	100	1.89	1.76
25-29	4.6	11.9	24.2	28.5	20.4	6.9	2.1	1.1	0.4	—	—	100	2.85	2.59
30-34	2.3	6.0	18.9	27.6	22.6	11.8	5.3	3.3	1.0	1.0	0.2	100	3.50	3.17
35-39	3.6	5.0	15.5	24.2	19.6	16.4	7.0	4.1	1.6	1.1	2.0	100	3.82	3.35
40-44	2.1	4.9	13.6	21.0	21.0	14.4	9.5	7.9	2.6	1.3	1.8	100	4.16	3.60
45-49	1.3	4.7	8.3	17.6	17.3	19.3	13.3	5.6	6.3	3.7	2.7	100	4.70	3.80
Total	9.8	14.5	19.8	21.9	15.4	8.9	4.5	2.6	1.2	0.7	0.7	100	2.95	2.62
<b>TAMIL NADU</b>														
13-14	—	—	—	—	—	—	—	—	—	—	—	100	—	—
15-19	51.4	42.4	5.5	0.8	—	—	—	—	—	—	—	100	0.56	0.52
20-24	19.5	33.9	32.3	12.2	1.7	0.4	—	—	—	—	—	100	1.44	1.32
25-29	8.1	18.6	34.3	25.3	9.6	3.1	1.0	0.1	—	—	—	100	2.24	2.03
30-34	5.2	9.3	25.7	30.3	15.4	10.3	2.3	1.0	0.2	—	0.3	100	2.90	2.58
35-39	4.5	6.8	18.6	25.9	20.1	13.3	6.9	3.4	0.6	—	—	100	3.38	2.91
40-44	3.4	4.5	11.3	20.2	17.9	18.3	10.0	8.7	3.6	1.9	0.2	100	4.20	3.42
45-49	2.7	3.9	9.0	15.6	18.9	15.0	14.7	10.2	5.7	1.2	3.0	100	4.67	3.74
Total	11.3	16.7	22.8	20.4	11.8	8.1	4.2	2.8	1.1	0.4	0.4	100	2.72	2.34

\* based on 25-49 cases  
 - less than 0.05 per cent

Table 4.6 Children ever born and living

Per cent distribution of currently married women by number of children ever born and mean number of children ever born (CEB) and living, according to age: Maharashtra and Tamil Nadu, NFHS

Age	Children ever born											Total %	Mean CEB	Mean children living
	0	1	2	3	4	5	6	7	8	9	10+			
<b>MAHARASHTRA</b>														
13-14	85.2*	14.8*	—	—	—	—	—	—	—	—	—	100	0.15	0.15
15-19	38.3	39.5	16.8	4.7	0.3	0.3	—	—	—	—	—	100	0.90	0.82
20-24	14.7	25.7	28.6	21.3	7.2	1.4	1.1	—	—	—	—	100	1.89	1.76
25-29	4.6	11.9	24.2	28.5	20.4	6.9	2.1	1.1	0.4	—	—	100	2.85	2.59
30-34	2.3	6.0	18.9	27.6	22.6	11.8	5.3	3.3	1.0	1.0	0.2	100	3.50	3.17
35-39	3.6	5.0	15.5	24.2	19.6	16.4	7.0	4.1	1.6	1.1	2.0	100	3.82	3.35
40-44	2.1	4.9	13.6	21.0	21.0	14.4	9.5	7.9	2.6	1.3	1.8	100	4.16	3.60
45-49	1.3	4.7	8.3	17.6	17.3	19.3	13.3	5.6	6.3	3.7	2.7	100	4.70	3.80
Total	9.8	14.5	19.8	21.9	15.4	8.9	4.5	2.6	1.2	0.7	0.7	100	2.95	2.62
<b>TAMIL NADU</b>														
13-14	—	—	—	—	—	—	—	—	—	—	—	100	—	—
15-19	51.4	42.4	5.5	0.8	—	—	—	—	—	—	—	100	0.56	0.52
20-24	19.5	33.9	32.3	12.2	1.7	0.4	—	—	—	—	—	100	1.44	1.32
25-29	8.1	18.6	34.3	25.3	9.6	3.1	1.0	0.1	—	—	—	100	2.24	2.03
30-34	5.2	9.3	25.7	30.3	15.4	10.3	2.3	1.0	0.2	—	0.3	100	2.90	2.58
35-39	4.5	6.8	18.6	25.9	20.1	13.3	6.9	3.4	0.6	—	—	100	3.38	2.91
40-44	3.4	4.5	11.3	20.2	17.9	18.3	10.0	8.7	3.6	1.9	0.2	100	4.20	3.42
45-49	2.7	3.9	9.0	15.6	18.9	15.0	14.7	10.2	5.7	1.2	3.0	100	4.67	3.74
Total	11.3	16.7	22.8	20.4	11.8	8.1	4.2	2.8	1.1	0.4	0.4	100	2.72	2.34

\* based on 25-49 cases  
 - less than 0.05 per cent

Table 4.6 Children ever born and living

Per cent distribution of currently married women by number of children ever born and mean number of children ever born (CEB) and living, according to age: Maharashtra and Tamil Nadu, NFHS

Age	Children ever born											Total %	Mean CEB	Mean children living
	0	1	2	3	4	5	6	7	8	9	10+			
<b>MAHARASHTRA</b>														
13-14	85.2*	14.8*	—	—	—	—	—	—	—	—	—	100	0.15	0.15
15-19	38.3	39.5	16.8	4.7	0.3	0.3	—	—	—	—	—	100	0.90	0.82
20-24	14.7	25.7	28.6	21.3	7.2	1.4	1.1	—	—	—	—	100	1.89	1.76
25-29	4.6	11.9	24.2	28.5	20.4	6.9	2.1	1.1	0.4	—	—	100	2.85	2.59
30-34	2.3	6.0	18.9	27.6	22.6	11.8	5.3	3.3	1.0	1.0	0.2	100	3.50	3.17
35-39	3.6	5.0	15.5	24.2	19.6	16.4	7.0	4.1	1.6	1.1	2.0	100	3.82	3.35
40-44	2.1	4.9	13.6	21.0	21.0	14.4	9.5	7.9	2.6	1.3	1.8	100	4.16	3.60
45-49	1.3	4.7	8.3	17.6	17.3	19.3	13.3	5.6	6.3	3.7	2.7	100	4.70	3.80
Total	9.8	14.5	19.8	21.9	15.4	8.9	4.5	2.6	1.2	0.7	0.7	100	2.95	2.62
<b>TAMIL NADU</b>														
13-14	—	—	—	—	—	—	—	—	—	—	—	100	—	—
15-19	51.4	42.4	5.5	0.8	—	—	—	—	—	—	—	100	0.56	0.52
20-24	19.5	33.9	32.3	12.2	1.7	0.4	—	—	—	—	—	100	1.44	1.32
25-29	8.1	18.6	34.3	25.3	9.6	3.1	1.0	0.1	—	—	—	100	2.24	2.03
30-34	5.2	9.3	25.7	30.3	15.4	10.3	2.3	1.0	0.2	—	0.3	100	2.90	2.58
35-39	4.5	6.8	18.6	25.9	20.1	13.3	6.9	3.4	0.6	—	—	100	3.38	2.91
40-44	3.4	4.5	11.3	20.2	17.9	18.3	10.0	8.7	3.6	1.9	0.2	100	4.20	3.42
45-49	2.7	3.9	9.0	15.6	18.9	15.0	14.7	10.2	5.7	1.2	3.0	100	4.67	3.74
Total	11.3	16.7	22.8	20.4	11.8	8.1	4.2	2.8	1.1	0.4	0.4	100	2.72	2.34

\* based on 25-49 cases  
 - less than 0.05 per cent

Table 4.6 Children ever born and living

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Age	Children ever born											Total %	Mean CEB	Mean children living
	0	1	2	3	4	5	6	7	8	9	10+			
<b>MAHARASHTRA</b>														
13-14	85.2*	14.8*	—	—	—	—	—	—	—	—	—	100	0.15	0.15
15-19	38.3	39.5	16.8	4.7	0.3	0.3	—	—	—	—	—	100	0.90	0.82
20-24	14.7	25.7	28.6	21.3	7.2	1.4	1.1	—	—	—	—	100	1.89	1.76
25-29	4.6	11.9	24.2	28.5	20.4	6.9	2.1	1.1	0.4	—	—	100	2.85	2.59
30-34	2.3	6.0	18.9	27.6	22.6	11.8	5.3	3.3	1.0	1.0	0.2	100	3.50	3.17
35-39	3.6	5.0	15.5	24.2	19.6	16.4	7.0	4.1	1.6	1.1	2.0	100	3.82	3.35
40-44	2.1	4.9	13.6	21.0	21.0	14.4	9.5	7.9	2.6	1.3	1.8	100	4.16	3.60
45-49	1.3	4.7	8.3	17.6	17.3	19.3	13.3	5.6	6.3	3.7	2.7	100	4.70	3.80
Total	9.8	14.5	19.8	21.9	15.4	8.9	4.5	2.6	1.2	0.7	0.7	100	2.95	2.62
<b>TAMIL NADU</b>														
13-14	—	—	—	—	—	—	—	—	—	—	—	100	—	—
15-19	51.4	42.4	5.5	0.8	—	—	—	—	—	—	—	100	0.56	0.52
20-24	19.5	33.9	32.3	12.2	1.7	0.4	—	—	—	—	—	100	1.44	1.32
25-29	8.1	18.6	34.3	25.3	9.6	3.1	1.0	0.1	—	—	—	100	2.24	2.03
30-34	5.2	9.3	25.7	30.3	15.4	10.3	2.3	1.0	0.2	—	0.3	100	2.90	2.58
35-39	4.5	6.8	18.6	25.9	20.1	13.3	6.9	3.4	0.6	—	—	100	3.38	2.91
40-44	3.4	4.5	11.3	20.2	17.9	18.3	10.0	8.7	3.6	1.9	0.2	100	4.20	3.42
45-49	2.7	3.9	9.0	15.6	18.9	15.0	14.7	10.2	5.7	1.2	3.0	100	4.67	3.74
Total	11.3	16.7	22.8	20.4	11.8	8.1	4.2	2.8	1.1	0.4	0.4	100	2.72	2.34

\* based on 25-49 cases  
 - less than 0.05 per cent

Nadu report having used a modern method (Table 5.2). Thus the acceptance of family planning in Tamil Nadu is 6 per cent lower than in Maharashtra and the gap is still more between rural Maharashtra and rural Tamil Nadu (8 percentage point). In other words, contraceptive prevalence is 16 per cent higher in rural Maharashtra than in rural Tamil Nadu. This is contrary to the lower fertility observed in Tamil Nadu than in Maharashtra. If the higher contraceptive prevalence in Maharashtra is translated into reproductive behaviour then Maharashtra should have a lower fertility than Tamil Nadu.

#### Current use

Current use of contraception is defined in NFHS as the proportion of women who reported they were using a family planning method at the time of interview. In the NFHS only currently married women were asked questions about current use of contraception. Table 5.3 shows the per cent distribution of currently married women by current contraceptive use status according to age group. As mentioned earlier, in contrast to the lower fertility in Tamil Nadu than in Maharashtra, current use of contraception is, in fact, higher in Maharashtra than in Tamil Nadu. The findings show that the proportion of currently married women age 13-49 currently using contraception (any method) is 54 per cent in Maharashtra and 50 per cent in Tamil Nadu; and the proportion using any modern method is 53 per cent in Maharashtra and 45 per cent in Tamil Nadu.

In both Maharashtra and Tamil Nadu, acceptance of contraception in general, and sterilization in particular, is

higher in rural areas than in urban areas. It signifies the impact of family planning programme in rural areas. Further, higher proportion of couples in rural Maharashtra (54 per cent) accepted modern methods of contraception than in rural Tamil Nadu (46 per cent). It again indicates that the family planning programme in Maharashtra is able to reach more rural couples than the programme in Tamil Nadu. These observations indicate that the higher acceptance of contraception by the couples as such will not be sufficient to bring down the level of fertility. The pattern of current use of contraception by age shows that the acceptance of contraception among women aged below 25 in Maharashtra and Tamil Nadu is more or less same (about 40 per cent). But among women aged 25 and above contraceptive use, particularly sterilization, is higher in Maharashtra than in Tamil Nadu. It is clear that in these two states among younger women acceptance of contraception is almost similar and the differences are large among women aged 25 and above.

#### Differentials in current use of contraception

NFHS data indicate that some women are much more likely to be using contraception than others (Table 5.4). A weak positive association is found between current use of contraception and level of education of women in both Maharashtra and Tamil Nadu. But in both the states acceptance of sterilization is negatively related with the level of education. The acceptance of family planning among the illiterate women of Tamil Nadu is considerably lower (48 per cent) than the illiterate women of Maharashtra (54 per cent). But the level of fertility observed for illiterate

higher in rural areas than in urban areas. It signifies the impact of family planning programme in rural areas. Further, higher proportion of couples in rural Maharashtra (54 per cent) accepted modern methods of contraception than in rural Tamil Nadu (46 per cent). It again indicates that the family planning programme in Maharashtra is able to reach more rural couples than the programme in Tamil Nadu. These observations indicate that the higher acceptance of contraception by the couples as such will not be sufficient to bring down the level of fertility. The pattern of current use of contraception by age shows that the acceptance of contraception among women aged below 25 in Maharashtra and Tamil Nadu is more or less same (about 40 per cent). But among women aged 25 and above contraceptive use, particularly sterilization, is higher in Maharashtra than in Tamil Nadu. It is clear that in these two states among younger women acceptance of contraception is almost similar and the differences are large among women aged 25 and above.

#### Differentials in current use of contraception

NFHS data indicate that some women are much more likely to be using contraception than others (Table 5.4). A weak positive association is found between current use of contraception and level of education of women in both Maharashtra and Tamil Nadu. But in both the states acceptance of sterilization is negatively related with the level of education. The acceptance of family planning among the illiterate women of Tamil Nadu is considerably lower (48 per cent) than the illiterate women of Maharashtra (54 per cent). But the level of fertility observed for illiterate

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couples with one living child there is no difference in the acceptance of contraception between those with one living son and one living child. The difference in the acceptance of family planning is even stronger among couples with 2 living children but no son: the proportion of current users for this group of women is 28 per cent in Maharashtra but about 50 per cent in Tamil Nadu; and the couples sterilized with two children but no son is 10 per cent in Maharashtra but 33 per cent in Tamil Nadu. The same trend is observed for women with three or more living children but no son. The above observation clearly brings out the fact that the son preference is very stronger in Maharashtra and this is one of the major factors for not accepting contraception with lower parity. It is true that more number of women in Maharashtra accepting contraception than their counterparts in Tamil Nadu but their acceptance starts at the higher parities and after achieving their desired sex combination of children.

#### **Number of children at first use of family planning**

In order to investigate when during family building process couples become motivated to initiate family planning use, the NFHS included a question for all women who had ever used a method as to how many children they had when they first used a method. Table. 5.5 shows the distribution of ever-married women by number of living children they had when they first used a method. Overall, only three per cent of contraceptors initiated the use of contraception before having any children in Maharashtra and Tamil Nadu. But the proportion started using contraception after having their first child is higher in Tamil Nadu (21 per cent)

than in Maharashtra (15 per cent). More than half of the women in Tamil Nadu (52 per cent) but only 36 per cent in Maharashtra who had ever used contraception initiated the use when they had fewer than three children. About one-fourth in Tamil Nadu but 34 per cent in Maharashtra initiated use when they had four or more living children. Fifty per cent of urban women and 45 per cent of rural women in Tamil Nadu initiated contraceptive use when they had fewer than three living children as against 47 per cent of urban women and 29 per cent of rural women in Maharashtra. Hence more number of women in Tamil Nadu in general, and particularly rural women, initiating use of contraception at lower parity than the women in Maharashtra. It makes clear that though the contraceptive prevalence is higher in Maharashtra, the initiation of contraception at higher parities thus fail to bring down the fertility level. In contrast, though the contraceptive prevalence is lower in Tamil Nadu than in Maharashtra the higher acceptance of family planning among women with lower parity led Tamil Nadu to bring down fertility lower than that of Maharashtra.

#### FERTILITY PREFERENCES

##### Desire for more children

Table 5.6 shows the distribution of currently married women by desire for another child and, for those women who desire another child, their per cent distribution by preferred sex of next child. Overall, one in four currently married women in Maharashtra and Tamil Nadu say they want another child sometime in the future. But the proportion of women report that they want no more children at all in the future is higher in Tamil Nadu

(27 per cent) than in Maharashtra (20 per cent). Further, additional 46 per cent in Maharashtra and 40 per cent in Tamil Nadu either have been sterilized or say that they cannot have any more children. These two groups of women (want no children and sterilized) together constitute 67 per cent in Maharashtra and Tamil Nadu. Thus the vast majority of women in both the states want to limit childbearing altogether.

Preference of children of particular sex is not very strong in Tamil Nadu but there is a strong preference for having a son as the next child in Maharashtra. Among currently married women desiring another child, the proportion wanting a son as their next child is 29 per cent in Tamil Nadu but it is 44 per cent in Maharashtra, and the proportion wanting daughter as their next child is also higher in Tamil Nadu (17 per cent) than in Maharashtra (11 per cent). The difference between these two percentages (proportion desiring son as next child and daughter as next child) indicate the extent of a preference for sons: the difference is 33 in Maharashtra and only 13 in Tamil Nadu. Further, the proportion of women say that it doesn't matter whether the next child is a boy or a girl or up to god is also higher in Tamil Nadu (54 per cent) than in Maharashtra (46 per cent).

Preference for sons is very strong in rural areas of Maharashtra where 49 per cent of women want a son as the next child as compared with urban areas where 36 per cent want a son as the next child. The son preference for rural and urban Tamil

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Maharashtra those who consider two child family as ideal is only 47 per cent. Those who consider three child family as ideal is higher in Maharashtra (30 per cent) than in Tamil Nadu (11 per cent). Hence in Maharashtra ideal number of children falls in a range of 2-3 children for a large majority of women (77 per cent). The mean ideal family size for married women is 2.1 in Tamil Nadu and 2.5 in Maharashtra. In other words, the ideal family size of Maharashtra women is about half a child higher than the Tamil Nadu women.

Table 5.9 also shows mean ideal number of children for ever married women by age group. The mean ideal number of children does not vary by age of women in Tamil Nadu but it varies between 2.5 for women aged 15-19 to 2.8 for women aged 45-49 in Maharashtra. This indicates that the two child family norm is nearly universal in Tamil Nadu. Women who have responded numerically to the question about the ideal number of children were also asked in NFHS that how many of these children they would like to be boys and how many they would like to be girls. Table 5.10 shows that the mean ideal number of sons is 0.9 in Tamil Nadu and 1.3 in Maharashtra, again indicates a higher son preference in Maharashtra.

#### **Wanted Fertility**

To estimate the extent of unwanted fertility women were asked in NFHS whether each pregnancy that resulted in live birth was wanted at that time (planned), wanted at a later time (mistimed) or not wanted at all (unwanted). The survey shows that in both

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**Table 5.1. Knowledge of contraceptive methods and source of methods.**

Percentage of currently married women knowing any contraceptive method and knowing a source by residence: Maharashtra and Tamil Nadu, NFHS

Method	Maharashtra	Tamil Nadu
<b>Knows any method</b>		
Urban	99.1	99.4
Rural	96.9	99.0
Total	97.8	99.1
<b>Knows any modern method</b>		
Urban	99.1	99.4
Rural	99.9	99.0
Total	97.8	99.1
<b>Knows source for any modern method</b>		
Urban	97.5	98.4
Rural	94.3	97.2
Total	95.6	97.6

**Table 5.2. Ever use of contraception**

Percentage of currently married women who have ever used any contraceptive method by residence: Maharashtra and Tamil Nadu, NFHS

Ever use	Maharashtra	Tamil Nadu
<b>Any method</b>		
Urban	59.5	60.9
Rural	57.2	53.4
Total	58.1	56.1
<b>Any modern method</b>		
Urban	57.5	54.9
Rural	56.5	48.6
Total	56.9	50.9

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Rural	96.9	99.0
Total	97.8	99.1
<b>Knows any modern method</b>		
Urban	99.1	99.4
Rural	99.9	99.0
Total	97.8	99.1
<b>Knows source for any modern method</b>		
Urban	97.5	98.4
Rural	94.3	97.2
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Rural	57.2	53.4
Total	58.1	56.1
<b>Any modern method</b>		
Urban	57.5	54.9
Rural	56.5	48.6
Total	56.9	50.9

Table 3.4 Current use by background characteristics

Per cent distribution of currently married women using contraception according to selected background characteristics: Maharashtra and Tamil Nadu, NFHS

Background characteristic	Maharashtra			Tamil Nadu		
	Any method	Modern method	sterilization	Any method	Modern method	Sterilization
<b>Education</b>						
Illiterate	54.1	53.7	52.4	47.5	44.7	42.7
Literate (middle)	53.2	52.3	47.8	51.7	47.6	41.7
Middle school complete	45.4	43.5	34.2	52.6	48.5	38.7
High school & above	58.0	54.1	30.5	52.3	40.6	26.7
<b>Religion</b>						
Hindu	56.6	55.3	49.6	50.2	45.8	40.8
Muslim	36.1	35.2	26.6	45.8	41.4	27.7
<b>Caste</b>						
Scheduled caste	55.1	55.1	52.1	45.0	42.0	40.3
Scheduled tribe	49.2	48.6	46.7	-	-	-
Other	54.2	52.8	45.7	51.0	45.9	39.2
<b>Number and sex of living children</b>						
None	3.1	1.9	0.4	3.3	2.4	1.8
<b>1 child</b>						
1 son	22.8	20.9	5.8	24.4	20.3	8.1
No son	27.3	25.1	8.6	24.9	21.7	8.4
	17.8	16.4	2.7	23.9	19.0	7.9
<b>2 children</b>						
2 sons	50.3	48.6	37.4	59.5	53.1	46.3
1 son	65.9	64.4	53.2	62.5	57.8	50.6
No sons	48.1	47.0	35.7	61.9	55.2	49.2
	27.9	24.5	9.5	49.0	41.1	33.4
<b>3 Children</b>						
3 sons	74.8	73.9	70.5	72.6	67.3	62.8
2 sons	86.0	86.0	85.3	74.2	68.8	66.6
1 son	84.7	84.5	82.7	80.4	75.0	70.5
No sons	63.9	61.9	55.6	70.4	65.3	60.8
	30.8	27.7	20.0	50.6	44.7	37.7
<b>4+ children</b>						
2+ sons	76.0	75.3	73.3	64.6	60.2	57.6
1 son	79.9	79.2	77.6	64.1	60.3	57.1
No sons	69.5	68.4	65.6	68.0	60.7	60.0
	48.6	48.6	43.2	59.5	56.8	56.8
<b>Total</b>	<b>53.7</b>	<b>52.5</b>	<b>46.2</b>	<b>49.8</b>	<b>45.2</b>	<b>39.5</b>

Table 5.5 Number of living children at first use

Per cent distribution of ever-married women by number of living children at the time of first use of contraception by residence: Maharashtra and Tamil Nadu, NFHS

Residence	Never used	Number of living children at the time of first use					Total
		0	1	2	3	4+	
<b>Maharashtra</b>							
Urban	42.0	3.4	12.9	10.8	13.8	17.1	100
Rural	44.7	0.8	4.9	10.2	19.0	20.3	100
Total	43.6	1.9	8.2	10.4	16.9	19.0	100
<b>Tamil Nadu</b>							
Urban		2.1	17.4	17.3	11.2	11.2	100
Rural		1.4	8.1	13.7	14.4	14.0	100
Total		1.6	11.4	14.9	13.3	10.2	100

**Table 5.6 Fertility preferences**

Per cent distribution of currently married women by desire for children and preferred sex of additional child: Maharashtra and Tamil Nadu, NFHS

Desire for children	Maharashtra	Tamil Nadu
<b>Desire for additional child</b>		
Want within two years	11.7	12.0
Want after two years	13.5	14.6
Want, undecided when	2.3	1.0
Undecided	1.2	0.7
Up to god	0.7	0.6
Want no more	20.4	27.1
Sterilized	46.1	39.5
Declared infecund	4.0	4.2
Missing	-	0.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Preferred sex of additional child</b>		
Boy	43.9	29.3
Girl	10.5	16.8
Doesn't matter	35.4	44.7
Up to god	10.1	9.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

**Table 5.7 Desire to have no more children**

Percentage of currently married women who want no more children by number of living children and number of living sons: Maharashtra and Tamil Nadu, NFHS

Number of children	Maharashtra	Tamil Nadu
<b>Number of living children</b>		
0	1.9	4.7
1	21.7	23.7
2	73.1	79.3
3	87.1	91.1
4	93.4	92.5
5	96.2	90.8
6+	91.2	86.0
<b>Number of living sons</b>		
0	17.4	32.4
1	70.3	74.2
2	92.2	90.7
3+	94.8	91.5
<b>Total</b>	<b>68.5</b>	<b>66.6</b>

**Table 5.8 Ideal number of children**

Per cent distribution of ever-married women by ideal number of children: Maharashtra and Tamil Nadu, NFHS

Ideal Number of children	Maharashtra	Tamil Nadu
0	0.1	0.1
1	6.8	9.3
2	46.7	75.2
3	30.2	10.6
4	9.5	2.8
5	1.8	0.2
6+	1.0	0.2
Non numeric response	3.9	1.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Table 5.9 Mean ideal number of children for ever-married women by age: Maharashtra and Tamil Nadu, NFHS

Age of women	Maharashtra	Tamil Nadu
15-19	2.5	2.1
20-24	2.4	2.1
25-29	2.5	2.0
30-34	2.5	2.0
35-39	2.6	2.1
40-44	2.6	2.1
45-49	2.8	2.1
Total	2.5	2.1

Table 5.10. Mean ideal number of sons and daughters for ever-married women: Maharashtra and Tamil Nadu, NFHS

Ideal sex composition of children	Maharashtra	Tamil Nadu
Sons	1.3	0.9
Daughters	0.9	0.7
Doesn't matter	0.3	0.5

**Table 5.11. Wanted fertility rate**

**Total wanted fertility rates and total fertility rates for the three years preceding survey by residence: Maharashtra and Tamil Nadu, NFHS**

<b>Residence</b>	<b>Total wanted fertility rate</b>	<b>Total fertility rate</b>
<b>Maharashtra</b>		
Urban	1.94	2.54
Rural	2.29	3.12
<b>Total</b>	<b>2.13</b>	<b>2.86</b>
<b>Tamil Nadu</b>		
Urban	1.74	2.36
Rural	1.76	2.54
<b>Total</b>	<b>1.76</b>	<b>2.48</b>



## CHAPTER 6

### SUMMARY AND CONCLUSIONS

India is one of the world's most populous countries and hence controlling the growth of her population has been a policy concern for the past five decades. Although the importance of checking the population growth has been recognized long back, India is still characterized by high fertility. But one thing that needs to be recognized is that the demographic profile of the sub-continent is as diverse as its culture and norms. The results of recent NFHS and SRS reveal that there has been a clear downward trend in fertility at the all India level. But decline of fertility is not uniform and varies widely across states. In the Southern and Western parts of the country TFR has declined significantly but the North Indian states still suffering from very slow decline of fertility than expected. Even within the Southern and Western parts of the country fertility has not declined uniformly. For example, though Maharashtra and Tamil Nadu share some comparable features of social environment, fertility had declined at higher pace in the latter than in the former. Further, in terms of economic indicators, Maharashtra can be placed above Tamil Nadu. Under these circumstances, fertility decline in Tamil Nadu is viewed as more significant by the demographers.

An analysis of fertility trends during the past two decades (1971-1991) in Maharashtra and Tamil Nadu using SRS data showed that during 1971-91 Tamil Nadu experienced 41 per cent decline in

TFR as compared to Maharashtra's 33 per cent. Fertility decline in rural Tamil Nadu during the same period is remarkably high (43 per cent) than in rural Maharashtra (28 per cent). In the urban areas of the two states fertility decline was almost identical during this period. Though the TFR of Tamil Nadu in 1970 was considerably lower than the TFR of Maharashtra, the latter experienced a considerable decline in fertility than the former during the seventies. But after 1980 Maharashtra witnessed a very slow decline of TFR, but Tamil Nadu underwent a dramatic decline in TFR. This inter-regional diversity in the demographic behaviour of the people within the country provides useful opportunities to study the determinants of demographic behaviour in India. Hence, a comparative study of Maharashtra and Tamil Nadu would help to understand the complexities involved in the fertility decline and will provide us with insights into the factors which facilitate fertility decline even when the socio-economic development is limited. This study examines the nuptiality patterns, fertility levels, trends and differentials and contraceptive practice in Maharashtra and Tamil Nadu to explain the factors that could have caused the interstate variation in demographic behaviour by using the published NFHS results. The main findings of this study are summarized in the following pages.

The analysis of the age structure of household population reveals that the age distribution of Maharashtra is typical of a population with a moderately high fertility whereas the age distribution of Tamil Nadu is typical of a population that has

been experiencing fertility decline in recent years. Because of relatively higher fertility, Maharashtra has a larger proportion of her population in the younger age-group than Tamil Nadu. The proportion of under-fifteen and child population (0-4 years) of Tamil Nadu are 12 per cent and 18 per cent respectively lower than that of Maharashtra's under-fifteen and child population. Distribution of ever-married household population by age shows that a higher proportion of females are getting married before age 20 in Maharashtra than in Tamil Nadu, suggesting higher female age at marriage and consequently lower fertility in Tamil Nadu than in Maharashtra. Female literacy and educational attainment are equal in both Maharashtra and Tamil Nadu. Though the level of female literacy is same in the two states, females in Tamil Nadu stay one year longer in schools than the females in Maharashtra. School attendance rate for school-age population is equal in the two states.

From the information on housing characteristics it appears that the housing conditions in Maharashtra are better than in Tamil Nadu: proportion of households with electricity, access to pump/piped water, toilet/latrine facility, cooking fuel and pucca houses are higher in Maharashtra than in Tamil Nadu. Also proportion of households owning landed and livestock wealth are HIGHER IN MAHARASHTRA THAN IN TAMIL NADU. Further, more number of households in Maharashtra own expensive consumer durable items (sewing machine, television and refrigerator) than the households in Tamil Nadu. The above economic characteristics of the households clearly reflect Maharashtra's superiority in economic

conditions over Tamil Nadu. The households in Maharashtra are bigger in size (average household size) and more crowded (number of persons per room) than the households in Tamil Nadu.

Examination of characteristics of ever-married women age 13-49 indicate more or less equal distribution in age, marital status, literacy, educational attainment, religion and caste in Maharashtra and Tamil Nadu. But among the working women, higher proportion of them are working outside the household in Tamil Nadu than in Maharashtra. Exposure of women to mass media is a measure of modernity and it helps the women to understand the importance of health and family welfare, among other things. NFHS's information on this aspect reveals that more women in Tamil Nadu are exposed to mass media than the women in Maharashtra.

The socio-economic and demographic profiles of households and individual respondents in NFHS reveal that relatively Tamil Nadu has some desirable demographic features though the households in Maharashtra are economically better-off than the households in Tamil Nadu.

The analysis of marriage patterns (proportion of women currently married by age, SMAM, age at first marriage and median age at first marriage) reveal that though the female age at marriage has increased over the years in the two states, still more marriages are occurring relatively early in Maharashtra, thus exposing themselves to longer duration of reproduction, than in Tamil Nadu. The values of SMAM for the state as a whole show

that females in Tamil Nadu marry 1.2 years later than the females in Maharashtra. The difference is more pronounced in SMAM for rural females. Females in rural Tamil Nadu marry 2.1 years later than the rural females in Maharashtra. NFHS SMAM values of Maharashtra are even lower than the values of all India. The median age at first marriage for women in Tamil Nadu is also two years higher than in Maharashtra. Further, women possessing the same background characteristics (residence, literacy, religion and caste) in the two states show that women in Tamil Nadu are marrying later than the women with the same characteristics in Maharashtra. Incidence of consanguinity is observed to be higher in Tamil Nadu than in Maharashtra.

The analysis of fertility levels, trends and differentials reveals that fertility in Maharashtra is about 15 per cent higher than in Tamil Nadu and the difference is still higher between rural Maharashtra and rural Tamil Nadu. NFHS's CBR and TFR in rural Maharashtra are 20 per cent and 23 per cent respectively, higher than in rural Tamil Nadu. Further, rural-urban fertility differentials are narrowed down in Tamil Nadu and still is existing in Maharashtra. Rural TFR of Maharashtra is 23 per cent (or more than half a child) higher than the urban TFR. Rural TFR of Tamil Nadu and urban TFR of Maharashtra are the same. ASFRs up to age 24 are considerably higher in Maharashtra than in Tamil Nadu and this is true for both urban and rural areas. ASFR of women age 15-19 and 20-24 in Maharashtra are 62 per cent and 12 per cent respectively, higher than the ASFR of the same women in

Tamil Nadu, and in rural areas of Maharashtra it is 85 per cent and 19 per cent respectively, higher than in rural Tamil Nadu.

Mean number of CEB to women age 40-49 is observed to be same for Maharashtra (4.25) and Tamil Nadu (4.21). A comparison of mean number of CEB to women age 40-49 and the TFR for three year period preceding the NFHS shows that the TFR is much lower than the CEB in Maharashtra (2.86) and Tamil Nadu (2.48). The extent of decline in fertility could be observed by noticing the difference between CEB and TFR. The difference indicates that fertility has declined substantially in the two states and the decline being more in Tamil Nadu (1.73 children) than in Maharashtra (1.39 children) during the past three decades. The gap between the TFR and CEB for women with different background characteristics indicates that fertility has declined in all the cross-sections of the society in the past three decades and the pace of decline is higher in Tamil Nadu than in Maharashtra. For example, the TFR of illiterate women in Tamil Nadu is 22 per cent lower (more than half child) than their counterparts in Maharashtra. The Muslims of Tamil Nadu have 66 per cent lower TFR (more than one and a half children) than their counterparts in Maharashtra. Even the TFR of scheduled caste women is marginally lower in Tamil Nadu than in Maharashtra.

Trends in ASFRs during the twenty year period preceding the NFHS reveal that although fertility has declined in almost all the age-groups in Maharashtra and Tamil Nadu, its decline is more among women age 25 and above. Further, among women age below 25,

fertility decline is more in Tamil Nadu than in Maharashtra. Trends in ASFRs indicate that fertility has declined greatly during the past two decades in Tamil Nadu and during the past 10 years in Maharashtra.

In general, fertility has declined substantially in the two states and the decline is observed to be more in Tamil Nadu than in Maharashtra. Fertility trends by background characteristics of women indicate that fertility had declined in all the sections of the population in both the states during the last two to three decades. Fertility levels of rural, illiterate, Muslim and SC/ST women are observed to be lower in Tamil Nadu than their counterparts in Maharashtra.

Marital duration specific fertility rates reveal that women in Tamil Nadu complete their childbearing by the 10th year of marriage and women in Maharashtra by their 15th year of marriage. Also women in Tamil Nadu are initiating childbearing later and completing before the women of Maharashtra. Most of the women are becoming mothers at the age of 19 in Maharashtra and at the age of 20 in Tamil Nadu and nearly for the past two decades median age at first birth has not at all increased in Maharashtra, whereas it has registered an increase of 1.5 years in Tamil Nadu. As like higher IMR observed in NFHS for Tamil Nadu (68) than Maharashtra (50.5), pregnancy wastages are 14 per cent higher in Tamil Nadu than in Maharashtra. Childlessness is also higher among women aged 40-49 in Tamil Nadu. Later initiation of childbearing, higher incidence of pregnancy wastage and

childlessness in Tamil Nadu than in Maharashtra could explain, to some extent, the reasons for the existing differences in fertility between these two states.

The increasing acceptance of contraception by the couples is the major cause of fertility decline in many parts of the world. The ever-use and current use of modern methods of contraception by the couples as observed in NFHS are higher in Maharashtra than in Tamil Nadu. Further, in both the states acceptance of modern methods of contraception is higher in rural areas than in urban areas. But acceptance is considerably higher in rural areas of Maharashtra than in rural areas of Tamil Nadu. It indicates that the family planning programme is able to reach more couples in rural Maharashtra than in rural Tamil Nadu. Although the current use is higher in Maharashtra than in Tamil Nadu the pattern of use is more or less similar among women age below 25 in both the states. But current use above age 25 is considerably higher in Maharashtra than in Tamil Nadu, indicating the higher acceptance of contraception by older couples in Maharashtra than in Tamil Nadu. Acceptance of family planning by background characteristics shows that acceptance among illiterate and scheduled caste women of Tamil Nadu are considerably lower than the illiterate and scheduled caste women of Maharashtra. Acceptance of family planning among Muslims of Tamil Nadu is significantly higher than that of their counterparts in Maharashtra.

Current use of contraception is positively related with number of living children in Maharashtra and Tamil Nadu. It is worth noting current use among women with only one child is



about one-fourth in the two states, indicating couples are willing to accept contraception quite early in their married life. Though the current use is higher in Maharashtra than in Tamil Nadu, the timing of initiation of use varies considerably between these two states. There is evidence in NFHS that the family planning programme has been successful in Tamil Nadu by encouraging couple to initiate contraceptive use earlier than the couples in Maharashtra. The results show that, in Tamil Nadu, women with lower parity are much more likely than the women of lower parity in Maharashtra to have started using contraception. The analysis of current use by sex composition of living children shows that the preference for male children is common for the two states. But the data indicate a very strong son preference in Maharashtra than in Tamil Nadu. The proportion of current users with two living children but no living sons is only 28 per cent in Maharashtra but it is 50 per cent in Tamil Nadu. Further evidence of late acceptance of contraception in Maharashtra comes from the analysis of number of living children at first use of contraception. Fifty-two per cent of couples in Tamil Nadu but only 36 in Maharashtra initiated use when they had fewer than three children.

The analysis of fertility preferences shows that higher percentage women want no more children in Tamil Nadu than in Maharashtra, and among currently married women desiring another child, proportion desiring son as their next child is considerably higher in Maharashtra (44 per cent) than in Tamil Nadu (29 per cent). Proportion of women who want no more children

also shows that the desire to have no more children increases with the increase in number of living sons in both the states. But more number of women with lower parity in Tamil Nadu want no more children than in Maharashtra. Also among couples with no living sons desire to have no more children is substantially higher in Tamil Nadu (32 per cent) than in Maharashtra (17 per cent). Mean ideal family size, mean ideal number of sons and wanted fertility rates are also observed to be higher in Maharashtra than in Tamil Nadu. Hence not only actual fertility but also fertility preferences of the couples are on the lower side in Tamil Nadu compared to Maharashtra.

#### CONCLUSIONS

Households covered by NFHS in Maharashtra are better-off in terms of housing condition, landed and livestock wealth and consumer durable items than the households of Tamil Nadu. Maharashtra with higher levels of urbanization and economic development at macro and at household level is expected to have a relatively more desirable demographic features than Tamil Nadu. But households in Tamil Nadu with same level of female education and lower standard living as compared to Maharashtra exhibit a lower fertility than Maharashtra. The major reasons for the prevailing fertility pattern in Maharashtra and Tamil Nadu as observed in this comparative study based on NFHS are discussed below.

Fertility difference between Maharashtra and Tamil Nadu could be partially attributed to differences in the nuptiality patterns

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Fertility difference between Maharashtra and Tamil Nadu could be partially attributed to differences in the nuptiality patterns

reduction. Also the prevailing lower fertility preferences in Tamil Nadu than in Maharashtra led the couples to make use of the available family planning services effectively.

There are arguments in favour of Tamil Nadu's family planning programme that the programme is successful because of strong political support, efficient management and bureaucratic efficiency in implementing the programme (Antony, 1992; Srinivasan, 1995). Though it is true to some extent, we cannot blame Maharashtra's programme for failing to bring down the fertility as fast as Tamil Nadu. In fact, Maharashtra's programme is also as good as Tamil Nadu's, but there are several non-programme factors that are real barriers for speedy reduction of fertility in Maharashtra. The existing low age at marriage and higher preference for sons are the cultural hurdles for achieving lower level of fertility in Maharashtra as that of Tamil Nadu. Also median age at first birth has not at all increased for the past two to three decades in Maharashtra whereas it registered a considerable increase in Tamil Nadu.

Srinivasan et. al. (1991) analyzed the effect of family planning programme inputs (facilities and personnel at the PHC level) on acceptance of contraception in four states, including Maharashtra and Tamil Nadu. They found that though most PHCs in Tamil Nadu had better infrastructural facilities, in terms of personnel it lagged well behind Maharashtra. However, the situation is found to be opposite in Maharashtra where most PHCs had adequate personnel but lagged behind Tamil Nadu in

infrastructural facilities. A multivariate analysis revealed that programme inputs and socio-economic variables explained 20 per cent of variation for the acceptance of sterilization in Maharashtra and only 9 per cent in Tamil Nadu. The low explanatory power of the programme input factors on the acceptance of sterilization in Tamil Nadu than in Maharashtra led the authors to suggest the existence of non-programme factors (strong political support, efficient management and involvement of other government departments in the implementation of the family planning programme) in determining the overall acceptance of family planning.

NFHS household level data show that households in Maharashtra are wealthier than the households in Tamil Nadu. Higher income couples of Maharashtra can afford to support more children than the lower income couples of Tamil Nadu. It is obvious that more wealth needs a son to inherit it. Households in Maharashtra, particularly in rural areas, are owning more wealth (land) than households of Tamil Nadu. Naturally son preference and ability to support more children will be higher in the households of Maharashtra. Roy and Jayachandran (1996) using NFHS data examined the effect of standard of living on fertility in four states. The results for Maharashtra show that standard of living has a significant negative influence on fertility. However, they further showed that there is an interaction between education of mother and her standard of living in affecting the level of fertility. The fertility of women in the higher categories of education (primary and at least middle) and in the high standard

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fertility. In other words, though the poor as a class do not have lower fertility, the poorest among them seem to have lower fertility than the not so poor. Further, though the poorer classes do not have lower fertility than the richer classes, but actually have high fertility, the gap seems to have narrowed. To that extent, a limited pure income effect is seen and the poverty hypothesis supported (p.49). If the poverty explanation is accepted for fertility decline in Tamil Nadu, higher female age at marriage of Tamil Nadu than Maharashtra could also be attributed to poverty and also to some extent prevailing higher dowry practices.

Tamil Nadu and Kerala are the two states relatively successful in India for implementing social security programmes in the unorganized sector (Guhan, 1992; Mahendra Dev, 1994). In the case of protective social security measures these two states seem to have succeeded in reaching sizable proportion of the unorganized poor. Also Tamil Nadu is pioneer in the implementation of the nutrition scheme and protective social security measures (Guhan, 1992; Mahendra Dev, 1994). There are several schemes in Tamil Nadu which are very much beneficial to the poor people (pension to poor widows, destitutes and old aged agricultural workers, unemployment relief, marriage assistance to the daughters of widows, and many others). All these institutional social security measures, rather than the security from the household, might have helped the couples to rethink about the importance of children as a source of security for old age and destitution. The rate of increase of per capita

governments expenditure on social, educational, and public health sectors from 1971-1991 in Maharashtra and Tamil Nadu also shows that the rate of increase in spending in these areas are higher in Tamil Nadu than in Maharashtra (EPW Research Foundation, 1994).

Srinivasan (1995) have argued that social awareness movement started in 1920s by E.V. Ramasamy Naicker (popularly known as Periyar) created an atmosphere favourable to the acceptance of small family norm long before the implementation of the government's family planning programme. His view also supported by others (Antony, 1972; Kishore, 1994; Kulkarni et. al. 1995; Ramasundaram, 1995). Periyar's recommendations among various others includes higher age at marriage for females; increasing the status of women; equality of sexes; contraception; widow remarriage; and small family size. The awareness created by Periyar was translated into action by his followers who came to the power later. Social reforms initiated by Periyar's Dravidian movement and the implementation of Periyar's ideologies by the Dravidian parties which came to the power later, and also ruling the state for the past 25 years, undoubtedly had a far-reaching impact on social development and awareness, thus promoted the small family norm in the society. Moreover Periyar's social awareness movement also challenged the social and political dominance of the Brahmins under British rule. This early undermining of caste system helped to weaken the socio-cultural limitations on upward mobility by the traditional caste system.



There are several other factors that might have also played a crucial role in bringing down the level of fertility in Tamil Nadu than in Maharashtra. These two states with the same level of female education differ with respect to exposure to media. Even with the similar social development, more exposure to media makes the couples to become more aware about the various aspects of life than the couples less exposed to media. Higher exposure to media in Tamil Nadu than in Maharashtra, as observed in NFHS, makes the couples to aspire for decent life thus making them to realize the importance of having smaller families, among other things. Generally people in Tamil Nadu are cinema crazy and many of the public figures, particularly after independence, emerged from cinema. This makes us to accept that people do not take cinema lightly just as a media for entertainment only. FURTHER, most of Periyar's ideals were also spread via cinema through charismatic actors like M.G. Ramachandran and Shivaji Ganesan in the 1950s and 60s. Injection of Periyar's ideals in the cinema in a society which gives more importance to cinema might have shaped the people to some extent to form a smaller family ideals. An analysis of NFHS data for four states (Kerala, Punjab, Maharashtra and Orissa) show that fertility is lower among women who were exposed to the media, and except Maharashtra, this effect is significant in other three states (Roy and Jayachandran, 1996).

Maharashtra is the most urbanized state in India and Tamil Nadu comes third in the level of urbanization. But the composite index developed by Ramachandran (1990) incorporating: (1)

proportion of urban population; (2) rural population served by urban centres; and (3) distance to the nearest town show that Tamil Nadu stands better than Maharashtra with respect to measures 2 and 3. On an average one urban centre serves to a population of 2.82 lakhs in Tamil Nadu and 3.37 lakhs in Maharashtra. Distance to the nearest town is 20.4 Kms in Tamil Nadu and it is 30.6 Kms in Maharashtra. The extent of interaction with the urban area increases when distance between the rural and urban area is less. The composite index of urbanization developed by Ramachandran is highest for Tamil Nadu. Kerala and Maharashtra stand second and fourth respectively. Higher rural-urban interaction in Tamil Nadu is also complemented by its fairly good transport and road facilities than in Maharashtra (See table 1.4). Savitri (1994) using the 1991 census district level fertility data for Maharashtra and Tamil Nadu found that road facilities (percentage of villages with pucca road) influenced the fertility most in Tamil Nadu than in Maharashtra. This rural-urban proximity coupled with good road facilities and resultant continued interaction of the rural-urban people might have greatly changed the perception of the rural people in Tamil Nadu to accept small family norm earlier than the people of Maharashtra.

The labour force participation of females is only marginally higher in Maharashtra than Tamil Nadu. But 1991 census data on labour participation of females in organized sector and NFHS data on proportion of women working for someone else/outside of the

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