FERTILITY DIFFERENTIALS IN INDIA :
AN ANALYSIS OF 1971 CENSUS DATA AND A COMPARISON
WITH 1972 AND 1979 SAMPLE SURVEYS

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I CERTIFY that the dissertation entitled
"Fertility Differentials in India: An
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of the University, is to the best of my
knowledge, a bonafide work and may be placed
before the Examiners for evaluation.

PROF. M.K. PREMI
Supervisor

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.../-

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CHAPTER-I

INTRODUCTION

The need for controlling the population explosion
in our country is greater now than ever before. The
reason for this is the startling revelation from the
1981 Census that the 1971-81 population growth has
remained at a very high level; in fact slightly higher
than the 1961-71 growth rate and is too fast to be
matched by the rate of economic development. Because
of this mis-match whatever gains are made from develop-
ment projects are, by and large, neutralized by the
increased demand of food and various goods and services
by the growing population.

The phenomenon of rapid population growth is a
world problem, but it has affected more severely nearly
seventy percent of the world's population living in the
developing countries. Though the problem was created
by rapid and unprecedented declines in mortality in
developing countries during the last three to four
decades, its continuation depends upon whether or not
the declines in mortality are followed by corresponding
declines in fertility in the coming years as suggested
by the demographic history of the developed countries.

The haunting problem of population in the developing
nations, as in India, therefore now revolves around
existing levels of fertility and prospects of its
decline in the near future.

I. POPULATION GROWTH IN INDIA

India is the second most populous country in the
world. (According to the 1981 Census the population of
India is about 684 million. The population of the
country according to the expert committee on popula-
tion projections set up by the Planning Commission in
1976 was expected to be about 672 million in 1981,[1]
Today India with 2.4 per cent of world's land area
contains more than 15 per cent of population which
exceeds the sum total of the population of the United
States, the Soviet Union, and Indonesia which are
world's 3rd, 4th and 5th most populous countries
respectively.) The density of population in India
(excluding Assam, and Jammu and Kashmir) was 221 per-
sons per square km. according to the 1981 Census.

1.	Government of India, Ministry of Health and
Family Planning, Department of Family Planning,
Family Welfare Planning in India, Year Book,
1978-79, p.27.

(Table-1 shows the population growth and vital
rates of India since 1901. The population growth
of India can be sub-divided into three distinct
periods: (a) Prior to 1921, (b) 1921 to 1951 and (c) From
1951 to 1981. In the eighty years, India's population
increased by 187 per cent. The first twenty years
(1901-21) witnessed a net addition of only 5.4 per
cent or 12.9 million persons. The next thirty years
1921-51 show an increase in the population by 43.7
per cent or an addition of 110 million people. In the)

Table-1: Population Growth and Vital Rates of India,
1901-1981

Year	Population in millions	Average annual growth % during preceding periods	Vital Rates	
			Birth Rate	Death Rate
1891-1901	238.4	-1.59	45.8	44.4
1901-1911	252.1	0.56	49.2	42.6
1911-1921	251.3	-0.40	48.1	48.6
1921-1931	279.0	1.06	46.4	36.3
1931-1941	318.7	1.34	45.2	31.2
1941-1951	361.1	1.26	39.9	27.4
1951-1961	439.2	1.98	41.7	22.8
1961-1971	548.2	2.24	41.2	19.0
1971-1981	683.8	2.24	33.3	14.2

Source: 1. Family Welfare Programme in India: Year Book
1978-79, Government of India, Ministry of
Health and Family Welfare, New Delhi, p.36.

2. Census of India 1981, Provisional Population
totals series 1, India, paper 1 of 1981,
Office of the Registrar General and Census
Commissioner.

following three (1951-1981) decades, India experienced
an explosive population growth. During 1971-81 the
population of India increased at an annual rate of
2.2 per cent.

Population growth prior to 1921 was sporadic
and almost stationary. Both birth and death rates
were high and the increment was largely controlled
by fluctuating mortality. Population growth was
almost negligible varying between a small loss and
small gain depending on the severity of famines,
epidemics and other catastrophies which periodically
accelerated the existing mortality. So startling was
the difference between the growth patterns prior to
and after 1921, that the Census Commissioner of 1951
called as the year of "Great Divide". The thirty
year period (1921-51) saw rapid population growth,
while the increase in the population after 1951 could
be called explosive - 78 million were added to the
Indian population between 1951 and 1961, 109 million
between 1961 and 1971 and another 136 million by 1981.
With very little and late reduction in the birth rate
in India, this only shows the impact of mortality reduc-
tion both among infants and older persons. The
rapid rise in population growth rate after 1951 is

mainly due to a reduction in mortality and a large population base. Eradication of malaria and immunization against many killer diseases; and availability of curative and preventive medicines accelerated the decline in mortality. In contrast fertility rates remained more or less stable thereby increasing the rate of population growth.

Now India is at a crucial stage of demographic transition. Moving from the first stage when both fertility and mortality were high in India, she has embarked upon the second stage of continued high fertility but declining mortality which is responsible for India's current high and accelerating population growth. If the theory of demographic transition based on the experience of the presently developed countries is applicable to developing countries like India this will continue till the country enters the third stage of declining fertility, while mortality still continue to decline. In accordance with the demographic history of the developed countries, it may be anticipated that demographic stability will be regained with fairly low rates of population growth during the fourth stage when both fertility and mortality are more or less stabilized at low levels. The crucial question now is how far India

India is on her way to the third stage of declining
fertility? Or, are there any symptoms of a change
towards declining fertility which has either already
begun or is just about to begin in the near future and
what would be likely future trends?

In this context the future of fertility pattern
has great importance. Important questions such as
these which are crucial to planning for the future
have not been answered satisfactorily, because of
paucity of data. Though complete answers are not
possible, the current study of "Differential Fertility
in India" hopes to provide some clues in that direction.

II.   BASIS OF DIFFERENTIAL FERTILITY AND REVIEW OF
        LITERATURE

Implicit in discussions of fertility patterns
in the expectation that differences in fertility will
exist among social strata. This expectation is based
upon the observation of differences among social strata
in physical factors and cultural practices or a combi-
nation of the two, which are assumed to affect the fre-
quency of their exposure to the risks of pregnancy.
The way in which the non-physiological factors affect
fertility in any society may be explained on the basis

of ideally acclaimed model devised by Kingslay Davis and Judith Blake.[1] The schematic representation of the model is shown in figure 1. The arrows in figure-1 represent the direction of causation but they are not claimed to be uni-directional nor is the model considered to be exhaustive. The model works backward from measures of fertility through intermediate variables to a much wider range of social, demographic and other environmental factors that ultimately effect fertility. The model envisages that any factor - environmental, socio-economic, biological, physiological or cultural which affects fertility, must go through a series of 'intermediate' variables. Davis and Blake have identified eleven such variables and provided a convenient classification of them as shown in figure 1.

It is presumed that any social economic a cultural factor which effects fertility must do so through and only through one or more of the intermediate variables as shown in the figure. In the present study, only the more important of the "intermediate variables" are

1.   Davis, Kingsley., and Judith Blake., "Social
      Structure and fertility: An Analytical Framework",
      Economic Development and Cultural Change, 4(3),
      pp.211-235, 1956.

Figure 1

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                                            INTERMEDIATE VARIABLES

  ┌──────────────┐        I.  Intercourse Variables
  │  Mortality   │
  │  Rates       │            A.  Governing formation and dissolution of
  └──────────────┘                unions in reproductive period
     ┌──────────────┐                 1.  Age of entry into unions
     │ Norms about  │                 2.  Proportion of women never entering
     │ family size  │                     unions
     └──────────────┘                 3.  Reproductive period spent after or
                                          between unions
  ┌──────────────┐                        (a) due to divorce, separation,
  │ Social and   │                            desertion
  │ Economic     │                        (b) due to death of husband
  │ structure    │
  └──────────────┘            B.  Governing exposure to intercourse within
     ┌──────────────┐             unions
     │ Norms about  │
     │ intermediate │                 4.  Voluntary abstinence
     │ variables    │                 5.  Involuntary abstinence (from impotence,
     └──────────────┘                     illness, temporary separations)
                                       6.  Coital frequency

                            II.  Conception Variables

                                       7.  Fecundity and infecundity as affected
                                           by involuntary causes
                                       8.  Use or non-use of contraception
                                           (all means)
                                       9.  Fecundity or infecundity as affected
                                           by voluntary causes (sterilization,
                                           etc.)

                            III. Gestation Variables

                                      10.  Foetal mortality, voluntary
                                      11.  Foetal mortality, involuntary
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ENVIRONMENT

FERTILITY

taken up for discussion and these are considered
to be largely responsible for determining the levels
and differentials in fertility. For example, among
the various variables determining the formation and
dissolution of marital unions, the female age at
Marriage and the proportion of those who never married
in the reproductive age group are important, in the
sense that they have a major share in determining
fertility levels and differentials.

REVIEW OF LITERATURE

Differentials infertility by various socio-eco-
nomic characteristics have been reported in many stu-
dies. However, some such studies are typically local
in character and the samples of different sub-groups
are not always comparable. Therefore the present review
is limited to a few fertility studies with the emphasis
on covering different socio-cultural differentials of
fertility in India.

(a) Religion and Fertility

Kingslay Davis[1] calculated the child-women ratio
(children 0-4 per 1000 women aged 15-39) from census
data of India and took the average of the ratio for

1. Kingslay, Davis., The Population of India and Pakistan, Princeton University Press, New York, 1958, p.80.

the three consequive years: 1911, 1921 and 1931.
He found the child women ratio for different religi-
ous groups in the following order: Sikhism (841),
Tribals (808), Islam (770),Christianity (741),
Buddhism (698), Hinduism (678), Jainism (624) and
Parsis (388) respectively. Visaria[1] has mentioned
that during 1901-1931 the marital fertility of
muslim women was about 5 per cent to 9 per cent
higher than that of Hindu women. Such differentials
were due to indirect and institutional factors and
were not due to deliberate fertility control or
contraceptive use. The Mysore Population Study[2] con-
ducted in 1951-52 reveals that ever married muslim
women had borne on an average a large number of
children than Hindu women as follows: for muslim women
5.7 in Bangalore city, 6.7 in the towns and 5.0 in the
rural areas, for the Hindu women the corresponding ave-
rages were 5.4, 5.2 and 4.8 respectively. The average
for christians who were well represented only in
Bangalore city was less than that for the Hindus (4.7)

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1. Leela Visaria, "Religious Differentials in fer-
    tility", in Ashish Bose etc.al., (eds.), Popula-
    tion in India's Development, 1947-2000,
    Vikas, Delhi, 1974, p.371.

2. United Nations, "The Mysore Population Study",
    New York 1961, p.119.

children. In the study of Punjab villages Jain[1] has
shown that the average number of children ever born
per couple among the four main religious groups namely
Hindus, Sikhs, Muslims and Christians was 4.84, 4.98,
5.12, and 5.58 respectively. Similarly the average
number of survivors among the groups was found to be
3.17, 3.48, 3.39 and 3.93 respectively. Though muslims
turn out to have a high fertility than the sikhs but
the sikhs have a greater proportion of survivors so
that their effective fertility is greater. A study of
central India during 1958 by Driver[2] also reveals some
variation among religious groups infertility. The mean
number of children ever born was reported to be 4.8 for
Buddhists, 4.5 for both Hindus, and Muslims and 4.3 for
'other religions' (Jains, Sikhs, Parsees, and christians).
When differences in present age were, controlled, the
weighted means were 4.1 for 'other religions', 4.9 for
Buddhists and 4.5 for Hindus and 4.6 for muslims. The
16th round of National Sample Survey[3] (1960-61), urban

1. S.P. Jain, Relationship Between Fertility and
    Economic and Social Status in the Punjab,
    Lahore: Punjab Board of Economic Inquiry,
    Publication no.64, 1939, pp.39-46.

2. Driver, E.D., Differential Fertility in Central
    India, Princeton University Press, Princeton,
    1963, p.38.

3. NSS 16th Round, July 1960-June 1961, no.116,
    New Delhi, 1967, p.32.

data indicate that the completed fertility of muslim
women wasabout 17 per cent higher than that of Hindu
women. Because of somewhat higher mortality among
muslim children the difference in the number of surviving
children between muslim and hindu women was about 15
per cent. Similarly, the 18th round of NSS[1] (1963-64)
rural-urban data indicate that the average number of
children born was higher among muslim women than the
Hindu in every marriage duration. The difference in
completed fertility of Hindu and Muslim women was however
found to be about 6 to 7 per cent. The 19th round NSS
data (1964-65) on marital fertility by major religious
groups indicate that the total marital fertility of the
Hindus and muslims in the rural areas was rather same.
However muslim fertility was found to be somewhat higher
than that of Hindus in the urban areas; the difference
in the total marital fertility being about 5 per cent.
The Lucknow Study[2] which was conducted in 1966-67 by
Hussain differs in its findings with regard to religious
differentials in fertility from most of the other rele-

1.   NSS Eighteenth Round, February 1963-January,
      1964, no.175, New Delhi, 1970, p.5.

2.   J.Z. Hussain, "An Urban Fertility: A Field Report
      on the City of Lucknow", Demographic Research
      Centre, Department of Economics, Lucknow Univer-
      sity, Lucknow, 1970.

vant studies conducted in India. The estimated general
fertility rates by religion indicate that the fertility
of Hindus was higher by about 16 per cent than that of
muslims. Fertility was found to be highest among
sikhs and lowest among christians. However the diffe-
rence in the general fertility rate could partly be due
to the difference in Age-sex marital status composition.
Rele and Tara Kanitkar[1] have estimated (1965-66) that the
standard average number of living children in Greater
Bombay was 2.65, 2.95 and 2.80 for Hindus, muslims and
christians respectively. (A study (R.P. Goyal) conducted
by the Demographic Research Centre of the Institute of
Economic Growth[2] in 1969-70 indicates muslims were found
to have the highest fertility level.) Accordingly,
age standardised general marital fertility rate for
Hindus, Sikhs and Muslims was 173.0, 173.8 and 242.3
respectively. Similarly total marital fertility rate for
these three religious groups was 5.19, 5.19, and 7.0

1. J.R. Rele and Tara Kanitkar, "Fertility Differen-
    tials by religion in Greater Bombay: Role of Ex-
    ploratory Variables" in the Economic and Social
    Support for High Fertility, edited by L.de,
    T. Ruzicka, A.N.U., Canberra, 1976, pp.271-303.

2. R.P. Goyal, "Fertility and Family Planning in
    Urban Delhi", in, Population in India's Develop-
    ment 1947-2000, edited by Ashis Bose, P.B. Desai,
    Ashok Mitra and J.N. Sharma, Vikas Publishing
    House, Delhi, 1974, pp.352-360.

respectively. (In the SRS[1] (Sample Registration System)
sub sample survey (1972), Muslim fertility was found
to be higher then that of Hindus and Christians, both
in rural and urban areas. TMFR among muslims and
christians was 6.8 and 5.8 in urban areas and 7.6 and
6.3 respectively in rural areas. The TMFR among the
Hindus in urban and rural areas was 5.8 and 6.8 respec-
tively. Similarly the Age-specific marital fertility
rate at each age among muslim women is greater than
among Hindu women. Among christians ASMFR is higher
than among muslims at each age below 27 years but lower
at each age thereafter.

(b)   Rural-Urban Residence and Fertility

Kingsley Davis[2] observed that the average number
of births per 1,000 women for three different cities
and sub-groups were in the following order. Bombay and
their sub-province 95 and 173, Calcutta 94 and 134,
Madras 167 and 155. He also found that the child-women

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1.   Office of the Registrar General and Census
      Commissioner, Fertility Differentials in
      India, 1972. Results of the Fertility Survey
      in a sub-sample of SRS (1972) New Delhi, 1976,
      p.11.

2.   Kingsley Davis, op.cit., p.71.

ratio in Calcutta, Bombay, and Madras was 564, 447,
504/1000 women respectively and was 754, 766, 685/1000
women in their respective suburbs. The Mysore Popula-
tion Study[1] reveals that the national fertility rate
in the sample from Bangalore city was 199 which was
considerably lower than the GMFR of 237 for the
sample from rural areas. The marital fertility rate
of the sample from towns of 10,000 to 25,000 population
was 251 higher than either. A special report of the
1951 census[2] of India provides the following averages
for urban and rural women respectively in various
regions who were still married at ages 45 and over,
6.4 and 6.6 in Travancore and Cochin, 6.3 and 6.1 in
Eastern Madhya Pradesh, 6.4 and 6.6 in other regions
of Madhya Pradesh. Driver[3] shows that the mean number
of children ever born were 4.4 in the city, 4.5 in the
towns and 4.6 in the villages. When age differences
were controlled weighted means were same for city and
village and the average for town rose from 4.5 to 4.7.

1. The Mysore Population Study, op.cit., p.86.

2. A.J. Coale and E.M. Hoover, Population Growth and
Economic Development in Low-Income countries,
Princeton: Princeton University Press, 1958,
pp.44-48.

3. E.D. Driver, op.cit., p.43.

The/round of NSS[1] data show that the rural-urban /19th
general fertility data were 182 and 170.1 respec-
tively. The differentials were however wiped out
by the refined measures of marital fertility; the
GMFR was 211 for rural and 216 for urban women. The
Sample Registration Scheme[2] (1972) reveals that the
total fertility rates for rural and urban areas were
5.8 and 4.3 respectively in 1972. The total marital
fertility rate was also higher for rural areas 6.8
than for urban areas (6.0). The SRS data of 1979[3]
indicate higher fertility in rural areas than in
urban areas. The GMFR was 137 in rural areas and 104
in urban areas. GMFR was 176 in rural and 148 in
urban areas. TMFR was 4.6 in rural and 3.1 in urban
areas and TMFR was 5.6 in rural and 4.7 in urban areas
respectively.

(c)   Age at Marriage and Fertility

In the Mysore Population Study[4] it was observed
that females who married between 14 and 17 years gave

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1.   NSS 19th Round, 1964-65, Table-7, op.cit., p.7.

2.   ORGC, Fertility Differentials in India, 1972,
op.cit., p.16.

3.   ORGC, Levels Trends and Differentials in Fertility
1979, Ministry of Home Affairs, New Delhi, 1981,
p.5.

4.   UN Mysore Population Study, op.cit., p.119.

gave birth to 5.9 children, while those who married between 18 and 21 years gave birth only 4.7 children. Majumdar[1] found in Kanpur Survey that women married upto age 15 gave birth to 6.9 children, while those who married after the age 19 gave birth to 6.0 children. Driver[2] showed that in Central India the mean number of children ever born was 5.3 for those who married before reaching 13 years of age, 4.1 for those who married between 13-17 years of age and 5.3 for those who married at the age of 18 years or older. According to Agarwala[3] if the proportion of currently married women in India changes to that obtained in Kerala corresponding to the marriage age of 19 to 20 years the reduction in the birth rate would be of the order of 29 per cent. Using the Calcutta and Singur data Talwar[4] calculated that/the age of 15, 40 ⌊at per cent of the married women were not found and by the age of 18 and 19, 9 per cent were not fecund. Basava-rajappa and Belvalgidad[5] estimated that the maximum

1.   Majumdar, D.N., Social Contours of an Industrial City, Asia Publishing House, Bombay, 1960, p.161.

2.   E.D. Driver, op.cit., p.65.

3.   S.N. Agarwala, "Raising the Marriage age for Women, a means to lower the birth rates", Economic and Political Weekly, 24 December, 1966.

4.   P.P. Talwar, "Adolescent Sterility in an Urban Population", Human Biology, September 1965, 37(3), p.257.

5.   K.G. Basavarajappa and M.I. Belvalgidad, "Changes in age at marriage of females and their effect on the birth rate in India", Eugenics Quarterly, vol.14, no.1, March 1967, pp.14-25.

reduction in the birth rate by raising the age at marriage (average or minimum) to 19 or 20 years may not exceed 10 per cent. Saxena[1] in his study of rural Utter Pradesh has shown that there are slight increase in the fertility upto age at marriage of 17 years. The interval between age at effective marriage and first birth decreases with each year of increase in age at marriage based on his cohort analysis. Saxene reports that the reproductive span (being the average of the difference between the first birth and last birth) is reduced from 24.8 years for marriage at less than 12 years to 23 years for marriage at the age of 16 years and above. Ram[2] in a recent study (1972) estimated that an increase in the age at marriage of Indian women from 16.1 in 1961 to 19.2 in 1981 would lead to a reduction of 12 per cent and 6 per cent in the general fertility rate and total fertility rate. In the SRS[3] sub-sample of 1972, women who married at ages below 18 years, between 18 to 20 years and 21 years and over, TMFR was

1. G.B. Saxena, "Age at Marriage and Fertility: A Sample Study in Rural Utter Pradesh", Artha Vinjana, March 1962, 4(1), p.52.

2. Ram, Bali., "A Note on the Change in Marital Status Distribution and its Impact on Fertility: A Case Study of India", International Journal of Sociology of the Family, March 1972, vol.2, no.1, pp.54-63.

3. ORGC, Fertility Differentials, SRS, op.cit., p.20.

6.9 and 6.7 and 5.2 respectively in rural areas. In
urban areas the corresponding figures were 6.4, 5.5
and 4.9 respectively. The SRS[1] data of 1979 indicate
that women who married at the age of 18 and below,
between 18 to 20 years and 21 years and over TMFR was
5.4, 5.0 and 4.7 respectively in rural areas. In
urban areas the corresponding TMFR was 4.6, 4.0 and
3.5 respectively.

Most of the studies conducted in different parts
of India bring out the differences in fertility behaviour
by rural-urban residence, religion and age at marriage.
The major findings of these studies show that the ferti-
lity of Muslims has been generally higher than Hindus;
the fertility of rural women is higher than urban women,
and fertility decreases with increase in age at marriage.
Only a few study seems to have been attempted to isolate
the specific effect of these socio-cultural characteris-
tics after controlling the dfect of certain others which
may explain the fertility differences among the states.
Hence a more systematic work is needed to study the role
of religion, age at marriage and place of residence to
understand differentials in fertility among various
states in India.

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1. ORGC, Levels Trends and Differentials in Fertility
   1979, op.cit., 0.7.

III. IMPORTANCE OF THE STUDY OF DIFFERENTIAL FERTILITY

Study of fertility patterns among the different groups in society is one of the important areas of research on fertility. During the 1930s declining fertility in the Western countries was a matter of much concern to demographers.[1] The main item of fertility research at that time was the identification of those groups for which fertility was low and thus to obtain some clues to guide the policy regarding fertility encouragement.[2] Such kind of studies were also necessary in order to find out how the small family ideals had diffused in different strata of western societies.

In the present situation of India and other developing countries where excessive population growth is the most important pre-occupation of demographers, planners and policy makers, the identification of the groups of higher fertility, along with the underlying causes, would be of great utility from the point

1.   John Hajnal, "The Study of Fertility and Reproduction: A Survey of Thirty Years", Thirty Years of Research in Human Fertility. Retrospect and Prospect, New York: Milbank Memorial Fund, 1959, p.16.

2.   Ralph Tomlinson, "Population Dynamics," New York: Random House, 1965, p.173.

of view of the family planning programme. It is good
for planners to see where exactly the impact of family
planning is greatest and to locate groups which would
need greater attention. The knowledge about fertility
in various groups of population might in addition help
the demographers in forming some idea regarding the
proportions of different groups in the population in
future. Moreover, "differentials between sub-groups
supply clues to future trends for the entire groups.[1]
The groups for the study of differential fertility
are usually differentiated by variables like rural-
urban residence, educational attainment of husband
and wife, economic status of the family, occupation
of wife etc. Besides, some ascribed qualities like
place of birth, race, religion and language are also
important factors in the study of differential fertility.

In this study the following social, and cultural
factors are considered for the analysis of differential
fertility in India on the basis of data collected in the
1971 Census on births during the previous year among
currently married women.

1. C.V. Kiser and P.K. Whelpton, "Social and Psycho-
logical Factors Affecting Fertility", vol.V;
Milbank Memorial Quarterly Fund, July 1958,
XXXVI, no.3, pp.1325-26.

2. J.R. Rele and Tara Kanitker, "Fertility and Family
Planning in Greater Bombay", International Institut
for Population Studies; Bombay, 1980, p.68.

(a) Rural-urban residence and fertility.

(b) Religion and fertility.

(c) Educational attainment and fertility.

(d) Age at marriage and fertility.

IV.   DATA FOR FERTILITY ANALYSIS

There are three important sources of information on fertility in India, namely:

(1) The vital Registration or Civil Registration system,

(2) Population Censuses, and

(3) Sample Surveys (NSS and SRS).

1.   Vital Registration System

The Vital Registration System which is also known as civil registration system is an important source for studying dynamics of population. The system of registration of vital events was introduced in India by the British more than a hundred years ago. The registration of Births and Deaths Act, passed in 1969, extends to the whole of India and makes the registration of births, still births, and deaths compulsory. Failure to register such an event is punishable under the Act.[1] Every year

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1.   Office of the Registrar General, India, "Registration of Births and Deaths in India", paper presented at the ESCAFE Seminar, on Civil Registration and Vital Statistics, 1968, p.2.

the Registrar General of India publishes a volume,
<u>Vital Statistics in India</u>, in which registered data
of births and deaths for the states and union terri-
tories are presented. From the vital registration
system information is available on the number of
registered births in each calender year. Along with
this information, ancillary information on the follow-
ing items is also available from this system: the sex
of the baby, order of birth, religion of parents, their
occupation, their place of residence etc.

(2) <u>Census</u>

In the national census of a country sometimes a
direct question on "number of children ever born" is
asked of ever married women and the answers to this
question provide the basis for information on fertility.

Questions on fertility were included in the census
for the first time in 1931. The sample of respondents
drawn from the 1931 census for the purpose was unsatis-
factory and the data were considered unreliable. The
1941 census questions on fertility were more useful,
but due to war time stringency, the tabulation was very
restricted in a number of states. In the 1951 census
two questions on the number of children ever born and

surviving were asked in Bihar, MP and Travancore and
Cochin and also in West Bengal on a sample basis.

Though no attempt was made in 1961 census to
collect data on fertility along with census enumeration
some data on fertility of currently married women were
collected in the 1971 census. The individual slip for
this census canvassed two questions: (a) age at marriage
and (b) whether a child was born during the last one year
This information was elicited from currently married
women only. A ten percent sample of the slips was selec-
ted linear systematically with a random start from the
individual slips relating to the rural parts of a tehsil/
anchal/police station. In urban part of the district, a
20 per cent systematic sample of the individual slip was
selected with a separate random start. The above sample
size was adopted in all the states, except in the case
of Himachal Pradesh, Jammu and Kashmir, Manipur, Megha-
laya, Nagaland, Sikkim, Tripura, and all the union
territories where data were processed on full count
basis.

In the 1981 census information on fertility has
been collected on sample basis from 20 per cent sample
of enumeration blocks. Questions from all ever married
women were asked on: (a) age at marriage, (b) number of

children surviving at present, and (c) number of children
ever born alive. Currently married women were asked
whether any children born alive during the last one year.

Another important source of information on fertility is the fertility Survey, conducted by the NSS.

(3)   The National Sample Survey

The National Sample Survey canvassed a detailed
schedule on fertility and mortality in its 16th round
(1960-61) in Urban India among ten per cent of the
surveyed house holds. In such a survey information
on events accounting to the members of the sample house
holds during the 12 months preceeding the inquiry were
collected. The NSSO conducted a comprehensive survey
of population, fertility, family planning and mortality
in its 18th round 1963-64, but vital rates derived from
that round have been found to be grossly under-estimates.
Results of the various rounds of the NSS have also
suffered from substantial recall bias.

In order to have regular and reliable estimates
of birth and death rates at least at the state level,
the office of the Registrar General and Census Commi-
ssioner in 1964 introduced a pilot scheme of sample
registration in the rural areas of selected states.

Later the scheme was extended to cover both rural and
urban areas in all most all the states and union
territories. The SRS provides half-yearly and early
estimates of vital rates and other measures of ferti-
lity and mortality at the national and state levels
that are considered to be sufficiently reliable for
most practical purposes; but they suffer from some
unavoidable under count of events which can be put
roughly at 5 per cent on the basis of some intensive
enquiries on the performance of the local registrers
and supervisors.[1] A comprehensive survey was brought
out by the Office of the Registrar General, India in
1972 which provides basic data on fertility differen-
tials at the state and national level. Information on
detailed fertility history of all ever married women
in the house hold was collected from all SRS villages
and urban blocks. The selection of household within each
SRS sample blocks was done by taking a 25 per cent syste-
matic sample of households with a random start. In the
wake of the International Year of the Child, 1979, the
Office of the Registrar General, India, conducted a
survey on infant and Child Mortality. This survey also
collected information on fertility in about 3,700 units

1. M.K. Premi, Demographic Situation in India,
   EWPI, Hawai, Honolulu, 1982, pp.37-43.

of SRS along with the regular SRS half-yearly survey.
The selection of household within each SRS sample
blocks was done by single and two stage stratified
sample design with a random start.

DATA BASE FOR THE PRESENT STUDY

Recently results presenting the all-India picture
with respect to fertility of currently married women
among different social groups along with their different
socio-cultural characteristics have been published in
1971 Census (Social and Cultural Tables Series I, part-
IIc-iii, vol.I & II), by Office of the Registrar General
and Census Commissioner, India. Here an attempt is
made to use these data which are available of state
level to investigate whether there are fertility diffe-
rentials among the different sub-groups of populations
(currently married women who are differentiated by:
Religion, Education, Rural/Urban residence and Age at
Marriage) of India.

Data were collected in the 1971 Census from all
currently married women with regard to their present
age, age at marriage, religion and educational level,
and whether they had given birth to any live child
during the one year preceeding 1st April, 1971. However,

the marital fertility indices which would be derived
from the question on the births during the preceeding
twelve months may suffer from certain limitations.
Apart from the under estimation error, a few content
error may also be present in the data. Important
among them is the quality of age reporting. Age
reporting suffers from digital preferences and other
age biases.[1] The grouping of ages in quinquennial
age groups does not remove these deficiencies
although they get reduced to some extent. Due to
omission of births during reference periods, the ana-
lysis of marital fertility differentials would not be
effected much if the extent of under-enumeration is
the same for all the categories under consideration.
It may however under-estimate the level of fertility
for all the groups. In the present study the following
four states namely, Manipur, Meghalaya, Sikkim and
Tripura were omitted due to small sample size.

V.   OBJECTIVE OF THIS STUDY

The main objectives of this study are: (1) To
assess the quality of census data on fertility.
(2) To determine whether the number of children ever

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1.   Census of India, 1971, "Fertility Tables", paper
      2 of 1977, series-1, India, ORGC, New Delhi,
      1977.

born (currently married women) varies among women
who are differentiated by place of residence (Rural/
Urban), Religion, Age at Marriage and educational
attainment. (3) To study whether the differences or
similarities in fertility of various sub-groups are
related to their age distributions; (4) To study the
effect of religion on fertility in various states after
controlling for variations in rural-urban residence,
educational states, and age at marriage, and (5) To
study the effect of increase in age at marriage on
marital fertility by controlling for such variables
as rural-urban residence, educational status and
religion.

VI.   HYPOTHESES

Keeping in view the above objectives, the follow-
ing hypotheses are examined by using marital fertility
rate as the dependent variable.

1. Urban women have low fertility than rural
   women.

2. Religious differences in fertility are
   existing among both rural and urban women.

3. Literate women have low fertility rates,
   but religious differences in fertility
   existing even for highly educated women.

4. Female literacy plays negative effect on
   age at marriage of women and upon their
   levels of fertility.

5. Fertility is decreasing with increase
in age at marriage. Religious diffe-
rences existing even with increase in
age at marriage, that is even at higher
age at marriage the differences are
likely to persist.

VII. METHODOLOGY

For this study, the fertility performance of
currently married women are taken into account. Here
an attempt is made to use the 1971 census data with
respect to fertility of currently married women by
controlling their socio-cultural characteristics.

The following data are used to examine the
fertility differentials among currently married women
in India (married only once): (a) Distribution of
currently married women and the related births during
the last one year by rural/urban residence, present
age, and at at marriage (India's state level).
(b) Distribution of currently married women and the
related births during the last year by religion, edu-
cational groups, present age, and age at marriage
(India: State level - Rural/urban). (c) Distribution
of currently married women and the related births
during the last year by education, present age, and
age at marriage (India: State level - Rural/Urban).
(d) Data from 1972 and 1979 (SRS Surveys) are also

used for comparison and to determine the trends of fertility during 1971, 1972, and 1979.

Measurement

"Marital Fertility" is the basic measurement for this study. The following indices have been used to measure the marital fertility of currently married women (married only once).

1. Age specific marital fertility rate.
2. Total marital fertility rate.
3. General marital fertility rate.

Maps and Graphs

The regional variation in GMFRs and TMFRs are represented in the maps for rural and urban areas separately.

ASMFRs are ploted in graphs for different states (Rural/Urban) according to different variables.

PLAN OF STUDY

Chapter two presents the levels and trends in crude birth rate and marital fertility rates. The analysis of the 1971 Census marital fertility rates

were compared with 1972 and 1979 SRS sub-sample surveys.

Chapter three deals with the effect of religion on fertility, after controlling the variables like place of residence, educational status and age at marriage.

Chapter four discusses the effect of increase in age at marriage on fertility by place of residence, age at marriage, educational status and religion.

Chapter five summarizes the analysis and brings out the conclusion and suggestion.

CHAPTER-II

CHAPTER - II

LEVELS AND TRENDS IN FERTILITY

Fertility of a woman is indicated by the number of children she bears during her entire reproductive life. The number of births are influenced by the social conditions besides biological and cultural factors. A low birth rate is an evil, as it leads to a declining population or a zero growth rate, which in turn, leads to decrease in man power and low economic growth, as had occurred in France. A high birth rate too is an evil, if it overburdens the productive power and leads to a condition of persistent poverty. The way in which a community grows whether by high birth rate and high death rate or by a moderate birth rate and death rate is to some extent an indication of the stage of civilization in which the community finds itself. This section presents the levels and trends of fertility in India and its states during the period 1901-71 and 1971-81 respectively.

I. CRUDE BIRTH RATE

The registered data in India do not give accurately the current level of birth rate because of under regis-

tration of the vital events. Indirect methods such
as the reverse survival and quasi-stable population
techniques are used for estimating the birth rate
from the census age returns. The Census Actuary
estimates obtained by the 'reverse survival' and
differencing method show a birth rate of 45.2 for
1931-41, 39.9 for 1941-51, 41.7 for 1951-61 and 41.1
for 1961-71 (Table-2). The corresponding estimates
for the four conseqcutive decades obtained by the
quasi-stable population method are 46.2, 43.1, 40.4
and 40.0.[1] During the decade 1901-11, the birth rate
was 49.2, since then it has shown a declining trend
as is clear from table-2.

Table-2: Decadal Birth Rates: India -
1901-1971

Decade	Birth Rate
1901-11	49.2
1911-21	48.2
1921-31	46.4
1931-41	45.2
1941-54	39.9
1951-61	41.7
1961-71	41.7

Note: The estimates for 1951-61 are based
on the 'differencing method; all others
are based on the reverse survival method.

Source: ORGC, India, "The Population of India",
1974 World - Population Year, CICRED
Series, New Delhi.

1. C.B. Mamoria, "Social Problems and Social Disorgani-
sation: Human Fertility in India", 1981, p.322.

The recent estimates of the Sample Registration System indicate that the birth rate was 38.9 in 1971 and around 33.3 in 1981. According to the Sample Registration bulletin of June 1983,[1] the combined crude birth rate for all India fell from 36.9 per thousand in 1971 to 33.3 in 1981 or by 3.1 points (Table-3).

Table-3: Birth Rates Estimated by the SRS, 1971-81 Rural and Urban India

Year	Birth Rate (Total)[a]	Rural	Urban
1971	36.9	38.9	30.1
1972	36.6	38.4	30.5
1973[b]	34.6	35.9	28.9
1974[b]	34.5	35.9	28.4
1975	35.2	36.7	28.5
1976	34.4	35.8	28.4
1977	33.0	34.3	27.8
1978	33.3	34.7	27.8
1979	33.1	34.3	28.5
1980	33.3	34.6	28.1
1981	33.3	34.8	27.3

Note: (a) The aggregated estimates for India excludes Bihar and West Bengal because the SRS work in these two states has not proceeded satisfactorily.

(b) The half-yearly survey for the period, July-December 1973 was postponed and combined with the half-yearly survey for January-June 1974. Supervision of the combined survey was also suspended. These changes might have affected the estimates for 1973 and 1974.

Source: Registrar-General India, Sample Registration Bulletin, vol.XVII, no.1, June, 1983, p.2.

1. Registrar General of India, SRS Bulletin, vol.XVII, no.1, June 1983, New Delhi.

The sample registration data of birth rates and death
rates are also not perfect and suffer from a certain
amount of under estimation judging from the actual
growth in population during 1971-81; but they constitute
the best available data on the subject. Table-3 shows
clearly the decline in birth rate from 1971-81.

As against this, the fall in birth rates of indi-
vidual states from a three year moving average of 1971-
73 (centered at 1972) to that of 1979-81 (centered at
1980) varied from a high of 4.5 points in Kerala and
Punjab to a low of 1.0 in Jammu and Kashmir (figures
are not available for West Bengal). Table-4 shows a
continuous decline of fertility in both rural and urban
areas among various states, except Bihar. In both rural
and urban areas Bihar shows an increase of CBR during
the period 1977-81. The increase in CBR was from 32.3
in 1971-73 (three-year moving average) to 38.4 in
1979-81 or 6.1 points.

It appears from Table-4 that the states could be
classified into four fertility groups of low, medium,
high and very high* group of CBR.

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* The South and South-Eastern part of coastal regions
of India (Kerala, Tamil Nadu, Karnataka, and Maharashtra)
have low fertility rates continuously during this decade.
The medium fertility group comprises the North-East and
Western parts of India which have medium fertility. The
northern regions of India forms a high fertility group
which comprises UP, Bihar, MP, Rajasthan and Haryana during
this period.

Table-4: Crude Birth Rate: India and its States — 1971-81 (Rural/Urban)

States	Census CBR			SRS: Rates, CBR from 1971-73 to 1979-81 (3-year moving Average)								
	1971			1971-1973			1972-1974			1973-1975		
	R	U	T	R	U	T	R	U	T	R	U	T
INDIA	42.9	34.6	41.3	37.7	30.0	36.3	36.7	29.4	35.3	36.2	28.6	34.8
Andhra Pradesh	38.4	32.5	37.4	34.3	33.1	34.1	34.0	38.5	33.9	34.1	31.2	33.6
Assam	49.9	34.3	46.1	36.8	28.7	36.0	34.9	26.7	34.2	32.7	25.3	32.0
Bihar	46.1	38.7	45.4	32.7	27.5	32.3	31.4	26.3	30.9	29.5	26.4	29.2
Gujarat	43.9	35.9	41.9	40.1	34.2	38.6	39.6	33.6	38.0	38.7	32.3	36.9
Haryana	42.2	32.9	40.7	42.5	32.0	40.6	41.7	30.9	39.8	40.8	30.0	38.9
Himachal Pradesh	38.5	29.4	38.0	36.8	23.5	36.0	36.0	23.3	35.2	35.9	22.2	35.0
Jammu & Kashmir	37.1	29.2	35.9	34.9	22.6	32.3	33.5	21.8	31.1	33.7	21.6	31.3
Karnataka	39.0	33.0	37.7	32.3	26.4	30.7	30.8	26.1	29.4	29.7	24.3	28.2
Kerala	31.9	28.9	31.5	30.7	29.2	30.5	29.2	28.3	29.0	28.1	27.6	28.0
Madhya Pradesh	47.2	39.5	45.9	39.6	33.4	38.6	38.7	32.5	37.8	39.2	32.4	38.1
Maharashtra	40.9	33.8	38.8	32.0	29.1	31.1	30.5	29.1	30.0	29.3	28.8	29.1
Orissa	40.7	36.6	40.4	34.8	32.5	34.7	34.5	31.7	34.3	34.3	31.3	34.0
Punjab	37.0	32.0	35.9	35.1	30.4	34.1	34.4	29.3	33.3	33.3	2910	32.4
Rajasthan	44.5	37.3	45.3	42.4	34.3	40.9	40.2	33.1	38.9	38.4	31.2	37.1
Tamil Nadu	36.3	31.1	35.4	33.4	26.2	31.3	32.9	25.0	30.6	32.1	25.1	30.0
Uttar Pradesh	46.6	39.1	45.9	44.6	34.0	43.2	43.6	33.0	42.3	43.1	32.8	41.7
West Bengal	46.1	28.4	42.1	—	25.4	—	—	24.8	—	—	24.0	—

1974–1976			1975–1977			1976–1978			1977–1979			1978–1980		
R	U	T	R	U	T	R	U	T	R	U	T	R	U	T
36.1	28.4	34.4	35.6	28.5	34.2	34.9	27.6	33.3	34.5	27.9	33.1	34.5	28.1	33.3
35.0	30.7	34.2	34.6	29.2	33.6	34.2	28.7	33.2	33.5	28.5	32.6	33.1	28.3	32.2
32.7	24.0	31.9	31.9	23.5	31.1	31.9	23.9	31.3	31.8	23.9	31.1	33.0	23.2	32.2
29.5	26.3	29.3	29.9	27.0	29.7	31.1	27.1	30.8	31.4	27.8	31.2	36.5	30.2	35.8
39.3	32.9	37.6	38.5	31.9	36.8	38.w	31.6	36.5	37.4	31.3	35.9	36.9	31.5	35.5
39.6	29.5	37.9	36.1	28.2	34.7	36.1	28.5	34.8	36.1	28.5	34.9	37.7	21.2	35.8
34.1	21.9	33.3	33.3	20.8	32.2	34.4	24.2	28.3	29.1	22.9	31.5	33.5	22.3	30.2
33.7	28.9	29.3	40.7	32.8	39.5	26.6	25.1	26.4	25.4	25.4	28.1	29.4	22.3	31.4
31.3	30.1	31.2	28.9	27.2	28.4	39.5	32.0	38.4	25.9	24.7	25.7	26.2	25.6	28.3
32.7	28.6	31.8	30.2	28.5	30.1	28.2	2610	27.5	39.0	31.1	37.8	38.5	24.8	25.9
36.8	29.5	35.5	32.2	28.6	31.5	-33.0	28.0	32.6	27.5	25.1	26.8	28.9	31.3	37.4
32.1	25.8	30.2	35.9	28.9	34.7	31.5	27.7	30.7	32.0	28.5	31.7	32.1	25.3	27.8
42.4	32.9	41.2	31.1	26.9	30.4	35.5	28.4	34.2	30.5	27.6	29.9	29.8	29.5	31.8
31.4	24.0	29.6	41.4	32.3	40.3	30.9	27.0	29.8	36.5	29.9	34.8	37.5	27.7	29.3
			33.3	23.5	30.9	41.2	32.2	40.1	29.8	26.7	28.9	29.6	32.2	36.5
						33.2	22.7	30.8	41.2	32.2	40.1	40.9	26.0	28.5
									34.0	21.2	31.1	34.0	32.4	39.8
													20.5	30.9

1979-1981			Difference between Rural/Urban birth-rate of 1979-1981	Amount of decline in CBR in 1979-81 over 1971-1973
R	U	T		
34.6	27.9	33.2	6.7	3.1
32.5	27.9	31.6	4.6	2.5
33.7	23.2	32.9	10.5	3.1
39.3	32.8	38.4	6.5	+6.1*
36.4	31.1	35.1	5.3	3.5
38.0	30.3	36.8	7.7	3.8
32.2	19.2	31.6	13.0	4.4
33.6	21.4	31.3	12.2	1.0
29.0	25.3	28.0	3.7	2.7
26.4	24.3	26.0	2.1	4.5
38.6	31.6	37.5	7.0	1.1
29.8	25.0	28.3	4.8	2.8
32.1	29.6	31.9	2.5	2.9
30.0	28.3	29.6	1.7	4.5
38.0	32.6	37.1	5.4	3.8
29.6	25.2	28.3	4.4	3.0
40.6	32.2	39.5	8.4	3.7
36.3	19.9	32.5	16.4	---

Note   :   Crude birth rates here obtained by applying Palmore's regression equations (Palmore 1978) to the 1971 Census data.

Source :   1.   M.K. Premi, "The Demographic Situation in India", East West Population Institute, Honolulu, Hawai, p.43.

2.   Registrar-General, India, Sample Registration Bulletin, vol.XVII, no.1, Table-3, pp.7-10, June, 1983.

*Bihar shows an increase in CBR from 32.3 in 1971 ○ 73   to   38.4 in 1979-81 (6.1 points).

Table-5: Low, Medium, High and Very High Groups of
CBR, 1979-81.

	States		Crude Birth Rate
I.	**Low Fertility Group** **(From CBR of 26 to 29.6)**		
	Kerala	..	26.0
	Karnataka	..	28.0
	Maharashtra	..	28.3
	Tamil Nadu	..	28.3
II.	**Medium Fertility Group** **(From CBR of 31 to 33)**		
	Jammu and Kashmir	..	31.3
	Andhra Pradesh	..	31.6
	Himachal Pradesh	..	31.6
	Orissa	..	31.9
	West Bengal	..	32.5
	Assam	..	32.9
III.	**High Fertility Group** **(From CBR of 35 to 36.8)**		
	Gujarat	..	35.1
	Haryana	..	36.8
IV.	**Very High Fertility Group** **(From CBR of 37 and above)**		
	Rajasthan	..	37.1
	Madhya Pradesh	..	37.5
	Bihar	..	38.4
	Uttar Pradesh	..	39.5

Source: Registrar General India, SRS Bulletin,
Table-3, vol.XVII, no.1, June 1983, pp.7-11.

The classified states are presented in Table-5.
It appears from the table that even the lowest crude
birth rate of 26.0 per thousand cannot be considered
satisfactorily by either desirable or even compari-
tive demographic standards, obviously the higher prio-
rity attention should be given to the highest group
of UP, Bihar, MP and Rajasthan, which also accounts
for 39 per cent of India's current population and
to the next highest group of Haryana and Gujarat
which account for 6.85 per cent of the population.

Rural-Urban Difference

Table-3 shows that at the national level the
rural birth rate has fallen by 4.1 points from 38.9
per thousand in 1971 to 34.8 in 1981, whereas the
urban birth rate during the same period declined by
only 2.8 points from 30.1 in 1971 to 27.3 in 1981.
The urban birth rate is however lower than the rural
birth rate by 6.7 points in 1981. But the difference
between the rural and urban birth rates has reduced
by 1.3 points between 1971 and 1981.

The inter-state variation in rural crude birth
rate is found to vary from 40.6 in Uttar Pradesh to a

low of 26.4 in Kerala, while the variation in the
urban birth rate is from a high of 32.8 in Bihar
to a low of 19.2 in Himachal Pradesh during 1979-
81 (three year moving average). The difference
between the rural and urban birth rate also varies
widely from 16.4 and 13.0 in the case of West
Bengal and Himachal Pradesh.

There are several factors for high and low
birth rate in these two states (Kerala and UP). In
UP in 1978, death rate per thousand population was
20 as against 7 in Kerala and in 1976 the infant
mortality rate per thousand birth in UP was 178 as against
56 in Kerala and low literacy among females 10.7
per cent as against 54.3 per cent in Kerala. The
family planning performance was also poor in UP
during this decade; the proportion of couples protec-
ted was 12.1 per cent as against 36 per cent in
Maharashtra. In the rural areas of UP in 1971 only
19 per cent of the girls in the age-group of 15-19
were unmarried while in rural Kerala 80 per cent of
the girls in this age group were unmarried. On the
next age group 20-24 years less than 2 per cent of
the girls in rural UP were unmarried, compared to 30
per cent in Kerala. According to estimates based on
the 1971 census data in rural UP the mean age at

marriage for girls was 15.5 years compared to 21.7 years in Kerala.

Rural-Urban Birth Rates

Table-6 shows very high, high, medium and low birth rates for rural and urban areas among various states during the year 1979-81 (three year moving average). (Table-6, p.40).

The comparison of 1971 census CBR with 1979-81 SRS rates (Table-3) show a decline of birth rate in both rural and urban areas for all the states. The decline was mainly due to the achievement of Family Planning targets during this period.* Uttar Pradesh

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*The Family Planning Statistics show that prior to 1966 only about 1.5 million sterilisations were done, whereas 7.1 million were done in 1966-71 and 10.3 million during 1971-76. During the Emergency 8.2 million sterilisations were done in 1976-77, 0.94 million in 1977-78 and 1.4 million in 1978-79. According to the Family Planning Department, the births averted to 1961-66 were only 0.5 million whereas during the period 1966-71 the figure was 6.7 million and during 1971-76, 24.3 million. During 1976-77 as many as 3.7 million births were averted in 1977-78, 5.0 million and in 1978-79, 4.9 million. These figures reveal that the decline of birth rate during the year 1966-71 and 1970-79 is mostly due to the achievement in Family Planning.

Table-6: Rural and Urban Birth Rates Among Various States: 1979-81.

Rural/States	Birth Rate	Urban/States	Birth Rate
(a) Very High Group (From 35-42)		Very High Group (From 31 to 32.2)	
Uttar Pradesh	41.2	Uttar Pradesh	32.2
Madhya Pradesh	38.9	Gujarat	31.3
Gujarat	37.9	Madhya Pradesh	31.1
Haryana	36.1		
Rajasthan	35.8		
(b) High-Group (From 33-34)		High Group (From 28-29.8)	
Jammu & Kashmir	33.5	Rajasthan	29.8
Andhra Pradesh	33.4	Haryana	28.5
		Orissa	28.5
		Andhra Pradesh	28.4
(c) Medium Group (From 29-32)		Medium Group (25-28)	
Orissa	32.0	Punjab	27.6
Assam	31.7	Bihar	27.1
Himachal Pradesh	31.2	Tamil Nadu	26.7
Bihar	31.1	Karnataka	25.4
Punjab	30.5		
Tamil Nadu	29.8		
Karnataka	29.1		
(d) Low Group (From 25-28)		Low Group (From 21-25)	
Maharashtra	27.5	Maharashtra	24.8
Kerala	25.8	Kerala	24.6
		Assam	23.7
		Jammu & Kashmir	22.9
		Himachal Pradesh	21.2

is the only state where the birth rate in rural areas
remained 40 or above during this period.* There was
a considerable reduction in urban fertility in all
the states. Rajasthan, Gujarat, Madhya Pradesh and
Uttar Pradesh form one contiguous belt where in birth
rates continued to be highest in both rural and urban
areas. A significant reduction in national birth
rate depends upon lowering birth rates in Bihar,
Madhya Pradesh, Uttar Pradesh, and Rajasthan which
accounts 39 per cent of the population of the
country.

II. MARITAL FERTILITY RATES

This section presents the levels and trends of
marital fertility in India and its states for the
year 1971, 1972 and 1978. To ascertain the levels of
marital fertility in India, the fertility performance of
a currently married woman (married only once) during
the reference period of one year were collected in the
1971 census. By using these data the following indices
were computed.

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*   If reliable data were available for Bihar they
    would probably indicate a birth rate similar
    to that of UP.

1.   General Marital Fertility Rate*

2.   Age-Specific Marital Fertility Rate+

3.   Total Marital Fertility Rate

The calculated rates are presented in the following tables.

1.   General Marital Fertility Rate

Analysis of the 1971 Census fertility data for
the currently married women shows vast differences in
general marital fertility between rural and urban areas
at the national as well as state level except in Bihar,
Himachal Pradesh and Uttar Pradesh. At the national
level the GMFR was 205.8 in rural and 167.8 in Urban
(Table-7). The table also shows vast difference in
rural-urban marital fertility in Orissa, West Bengal,
Rajasthan, Madhya Pradesh, Maharashtra, Jammu and
Kashmir and Assam.

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*   The GMFR shows the number of children born per
     thousand currently married women (married only
     once) in the age group 13-47 during one year period.

+   ASMFR describes the fertility experience of the
     currently married women by age.

@   TMFR summarizes the pattern of fertility exhibited
     by the age-specific marital fertility rates and
     presents a single index of total marital
     fertility.

Regional Variation

The regional variation in GMFRs are represented in the maps.

Rural

Among States in rural areas, Orissa had the highest GMFR (253.0) followed by Assam (246.4) (Map 1). The next high group of GMFR was in West Bengal (235.8), Jammu and Kashmir (234.0), Maharashtra (225.2), Haryana (216.8) and Madhya Pradesh (216.4). The next medium group which have more or less or little higher than the national level (205.8) was in Punjab (205.6), Andhra Pradesh 206.0, Rajasthan 206.1, Mysore (208.6) and Gujarat (209.9). Bihar has the lowest GMFR followed by Uttar Pradesh, Himachal Pradesh (180.7), and Tamil Nadu (193.5). These states show below the national level.

Urban

Among urban areas Jammu and Kashmir had the highest GMFR (214.8) (Map-urban GMFR) followed by Assam (197.1) Orissa 191.0, and Andhra Pradesh (190.4). The next group of higher GMFR which fall above the national level (167.8) was in Madhya Pradesh (183.9), Punjab (183.9),

GENERAL MARITAL FERTILITY RATE
India   Rural   1971

	> 240
	230-240
	220-230
	210-220
	200-210
	190-200
	< 190

GENERAL MARITAL FERTILITY RATE
India   Urban 1971

> 200

190-200

180-190

170-180

160-170

150-160

< 150
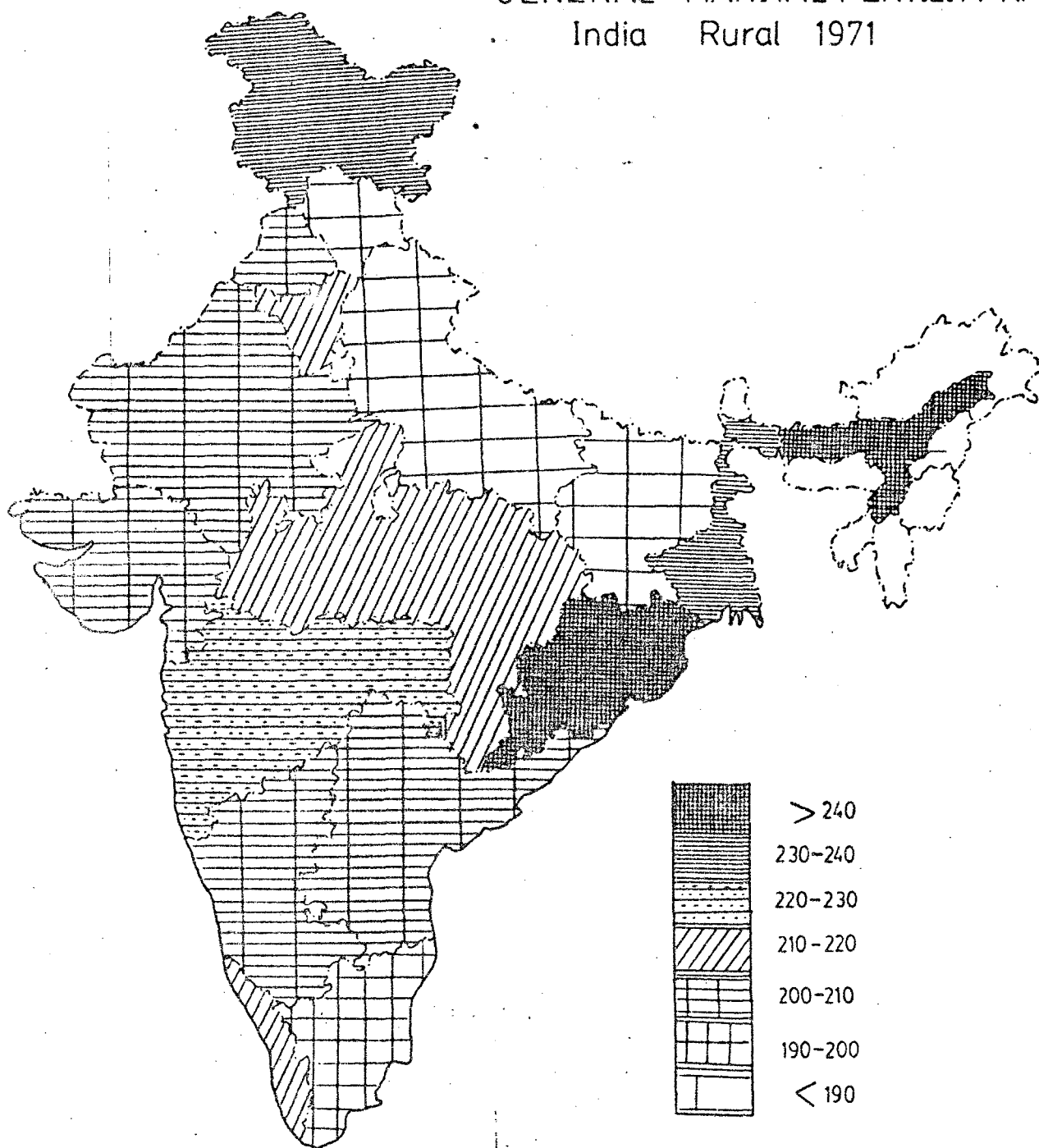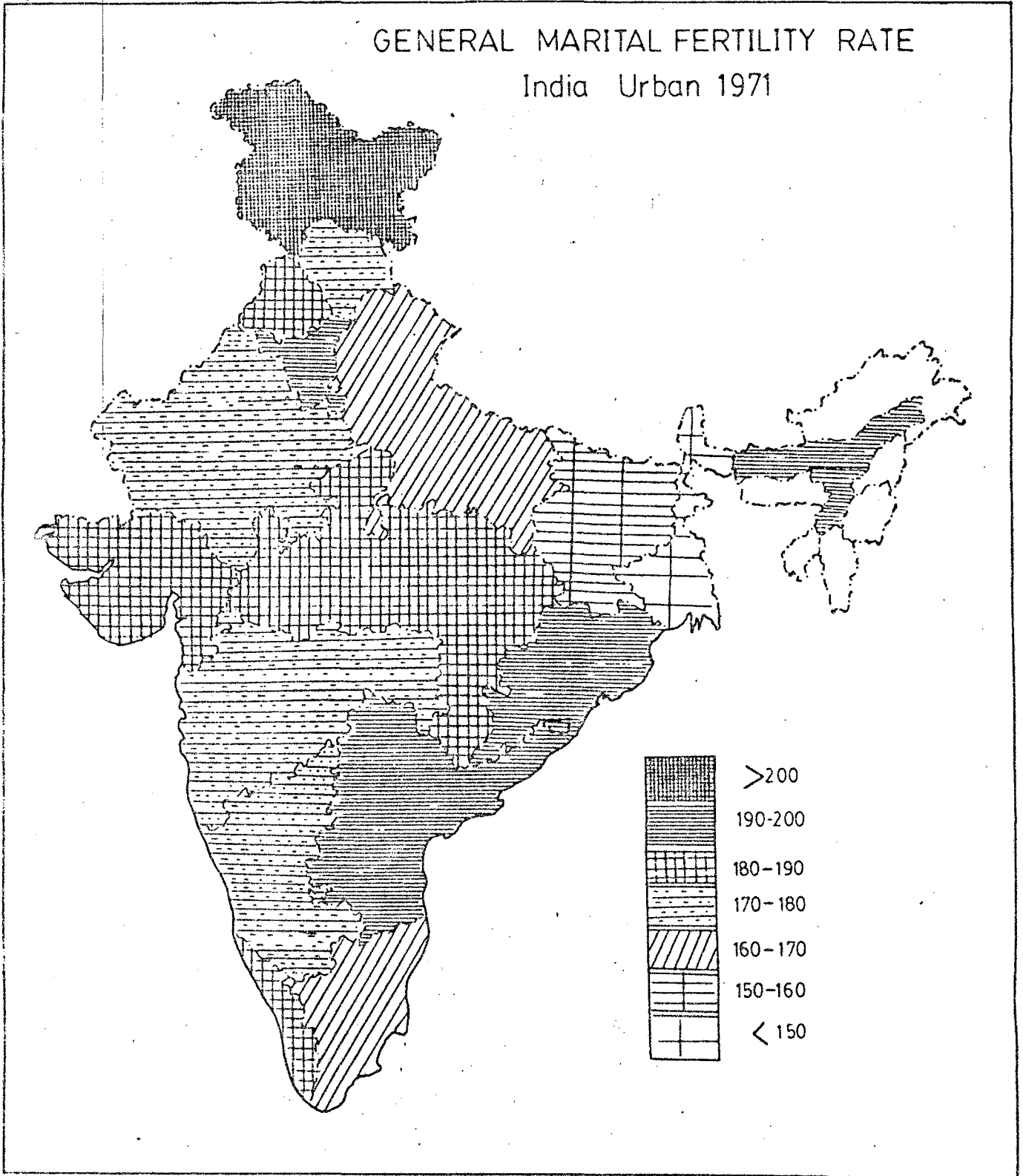
Kerala (183.4), Gujarat (181.0), Mysore (177.9),

Rajasthan (175.9), Himachal Pradesh (175.3) and

Maharashtra (174.3). West Bengal had the lowest GMFR

(121.9) followed by Bihar (156.8), and Tamil Nadu (160.2).

Table-7: General Marital Fertility Rate - India and
its States - Rural/Urban 1971.

States		Rural	Urban
India	..	205.8	167.8
Andhra Pradesh	..	206.0	190.4
Assam	..	246.4	197.1
Bihar	..	165.4	156.8
Gujarat	..	209.9	181.0
Haryana	..	216.8	196.8
Himachal Pradesh	..	180.7	175.3
Jammu and Kashmir	..	234.0	214.8
Kerala	..	211.9	183.4
Madhya Pradesh	..	216.4	183.9
Maharashtra	..	225.2	174.3
Mysore	..	208.6	177.9
Orissa	..	253.0	191.0
Punjab	..	205.6	183.9
Tamil Nadu	..	193.5	160.2
Rajasthan	..	206.1	175.9
West Bengal	..	235.8	121.9
Uttar Pradesh	..	171.8	169.3

Source: Computed from the 1971 Census, Series I,
India, Social and Cultural Tables, Part II-c-iii,
vol.I.

Even when the birth rate is found to be very high
in Bihar and Uttar Pradesh on the basis of SRS, the
marital fertility rate is found to be lowest in them.
From this one may conclude that under reporting in the
1971 Census was high in UP and Bihar. The comparison
of rural and urban marital fertility rate shows vast

difference in West Bengal, Orissa and Assam, i.e.
these states have high marital fertility in rural
areas than in urban. Similarly the birth rate based
on SRS data also shows higher rates in rural areas
than in urban.

2. Age-Specific Marital Fertility Rate

A detailed and more meaningful analysis of
the pattern of fertility in a population is provided
by the fertility rates calculated for various ages.
In this analysis ASMFRs was computed for five year
age group (from 13-17 to 43-47). The calculated
rates are presented in the following table-8. The
computed rates are also represented in graphs (ASMFR
Curve) for various states.

National Level

The ASMFRs found to be lower in urban areas for
all the age groups except 13-17 than rural (Table-8).
The graph for India shows that in rural areas the
ASMFRs reached its peak in the age group 23-27 (264%1),
while in the urban areas the peak was reached in the
age group (18-22) (249.9). The difference in marital
fertility between the age group of 18-22 and 23-27 was
insignificant in urban areas. The ASMFRs declined from

Table-8: Age-Specific Marital Fertility Rate - India and its States - Rural 1971

States	Age-group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
INDIA	085.9	240.7	264.1	226.6	168.4	101.2	053.5
Andhra Pradesh	105.3	158.4	251.7	109.8	146.2	080.8	037.9
Assam	177.4	318.3	319.6	273.4	202.8	119.6	061.9
Bihar	050.3	177.1	209.2	189.2	149.0	094.2	050.1
Gujarat	034.7	233.1	315.5	269.0	191.0	112.9	049.4
Haryana	043.6	278.3	340.2	291.7	219.7	126.1	054.2
Jammu and Kashmir	069.8	230.3	282.6	250.6	197.6	113.5	069.2
Himachal	087.4	229.0	272.2	222.4	149.2	076.3	036.9
Kerala	116.0	294.7	292.6	220.8	153.4	073.5	015.5
Madhya Pradesh	071.5	266.9	285.6	245.5	183.1	106.4	048.1
Maharashtra	081.9	265.2	291.9	240.7	169.0	093.9	042.3
Mysore	134.1	271.0	264.6	212.5	147.8	081.3	038.9
Orissa	178.6	327.4	295.8	299.1	225.0	138.3	115.5
Punjab	083.6	248.3	289.2	235.0	158.9	083.7	036.2
Rajasthan	042.9	243.9	299.6	273.9	210.1	120.5	052.8
Tamil Nadu	106.5	229.7	238.6	185.0	121.2	055.6	015.1
Uttar Pradesh	011.4	187.9	228.6	215.1	166.2	113.1	065.7
West Bengal	157.4	285.1	281.8	219.6	182.2	129.3	094.9

Source: Computed from 1971 Census, series 1, India, Social and Cultural Tables, Part-IIc, - iii, volume-I.

Table-8a: Age-Specific Marital Fertility Rate - India and its States - Urban 1971

States	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
INDIA	101.2	249.9	248.3	180.4	113.5	057.0	024.5
Andhra Pradesh	130.7	248.2	236.4	171.9	109.4	056.0	023.1
Assam	185.4	302.7	276.3	201.5	117.4	064.9	021.8
Bihar	076.1	207.1	210.3	164.9	104.0	068.4	035.0
Gujarat	060.9	250.3	283.2	203.8	121.7	057.0	024.5
Haryana	101.3	277.3	294.5	222.1	143.9	065.4	024.5
Jammu & Kashmir	121.5	265.3	257.7	174.7	106.7	057.0	025.2
Himachal Pradesh	105.7	279.4	211.2	177.7	085.0	036.1	013.3
Kerala	150.8	302.1	285.7	202.5	136.1	065.2	016.6
Madhya Pradesh	084.9	260.1	263.2	169.1	126.9	069.9	025.7
Maharashtra	110.9	269.3	262.8	185.6	104.6	048.6	020.8
Mysore	129.6	265.4	246.3	180.8	116.9	059.3	024.8
Orissa	130.4	264.2	241.1	183.1	120.2	056.5	026.2
Punjab	112.1	278.6	286.7	199.0	114.6	054.0	022.4
Rajasthan	068.9	248.2	265.0	201.6	141.3	072.4	032.1
Tamil Nadu	126.9	245.8	237.9	172.9	106.1	046.7	016.4
Uttar Pradesh	078.9	231.2	251.7	199.8	135.3	076.2	037.4
West Bengal	128.4	220.6	180.6	116.4	077.1	039.4	022.1

the age group of 28-32 onward in both rural and urban areas. Graph-1 shows a clear picture of decline in marital fertility from the age group 28-32. The decline was much in urban compares with rural. The higher order birth is found to be very low in urban areas compared with tural. The higher order birth is found to be very low in urban areas compared with rural data. For both rural and urban women, the higher order birth in the age groups 33-37, 38-42 and 43-47 were in the following order: 168.4, 101.2, and 53.5 in rural areas and 113.5, 57.0, and 24.5 in urban areas respectively. These data indicate that the urban married women attempt to control their family size at later ages, especially after the age 33. The ASMFR was high for the urban women in the age group 13-17 than rural women. This may be due to small sample size in this age group.

Regional Variation

Rural: The ASMFRs curve (Graph   ) attained its peak in the early age group 18-22 was in Assam (318.3), Kerala (294.7), West Bengal (285.1), Haryana (278.3), Mysore (271.0), Madhya Predesh (266.9) and Maharashtra (265.2).

Graph-1 46a

AGE SPECIFIC MARITAL FERTILITY RATE 1971

INDIA
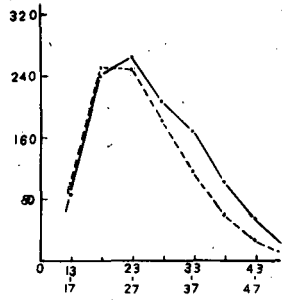
ANDHRA PRADESH
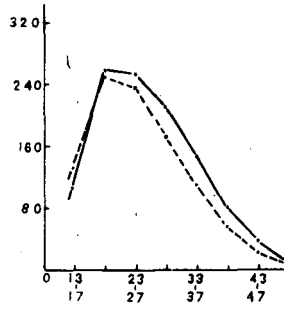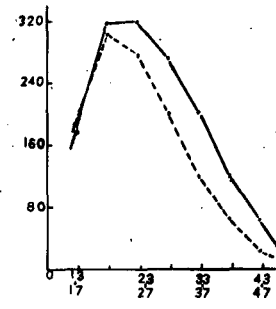
ASSAM

JAMMU & KASHMIR
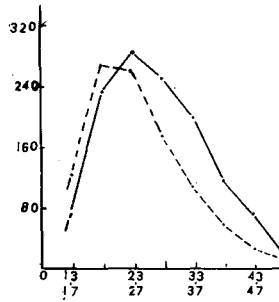
HIMACHAL PRADESH
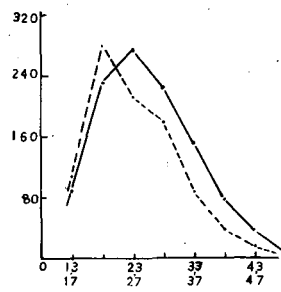
KERALA
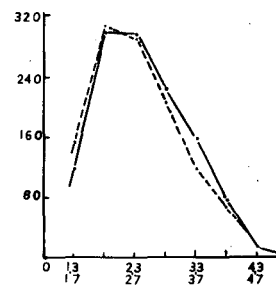
ORISSA
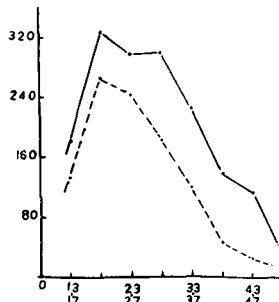
PUNJAB
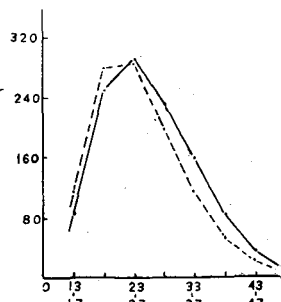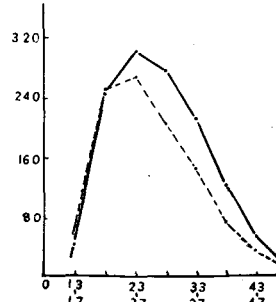
RAJASTHAN

—— Rural
----- Urban

AGE SPECIFIC MARITAL FERTILITY RATE 1971

BIHAR

GUJARATH

HARYANA

MADHYA PRADESH

MAHARASTRA

KARNATAKA

TAMIL NADU

UTTAR PRADESH

WEST BENGAL
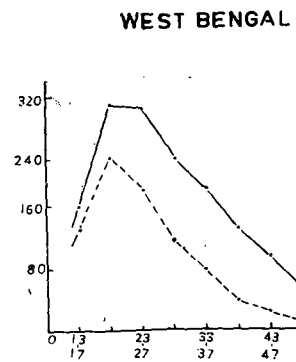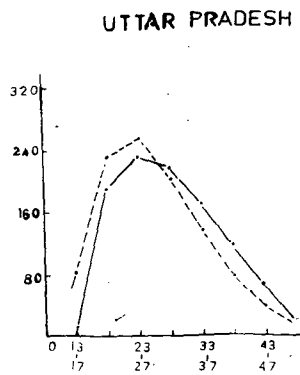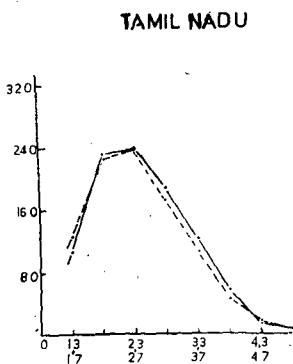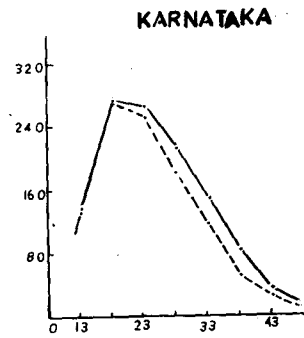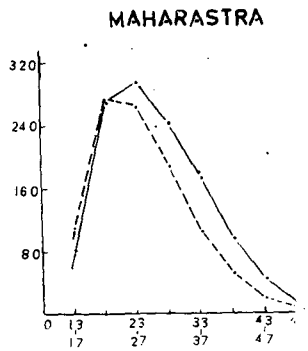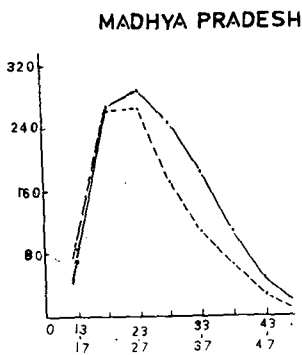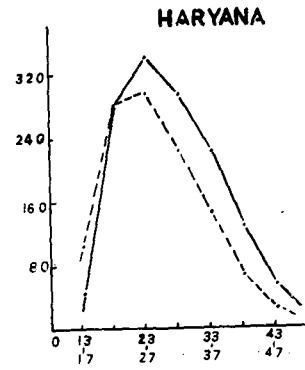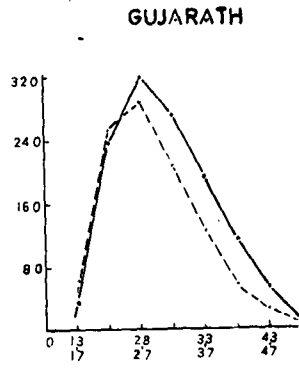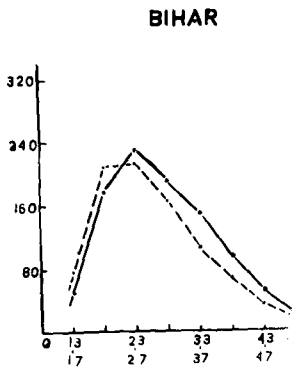
———— Rural
- - - - - - Urban

The broad peak pattern 23-32 shows high rate in Orissa (299.1) Haryana (291.7), Rajasthan (273.9) Assam (273.4) and Gujarat (269.0).

The higher order birth was high (after the age 33, i.e. in the age groups 33-37, 38-42 and 43-47) in Orissa (Table-7), Haryana, Assam, West Bengal and Rajasthan. Kerala has the lowest higher order births - 153.4, 73.5 and 15.5 in the above mentioned age groups followed by Tamilnadu, Himachal Pradesh, and Punjab.

The ASMFR was very high in the young age group (13-17) in Orissa, (178.6), Assam (177.4) and West Bengal (157.4). This may be due to over reporting or over estimation in these states.

Urban: Among the states the ASMFR curve for urban areas attained its peak in the early age group (18-22) in Assam (302.7), Kerala (302.1), Himachal Pradesh (279.4), Punjab (278.6), Haryana (277.3), Maharashtra (269.3), Mysore (265.4), Jammu and Kashmir (264.2) and Madhya Pradesh (260.1). Bihar has the lowest ASMFR (207.1) in this age group. Most of the states show maximum ASMFRs in this age group except the following seven states: Bihar, Gujarat, Haryana, MP, Punjab, Rajasthan and UP, whereas in rural areas the maximum

ASMFR was in the age group of 23-27 except in Andhra, Mysore and Orissa.

The ASMFR started declining from the age group of 23-27 in most of the states except the above mentioned seven states. The broad peak pattern with high ASMFRs in the age group of 23-32 was found in Haryana (222.1), Gujarat (203.8), Kerala (202.5), Rajasthan (201.6), Assam (201.5), UP (199.8) and Punjab (199.0).

The comparison of rural and urban data indicates high ASMFRs in Assam, Gujarat, Haryana and Rajasthan in both rural and urban areas. The curve shows that the difference in rural and urban ASMFR was so insignificant in Kerala and Tamil Nadu. The graph also shows vast differences in rural and urban ASMFRs in Orissa and West Bengal. One may conclude this may be due to over-estimation of census data in rural areas in these two states.

3- ## Total Marital Fertility Rate

As pointed out earlier the TMFR summarizes the pattern of fertility exhibited by the age-specific marital fertility rates and presents a single index

of marital fertility. For this study TMFR was com-
puted for the currently married women in India and
its states during the year 1971. There rates are
presented in the table-7. At the national level
the TMFR was 5.8 for rural areas and 4.4 for urban
areas.

Regional Variation

Rural: Among states in rural areas, Orissa had the
highest TMFR (8.1) followed by West Bengal (7.3),
Assam (6.8), Madhya Pradesh 6.4 and Karnataka (6.)
Jammu and Kashmir(5.9)and Kerala (5.9). These
states have higher TMFR which is above the national
level (5.8). The next group TMFR, below the national
level of 5.8 was in Haryana (5.8), Maharashtra (5.7),
Andhra Pradesh (5.6), Rajasthan (5.5), Himachal (5.4),
UP (5.3), Gujarat (5.3) and Bihar (4.8). Bihar has
the lowest TMFR in rural areas among various states
which seems to be due to poor quality of census
data.

Urban: In urban areas Kerala had the highest TMFR
(5.7) followed by Assam (5.5), Haryana (5.3), Orissa
(5.1), Jammu and Kashmir (4.9), Mysore (4.9),

Table-9: Total Marital Fertility Rate - 1971

States	Rural	Urban
India	5.8	4.4
Andhra Pradesh	5.6	4.4
Assam	6.8	5.5
Bihar	4.8	4.4
Gujarat	5.3	4.7
Haryana	5.8	5.3
Himachal Pradesh	5.4	4.7
Jammu and Kashmir	5.9	4.9
Kerala	5.9	5.7
Madhya Pradesh	6.4	4.9
Maharashtra	5.7	4.8
Mysore	6.0	4.9
Orissa	8.1	5.1
Punjab	6.2	4.9
Rajasthan	5.5	4.3
Tamil Nadu	5.2	4.7
Uttar Pradesh	5.3	4.8
West Bengal	7.3	3.8

TOTAL MARITAL FERTILITY RATE
India   Rural 1971

	>7·5
	7·0 – 7·5
	65 – 70
	60 – 65
	55 – 60
	50 – 55
	< 50

TOTAL MARITAL FERTILITY RATE
India Urban 1971

	>5·6
	54 — 56
	52 — 54
	50 — 5·2
	48 — 50
	46 — 48
	44 — 46
	<44
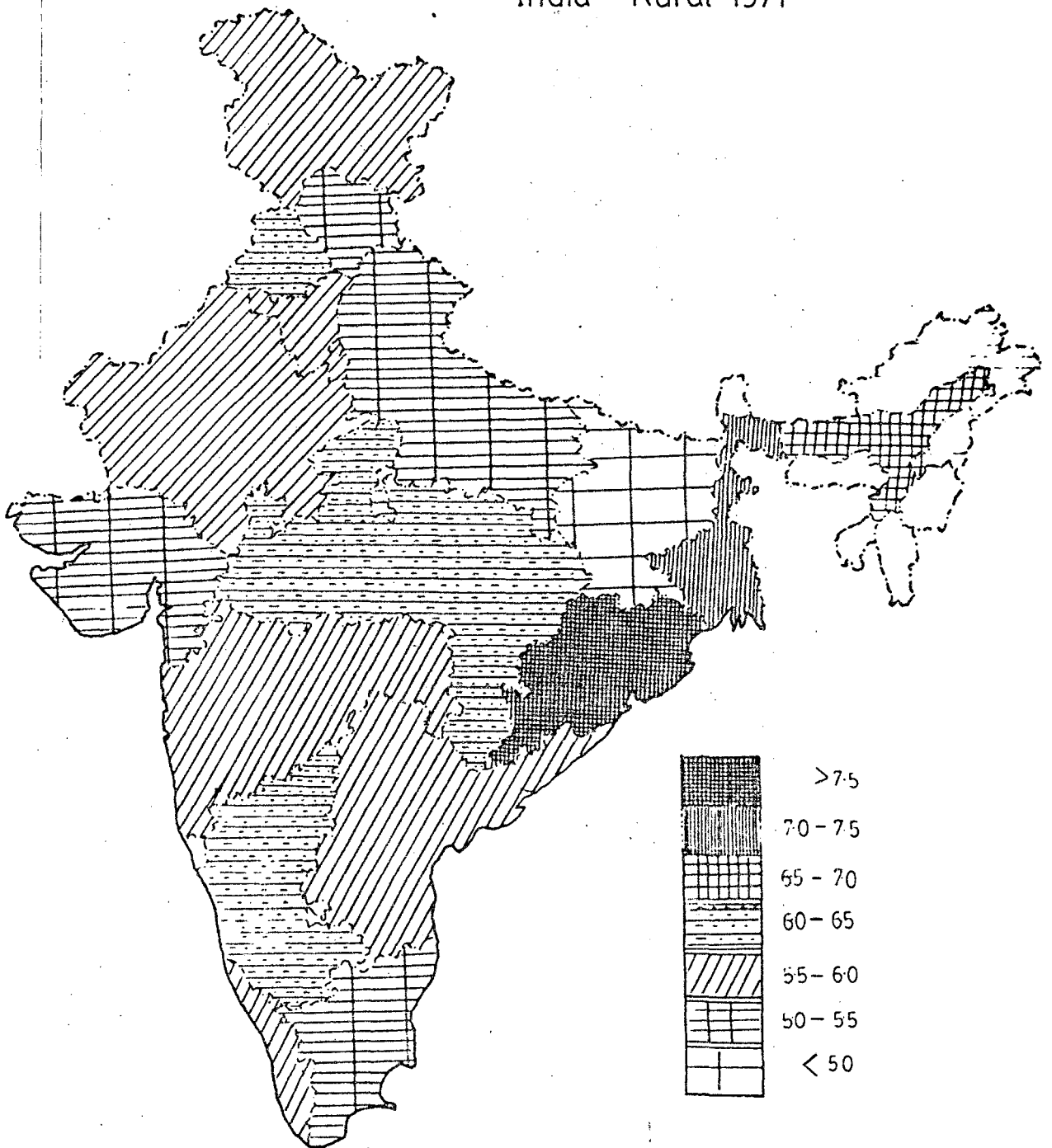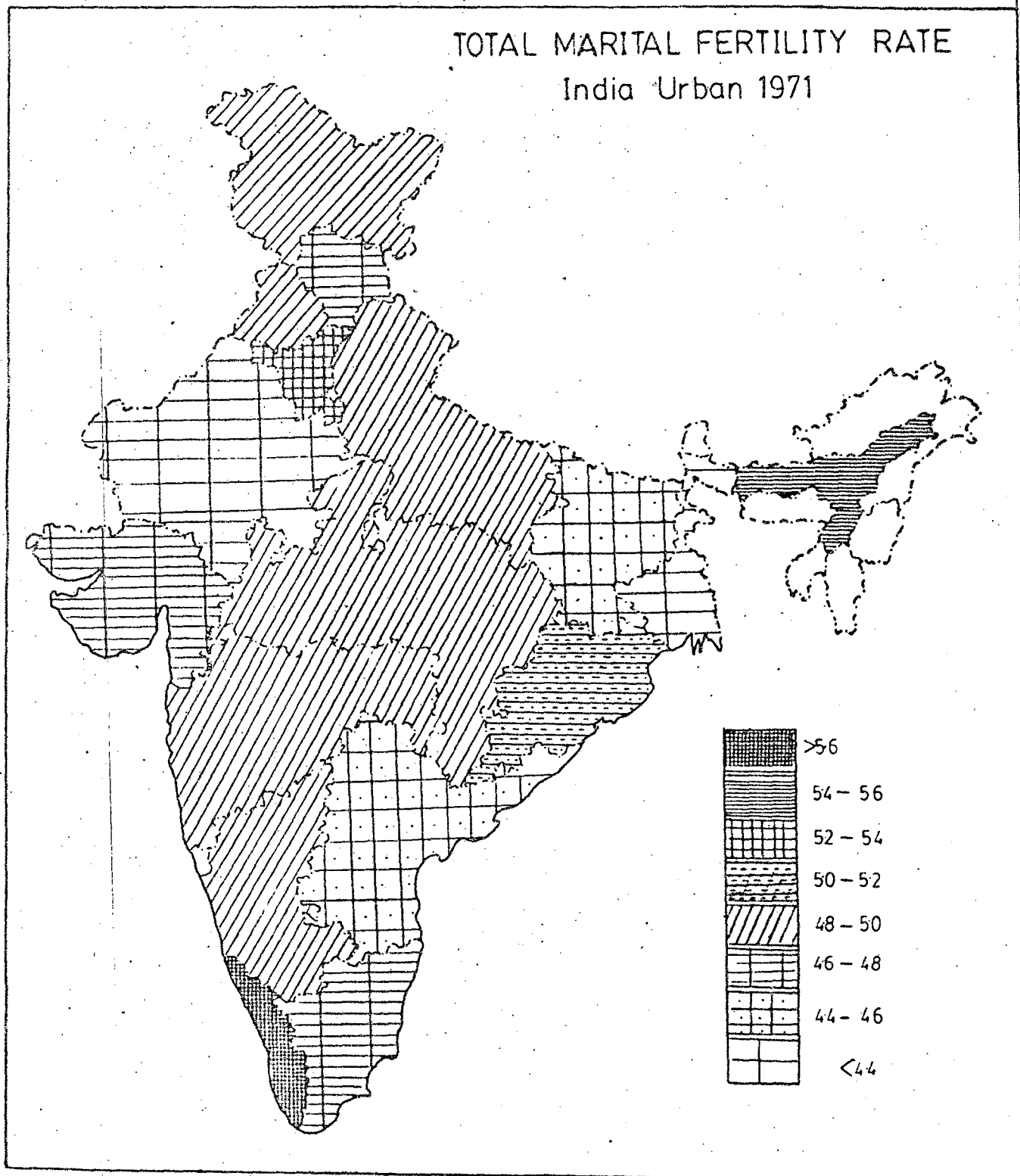
Maharashtra (4.8), UP (4.8), Himachal (4.7), Tamil
Nadu (4.7) and Gujarat (4.7). The TMFR in the
above states were found to be above the national
level (4.4). Andhra and Bihar have equal TMFR
(4.4) which is found to be equal to the national
level. West Bengal had the lowest TMFR (3.8) in
urban areas.

The comparison of rural TMFR with urban rate
shows vast difference for Orissa and West Bengal.
Comparison of SMFR and ASMFR also reveals the same
pattern.

The marital fertility rates of the 1971 ana-
lysis indicate that ASMFR was low in the broad
peak pattern in South and South Eastern region
(low fertility group). The rural-urban differen-
ces in marital fertility was insignificant in
Kerala and Tamil Nadu. But the GMFR shows a
significant difference in marital fertility in these
two states. On the other hand Orissa and West Bengal
shows vast difference in marital fertility rate between
rural and urban. Like CBR the ASMFR was high in Nor-
thern regions. This difference may be due to lack
of family planning performances and other socio-

economic under development in these regions. Among
northern states, Punjab has low ASMFRs. These
may be due to the high economic development in
this region.

The high fertility group of Bihar and UP
shows low and medium GMFR and TMFR. As mentioned
earlier this may be due to under-estimation of
census fertility data in these two states.

It is adviseable, that necessary improvement
should be taken in the states of UP, Bihar, Orissa
and West Bengal to improve the quality of census
data.

III. COMPARISON OF 1971 MARITAL FERTILITY RATES
      WITH 1972 AND 1979 SRS RATES

To know the trends in marital fertility rates,
the figures (TMFR) obtained in this analysis were
compared with 1972 and 1979 sample surveys. The
TMFR shows an increase in 1972 survey compared with
1971 census analysis (Appendix-Table 1). The diffe-
rence of increase range from 1 to 2.5 points. TMFR
was very high in 1972 in Jammu and Kashmir (9.6 in
rural, and 8.4 in urban), and UP (8.0 in rural and
6.4 in urban). But the 1971 census analysis shows

less TMFR for Jammu and Kashmir and Uttar Pradesh in
both rural and urban areas. The rate is found to
be as follows: 5.9 and 4.9 for Jammu and Kashmir
and 5.3 and 4.8 for UP in both rural and urban
areas. This vast difference may be due to over
estimation of 1972 survey. Bihar shows lowest
TMFR in 1971 compared with 1972 and Orissa had the
higher TMFR in 1971 than 1972. As pointed out ear-
lier this difference may be due to under estimation,
in Bihar and over-estimation in Orissa (Rural)
respectively.

The 1979 SRS Rate does not show any significant
decline in TMFR at the national level compared with
1971 census rate (Appendix. Table 1). State level
comparison shwws little decline in both rural and
urban areas in 1979, except Bihar, Rajasthan, MP
and UP. The TMFR for the above state was less in
1971 Census analysis compared with 1979 SRS data.
This indicates the under-estimation of 1971 census
fertility data in Bihar, UP, Rajasthan, and Gujarat.
The comparison of Orissa and West Bengal data with
1979 survey shows vast difference in TMFR. The TMFR
was high for the 1971 analysis in rural Orissa and
West Bengal whereas Urban data shows high rates in
1979 survey (Appendix - Table 1). This further

stress the over estimation of 1971 Census data in rural areas of Orissa and West Bengal.

From this comparison the following conclusion can be reached.

(1) TMFR was found to be declined in 1979 compared with 1971 census analysis.

(2) From this comparison – one may conclude – that under-estimation was high in 1971 census fertility data in Bihar, Gujarat, Haryana, MP, Rajasthan and UP.

(3) Orissa and West Bengal shows over-estimation of 1971 census data in rural areas.

(4) The comparison also reveals over-estimation of 1972 sample survey in Assam, Jammu and Kashmir, Rajasthan, UP, MP, Gujarat and Haryana.

(5) Compared with 1971 census analysis, 1979 survey also shows over-estimation of SRS rates at the national level.

CHAPTER-XII

CHAPTER - III

RELIGION AND FERTILITY

Among the various socio-cultural and environmental factors influencing fertility, religion has been considered very important. Religion prescribes a code of life, refers to a system of beliefs, attitudes and prescribes which individuals share in groups and through this orientation towards life and death is supported to effect one's fertility behaviour.

In India religion has a special significance as social behaviour is much influenced by practices, which are subject to religious sanctions. It has been observed that age at marriage, divorce, education, customs, taboos on sex, etc., which have a great impact on fertility performance vary according to religion of the individual. The acceptance of family planning as a national programme has added a new dimension in studying fertility differentials by religion.

The main objective of this chapter is therefore to study the fertility differentials by religion in India and its states. An attempt is also made to explain the causes of such differentials wherever possible.

The Review of Literature in Chapter-I indicate that most of the studies conducted in different parts of India have brought out the differentials in fertility behaviour of the two major religious groups, namely, Hindus and Muslims. However it seems appropriate to state that the fertility differentials among all the religious groups are not very clean. Moreover very few studies have attempted to isolate the specific effect of the characteristics of the religious groups which may explain the fertility differentials between different religious groups. This may perhaps be due to the paucity of relevant data on the subject. Hence a more systematic study is needed to conclude on the role of religion in influencing fertility.

Before proceeding with the analysis of fertility differentials, it is also desirable to know the distribution and growth of the major religious communities namely Hindus, Muslims, Christhens, Sikhs, Buddhists and Jains and their major religious beliefs (only for Hindus, Muslims and Christians), norms, and values related to fertility in India.

DISTRIBUTION AND GROWTH OF THE RELIGIOUS POPULATION

According to the 1971 Census the population of
India was 547.9 million. Hindus accounting for 82.72
per cent of the total population formed the predominant
proportion of India's population (Table-10). Muslims
accounting for 11.21 per cent of the population of
the country came next only to Hindus in numerical
strength and are followed by Christians, Sikhs, Jains
and Buddhists.

The table also shows the relative decadel growth
rates of the population of major religious groups in
India. During 1961-71, the decennial growth rates for
various religious groups in India were 23.69 per cent
for Hindus, 30.85 per cent for Muslims, 32.60 per cent
for Christians, 32.28 for Sikhs, 17.20 per cent for
Buddhists and 28.48 per cent for Jains. Among all the
religious groups, the highest rate of population growth
was observed among christians during the decade 61-71
closely followed by Sikhs. Muslims occupied the third
rank followed by Jains. The higher growth rate among
Christians was partly due to adoption of christianity
from other religions. And it was observed that many of
the converts were from the Hindus.

The growth rate of Hindus during 1961-71 was slightly less than all India growth rate of 24.80 per cent. The proportion of Hindus which was 83.5 per cent of the total population in 1961 has gone down very slightly to 82.7 per cent in 1971 while other religious communities except Buddhists have improved their position though marginally. The proportion of Buddhists to total population fell from 0.73 per cent in 1961 to 0.70 in 1971. In turn, the growth rate of Buddhists population in the country during the decade has reduced to 17.20 per cent which was much less than the general growth rate of 24.80 per cent.

Table-10: Percentage Distribution and Decadal Growth Rate of Population by Religion in India, 1961-71.

Religion	Percentage of population 1971	Decadal Growth Rate (in percentage) 1961-71
Hindus	82.72	23.69
Muslims	11.21	30.85
Christians	02.60	32.60
Sikhs	01.89	32.28
Buddhists	00.70	17.20
Jains	00.47	28.48
Other religions of persuasions*	00.41	26.10
All religions	100.00	24.80

*Includes Zoroastrianism, Judaism etc.

Source: Computed from Census of India, 1971, Religion Series 1, India, paper 2, 1972, Registrar General Office, New Delhi, pp.2-7.

In the previous decade (1951-61), the Buddhists recorded a phenomenal growth rate of 2267.01 per cent. It is well known that the Neo-Buddhist movement during the decade 1951-61 saw a large scale adoption of Buddhism particularly by the scheduled castes population which appears to have contributed to this extraordinary growth rate. During the decade 1961-71, the growth rate recorded appears to be less than even the natural growth rate. It is possible that certain converts from scheduled castes to Buddhism might have come back to Hinduism finding that as Buddhists they were not entitled to certain concessions available to Scheduled Castes.[1]

The differential in the growth rate during 1961-71 among different religions might occur not only from the differences in mortality and fertility but also due to other factors like conversion (as mentioned earlier) or differentials in census coverage or migration. However, at the national level, the effect of such misreporting of religion and that of international migration on the overall growth rate of different religious communities may not be significant. If religious conversion

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1.   Chandrasekar, A., "Religion", Census of India series I - India, Paper no.2, New Delhi 1972, p.22.

can be ruled out as being insignificant, the difference in the growth rates during 1961-71 were mainly due to natural increase.

While the date on fertility and mortality differentials by religion is very limited, it is interesting to note from 18th round of the NSS (1963-64) that the rate of natural increase of population was highest among the sikhs, in both rural and urban areas and lowest among the christians. The Hindus and Muslims occupied intermediate positions. However, the natural rate of growth was found to be slightly higher among Muslims than that of Hindus. This differential was mainly due to variation in the death rate than in the birth rate among different religions as is clear from Table-11.

Table-11: Religion-wise Birth and Death Rates, India - 1963-64

Religion	Birth Rate		Death Rate	
	Rural	Urban	Rural	Urban
Hindus	38.07	31.61	12.46	7.43
Muslims	37.01	31.94	10.67	8.28
Sikhs	32.49	29.99	05.50	5.44
Christians	30.58	27.97	06.46	7.64

Source: National Sample Survey, Differential Fertility and Mortality rates in India, Eighteenth Round, February 1963-January 1964, No.175, p.5, Table-1.

Since there was wide divergence between sub-samples
estimates for the sikhs and christians in the NSS
data no firm conclusion could be drawn.

Therefore the observed differentials in growth
rate during 1961-71 remain to be explained mainly by
studying differences in fertility and mortality
among different religious groups.

MAJOR RELIGIOUS BELIEFS AND ATTITUDES TOWARDS FERTILITY

The influence of religion extends to the very
core of social behaviour, attitudes, and values. Each
religious groups has its own folk ways and mores, its
own out look and its own allegiance superior to all
others. This section briefly focusses upon the specific
attitudes of some major religions (namely Hindus,
Muslims and christians) particularly towards birth
control and also examine the extent to which faith in
a particular religion determines ones fertility
behaviour.

1.   Hinduism and Fertility

Among religions, Hinduism is unique in the extent
to which the structure of the society and human behaviour

are regarded as the manifestation of divine law. The
little tradition, which has predominated in the
villages, assumes that every community or individual
problem is a sign of transgression against divine
order or natural balance.

One gets the impression that fertility cults
are an integral part of Hinduism. The impression
results mostly from the elaborate sex mannuals of
ancient India, exotic temple sculptures, and litera-
ture on aphrodisacs, devadasis and tantric cults.
However, it would be erroneous to form an idea of
the general sex life of ordinary Hindus, particularly
of the contemporary period from the above.[1] The
example of fertility cults in Hinduism is also evi-
dent in preference for a son among Hindus. The be-
getting of a son is regarded as a prime religious
duty, not only to continue the family line but also as
a means to salvation for the father and his ancestors.*

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1.   Chaudhury, R.H., Social Aspects of Fertility,
     Vikas Publishing House, New Delhi, 1982, p.116.

*   Hindus set great store by the birth of sons who
     have a part to play in religious ceremonies and
     duties like igniting the father's funeral pyre.
     However, this role is somewhat over emphasized.
     The memorial rites can be performed by a surro-
     gate son and moreover, are not of imperative
     consequence among many of India's people,
     particularly the poorest.

According to Manu, a man conquers the world by the
birth of a son, he enjoys eternity by that of a
grand son and the great grand fathers enjoy etternal
happiness by the birth of a great grand son.[1] The
traditional blessings to an Indian bride is 'Be the
mother of eight children'. Other Hindu customs like
universal marriage, early age at marriage, strong
desire for sons, have a strong pro-fertility elements.

In spite of pro-fertility elements in Hindu
culture, there were checks on fertility in three ways.
Firstly, it was checked by Hindu scheme of 'asramas'.
Life was divided into four stages. The prescribed
time limits and duties for each stage provided healthy
restraints on the instinctive and impulsive life of
man. Secondly, traditional Hindu way of life pres-
cribed sexual restrictions during married life.
Lastly, it was controlled to a considerable degree
by indirect, institutional, non-deliberate custom,
such as the taboo on widow remarriage. Besides, these
one also finds some practices which are anti-natal
in character. These are as follows:

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1.   P.N. Prebhu, <u>Hindu Social Organisation</u>, Victor
      Publications, Bombay 1958, p.242.

(1) Late consummation of marriage*; (2) abstinence
from sex during certain religious days**; (3) prolonged
abstinence from sex following child birth due to con-
finement of wives in their parents' home; (4) Other
restrictions regarding sex.+ Although there is
little organised movement against birth control
among Hindus but it appears that the religion does
not necessarily promote a high fertility norm.

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*   One may find evidence of early marriage among
     Hindus but many of these are not immediately con-
     summated. There is always a time lag between
     betrothal at pre-menarche and its physical
     consummation. The effective age at marriage
     i.e. when it is actually consummated is estimated
     to be 16-17 years in India (Agarwala 1965). How-
     ever, late consummation is not common throughout.
     A major exception to these practices could be
     found in South India as indicated by Scarlet
     Epstien, who has done extensive field-work in
     South India. Moreover, this time lag between
     marriage engagement and its consummation is
     narrowing down with the increasing incidence of
     marriages being held in the post-menarche period
     in recent decades.

**   The Hindu tradition prohibits sexual indulgence
     on a large number of religious days. There is
     no data on these over the year at a national
     level, but fragmentary evidences suggest that
     they may range from per year, 2-120 days.

+   For example, it is considered a matter of shame
     for a couple if the wife becomes pregnant after
     any of their children are married. This is
     quite possibly reflected in a sharp decline in
     average frequency of coitus after the age of 30
     among the Hindus.

Today, urbanisation and modernisation, leading
to nuclear family pattern make these taboos and reli-
gious practices weak in Hindu society. Under Western
influence, the effect of institutional controls is
lessened and more widow re-marriages are taking place.
Four stages of life have completely disappeared. All
these coupled with pro-fertility elements in culture
lead to high fertility.

2. Islam and Fertility

Islam is often considered to be pro-natal in
character, and some adherents maintain that children
are among the richest blessings, that Allah bestows,[1]
Islam is the main religion in the developing countries.
In regard to parenthood, the ethos of Islam might be
generally described as procreation unlimitted. Impor-
tant among the pro-fertility factors is the prevalance
of universal marriage. Celibacy is contrary to the
ethos of Islam. Moreover the importance of marriage
and motherhood for the status of woman and the sanction
for the early re-marriage of a widowed or divorced woman,
all contribute to the high fertility.

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1.   Chaudhury, "Social Aspects of Fertility",
      New Delhi, 1982, pp.115-123.

A principal pro-natalist factor in Islam stems
from a strong belief that every thing is done by
Allah. It is Allah who creates sexuality and deter-
mines pro-creation or barenness. "He Multiplieth
you in the earth" (The Qur'an LXVIII - 24 of XLII,
49-50).

As Kirk[1] points out, muslim institutions, more
than those of other world religions, favour of uniformly
high natality. Religion and natality are perhaps more
highly correlated for muslim populations than for any
other major religion. Certain reasons given by him
are that muslim influence is strongly conservation.
Secondly, high levels of education, industrialisation
and other aspects of modernisation associated with
declines in the birth rate have not made strong headway
as yet in muslim countries. Lastly, Islam shares some
pro-natalist social forces that exist generally in pea-
sant societies. The traditional muslim family is strongly
partilineale with male dominance. Polygamy was customary.
More over in traditional muslim belief, permanent state
of celibacy is unthinkable for men and women. The
place of women in muslim traditional society was very low.

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1. Kirk, D., Factors Affecting Moslem Natality;
   In Proceedings of the World Population Conference,
   1965, vol.II, pp.149-154.

They have to observe seclusion of purdah. In some muslim sects, women were not allowed to enter the Mosques.

Despite the generally strong pro-fertility elements among muslim, Quran does not prohibit the voluntary restriction of births. However, one of the important barriers to the acceptance of family planning among muslims is their belief that Islam is against contraception. There are clear authoritative statements made by experts in Islamic law that would permit the practice of birth control. Imam Al-Ghazzali, a highly respected medieval muslim theologian mentioned the scope of birth control in Islam in the form of coitus-interruptus.[1] Similarly the Grand Mufti of Egypt, an expert in Islamic jurisprudence after reviewing Islamic law with respect to family planning, concluded "it is permissible for either husband or wife by mutual consent to take any measures in order to prevent conception.

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1. Khan Akhter, Hameed., *Islamic Opinions on Contraception*, Comilla, East Pakistan, Academy for Village Development 1961, p.46.

M.E. Khan[1] emphasises that this misconception
has to be removed from this minds of those muslims
who reject family planning on religious ground.
Because Quran did not forbid azyl or coitus interruptus.
Further on the basis of the principles, the modern
fetwas or legal opinions on the subject provide a
sanction for contraception. However, muslim opinion
has been divided over the morality to regulate
fertility.

3.   Christianity and Fertility

Christianity, particularly Roman Catholicism has
a definitely negative attitude towards birth control.
The biblical[2] junction to Adam and Eve was 'to be
fruitful and multiply'. The Roman catholic approach
to marriage has been pro-fertility. For centuries,
the attitude of the Roman catholics towards deliberate
family limitation was clear cut. According to them the
aim of sexual intercourse in marriage is the procreation
of children. Any artificial interference with the natural

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1.   M.E. Khan, Family Planning Among Muslims in India,
      Manohar Publications, New Delhi, 1979, p.59.

2.   Richard M. Fagley, "The Population Explosion and
      Christian Responsibility", New York, 1960, p.111.

process of coitus and contraception was contrary to the laws of God; and must be condemned as gravely sinful. According to them the procreation of children was not only the object of marriage, but the God given boon to enable people to love one another. Their attitude towards abortion is equally uncompromising for according to them it is tantamount to the killing of life. In sum, Roman Catholics are opposed to family limitation through artificial means and catholic church leaders have historically resisted the introduction of artificial contraception in various parts of the world.[1] Given the above one would expect to find higher fertility and less use of contraception among catholics compared to other religions. But even Roman catholic church authorities admit the wisdom or necessity of some limitation when they advise that it may be achieved by reliance on the so-called safe period. Determination to use of contraception is also noticed among the maltese, for whom Roman catholism is the state religion and all artificial means of contraception are strictly outlawed.[2] The

1. Smith, T.E., The Politics of Family Planning in the Third World, London, Allen & Unwin, 1973, p.38.

2. R. Chaudhury, "Social Aspects of Fertility", op.cit., p.119.

consensus which is found among the protestant churches,
offers the most adequate doctrine of responsible parent
hood in today's world. From the above discussions it
appears that mere identification with catholicism
does not necessarily lead to high fertility and
lower use of contraception.

III. Religious Differentials in Marital Fertility

To study the differentials of fertility by reli-
gion, marital fertility rates (GMFR, ASMFR and TMFR)
were computed for the currently married Hindu, Muslim
and Christian women who were classified interms of
rural/urban residence, educational status and age
at marriage. The result of the analyses are presen-
ted in the following tables.

1. General Marital Fertility Rate

National Level: Table-12 shows a clear picture
of difference in marital fertility between Hindus,
Muslims and Christians. Muslims were found to have
the highest GMFR in both rural and urban areas at
national level (225.9 and 203.5) followed by christians
and Hindus.

Regional Variation - Rural

Orissa had the highest GMFR for the three
religious (248.7 for Hindus, 362.9 for Muslims and
332.5 for Christians) followed by Assam, Jammu and
Kashmir, MP, Punjab, and West Bengal (except Chris-
tian in West Bengal). The high fertility group of
UP and Bihar shows lowest GMFR for these three
religions. This may be due to under estimation
of census fertility data in this region. Christians
have low GMFR than Hindus and Muslims in West-Bengal
U.P., Rajasthan, Maharashtra, Haryana and Gujarat.
This is due to the low percentage of Christian
population in these states* and the proportion of
currently married women were found to be less in
this analysis. In Jammu and Kashmir Hindus have
higher GMFR than Muslims and Christians. This is
due to the small sample size, that is, the Hindu
population is found to be low in per centage than
muslims and the number of women reported in this
sample were found to be less than muslims.

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*   The per centage of Christian population to
the total population in the States of West
Bengal, UP, Rajasthan, Maharashtra, Haryana
and Gujarat is as follows: 0.57 in West Bengal,
0.1 in UP, 1.4 in Maharashtra, 0.1 in Haryana,
0.4 in Gujarat.

Table-12: General Marital Fertility Rate by Religion -
Rural, 1971.

States	Hindu	Muslim	Christian
INDIA	203.1	225.9	213.8
Andhra Pradesh	203.1	221.1	205.1
Assam	239.9	263.4	250.3
Bihar	160.8	177.1	194.3
Gujarat	206.9	232.4	198.4
Haryana	219.1	261.1	161.8
Himachal Pradesh	187.9	223.7	188.3
Jammu & Kashmir	239.3	217.5	237.8
Kerala	199.3	233.3	201.8
Madhya Pradesh	218.3	230.7	221.0
Maharashtra	225.7	229.3	210.1
Mysore	207.6	213.1	227.1
Orissa	248.7	362.9	332.5
Punjab	218.2	238.8	263.2
Rajasthan	206.9	212.2	194.0
Tamil Nadu	201.6	205.2	206.9
Uttar Pradesh	168.6	202.7	148.2
West Bengal	234.6	246.3	132.8

Source: Computed from the 1971 Census, Series I, India,
Social and Cultural Tables, Part II-C-iii,
vol.I.

Table-12a: General Marital Fertility Rate by Religion -
Urban, 1971.

States	Hindu	Muslim	Christian
INDIA	163.3	203.5	175.4
Andhra Pradesh	178.3	210.8	176.7
Assam	193.5	224.7	250.8
Bihar	154.9	173.4	150.7
Gujarat	176.6	200.7	179.0
Haryana	194.2	233.3	245.8
Himachal Pradesh	172.9	212.0	131.4
Jammu & Kashmir	172.6	160.5	214.2
Kerala	171.9	212.6	186.9
Madhya Pradesh	174.7	205.2	184.9
Maharashtra	168.4	203.1	155.1
Mysore	166.4	201.1	174.8
Orissa	176.3	209.4	179.4
Punjab	176.7	269.0	226.1
Rajasthan	172.2	196.0	158.0
Tamil Nadu	157.3	177.6	176.6
Uttar Pradesh	161.3	195.7	147.9
West Bengal	122.7	149.2	128.2

Source: Computed from 1971 Census of India, Social
and Cultural Tables, Series 1, Part-II-C-iii,
vol.II.

Urban: In comparison to rural areas, the GMFRs for
urban areas show vast difference in marital fertility
for these three religions. In urban areas, Haryana
had the highest GMFR (194.2 for Hindus, 233.3 for
Muslims and 245.8 for Christians) followed by Assam
and Punjab (Table-12a). West Bengal had the lowest

GMFR for these three religions followed by Bihar and
UP. As pointed out earlier the same states show
low fertility for Christians in urban areas also. In
Jammu and Kashmir, Hindus have higher GMFR than
Muslims as in rural areas.

It is evident from Table 2 and 2 that religious
differences in marital fertility persisted even when
the effect of the variable place of residence was con-
trolled. This was found to be true in almost all the
states.

2. Age-Specific Marital Fertility Rate

The Age-specific Marital fertility rates for the
different religious groups in India and its states are
presented in table 13a. The table clearly delineates
religious differences in marital fertility in both
rural and urban areas. Muslims were found to have the
highest fertility followed by christians while Hindus
had the lowest fertility. In confirmity with the
earlier studies, the ASMFRs of Hindus were uniformly
lower for all age groups of Muslims. Similarly the
~~ASMFRs of Hindus were uniformly lower for all age
groups of Muslims. Similarly the ASMFRs among Hindus~~

were uniformly lower for all age groups of muslims.
Similarly the ASMFRs among Hindus were uniformly lower
than those of christians in all the age groups, except
in the age group of 43-47. This may be due to diffe-
rence in age at marriage and literacy level among
Hindus and Christians.* On the other hand christians
have higher fertility in the age group of 13-27 than
the muslims and Hindus. In the case of women above
28 years, the ASMFRs among christians had been uniformly
lower than that of Muslims.

The Graph-2 shows that at the national level
ASMFR attained its peak in the age group 23-27 for all
the three religions in rural areas. For christians
the peak was attained in the age group of 18-22 in
urban. The ASMFR was declining from the age group
of 28-32 for these three religions in both rural and
urban areas. The graph shows a clear picture of
decline in ASMFR from the age group of 28-32. The
decline was much in urban compared with rural for
Hindus and christians. The higher order birth was lower
for christians than Hindus and Muslims in both rural
and urban areas. As pointed out earlier this may be due
to high age at marriage and literacy level among them.

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* 1972 SRS data shows that the median age at marriage
for christian women were 18.7 in rural and 19.4 in
urban, whereas, the median age at marriage for the
Hindu women were found to be 16.2 in rural and 16.8
in urban. Literacy levels also were found to be
high among christians.

Table-13a: Age Specific Marital Fertility by Religion:
India and its States - Rural, 1971.

States	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
INDIA							
H	081.7	237.9	261.8	225.0	166.3	099.8	052.8
M	116.5	252.3	272.8	240.3	187.8	117.5	065.4
C	157.8	285.6	292.8	231.6	176.5	101.3	046.2
Andhra Pradesh							
H	102.1	256.4	250.1	108.1	144.4	078.8	037.4
M	161.3	282.6	273.8	237.5	172.8	094.2	052.7
C	126.9	272.4	260.9	214.8	065.7	080.0	033.5
Assam							
H	154.9	313.4	308.1	264.4	189.4	112.1	056.4
M	168.9	328.1	347.9	299.8	234.9	137.5	072.1
C	143.5	332.2	330.9	281.4	244.2	145.2	080.4
Bihar							
H	047.1	173.7	206.3	186.1	147.4	092.6	048.6
M	070.9	191.3	221.5	206.6	156.7	099.3	055.1
C	164.4	186.6	245.2	215.5	184.4	129.3	061.1
Gujarat							
H	053.2	231.1	314.1	265.2	191.4	112.9	049.6
M	081.2	269.9	340.5	265.9	201.3	121.5	054.3
C	055.6	321.9	345.7	202.3	096.3	100.7	028.6
Haryana							
H	042.4	276.8	339.9	291.9	219.8	126.1	054.8
M	048.9	296.7	362.9	350.4	280.6	154.8	074.9
C	—	666.7	333.3	157.9	125.0	—	—
Himachal Pradesh							
H	087.5	228.9	271.7	221.0	147.5	074.9	036.3
M	099.2	270.1	303.1	265.8	256.3	123.2	065.3
C	—	315.8	222.2	166.7	235.3	—	—

States	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
Jammu & Kashmir							
H	081.7	272.6	309.0	263.8	084.8	108.9	044.9
M	061.8	210.7	270.4	244.9	198.1	114.4	060.5
C	035.7	303.0	375.0	237.3	222.2	069.8	200.0
Kerala							
H	114.7	295.1	285.9	207.8	140.8	072.8	020.9
M	115.6	284.7	293.7	249.6	175.7	089.7	024.8
C	134.3	312.6	312.4	231.4	172.4	089.1	028.0
Madhya Pradesh							
H	070.6	266.3	221.8	245.5	182.9	106.4	048.0
M	103.1	296.4	312.8	264.7	289.5	111.4	057.3
C	147.4	267.2	323.5	257.3	223.3	132.1	050.0
Maharashtra							
H	077.8	261.8	290.1	239.7	167.9	094.4	042.6
M	139.9	299.7	309.5	261.4	191.9	096.7	047.2
C	112.4	311.9	340.3	217.0	144.4	097.2	026.5
Mysore							
H	129.8	268.9	251.7	208.6	146.4	079.8	037.4
M	189.2	304.3	287.2	251.3	167.7	098.3	057.9
C	152.2	310.3	354.6	244.3	168.3	096.2	049.4
Orissa							
H	174.3	324.2	294.4	297.5	222.3	135.6	201.1
M	322.9	486.4	347.5	377.6	347.2	263.5	285.5
C	223.7	335.9	338.9	344.0	284.1	217.1	233.4
Punjab							
H	100.2	254.4	301.3	205.8	183.0	096.8	042.3
M	132.1	318.4	348.6	274.3	244.1	129.3	023.3
C	203.4	278.7	343.4	304.8	196.2	113.3	059.6
Rajasthan							
H	042.6	243.4	300.0	273.7	210.8	120.7	052.7
M	048.3	243.4	290.9	287.4	218.8	155.7	062.8
C	285.7	181.8	285.7	238.1	157.9	214.3	071.4

States	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
Tamil Nadu							
H	105.6	227.1	235.7	182.8	119.0	054.0	020.7
M	126.1	257.4	260.9	198.2	138.2	058.6	025.5
C	116.5	270.2	283.9	222.1	154.8	081.8	027.7
Uttar Pradesh							
H	063.2	184.9	226.5	213.4	161.7	109.6	063.5
M	096.2	206.8	248.2	226.9	196.1	137.6	080.6
C	157.9	206.2	200.0	134.0	107.7	066.7	139.5
West Bengal							
H	162.6	285.9	282.2	215.2	184.1	132.5	105.0
M	146.8	285.4	281.9	235.6	179.0	119.9	070.5
C	145.2	187.3	155.1	108.8	123.9	119.3	005.9

Source: Computed from 1971 Census, Series I, India, Social and
Cultural Tables, Part II-C-iii, vol.II.

Note : H - Hindu; M - Muslim; C - Christian

Regional Variation: The ASMFRs for different religions are repre-
sented in graph-2 which shows that the ASMFR curve for Hindus
generally attained its peak in the age group 18-22 in Andhra
Pradesh, Assam, Kerala, Madhya Pradesh, Mysore (Karnataka),
Orissa and West Bengal. In other states the peak was attained
in the age group of 23-27. For Muslims the ASMFR attained its
peak in the age group of 18-22 in Andhra Pradesh, Mysore, Orissa
and West Bengal. Among Christians the peak was attained in the

Graph 2a

AGE SPECIFIC MARITAL FERTILITY RATE
By Religion Rural 1971

INDIA

ANDHRA PRADESH

ASSAM

KERALA

MADHYA PRADESH

MAHARASTRA

RAJASTHAN

TAMIL NADU

UTTAR PRADESH

——— Hindu
----- Muslim
— — Christian

AGE SPECIFIC MARITAL FERTILITY RATE
By Religion Rural 1971

BIHAR

GUJARATH

JAMMU KASHMIR

KARNATAKA

ORISSA

PUNJAB

WEST BENGAL

HARYANA

HIMACHAL PRADESH
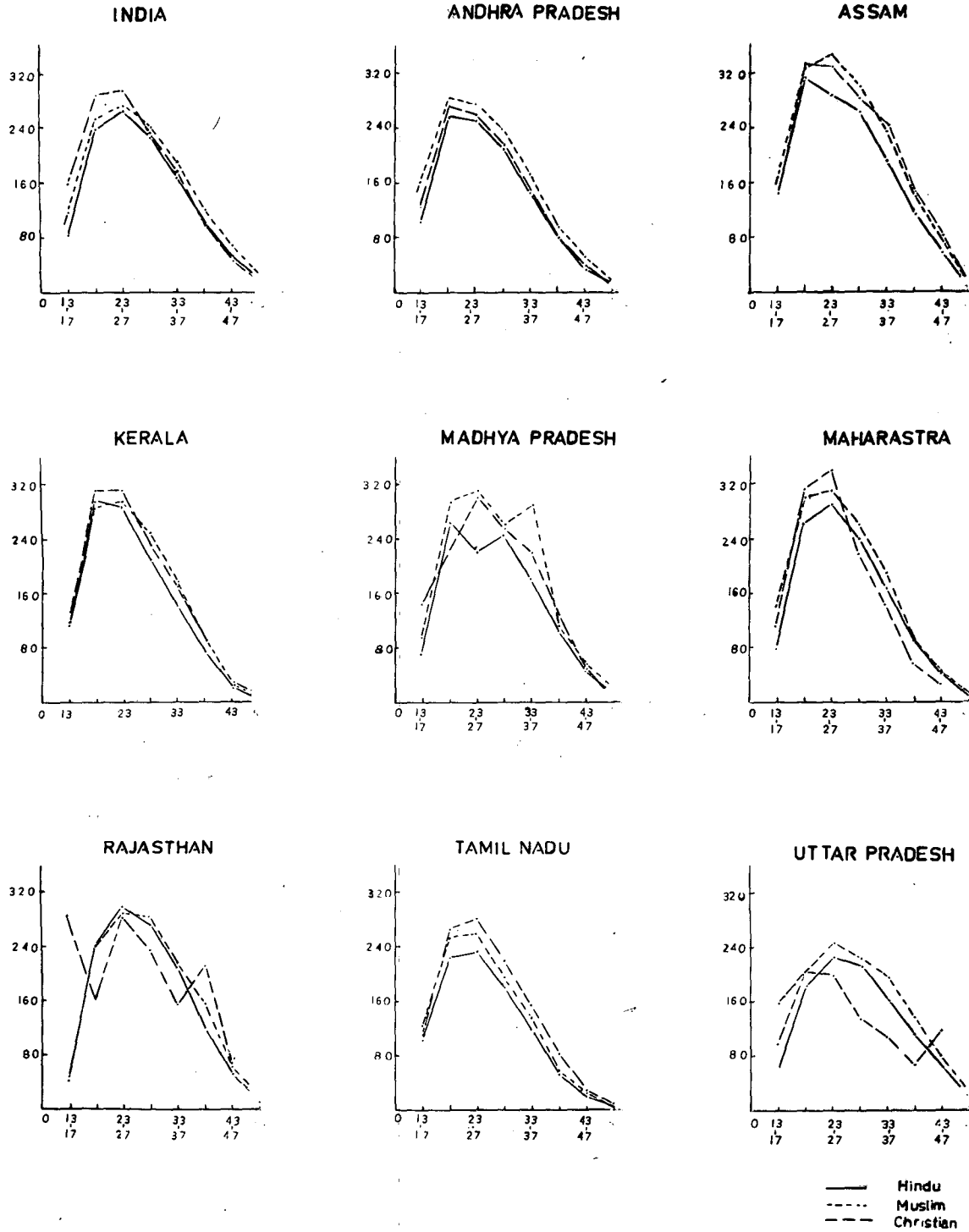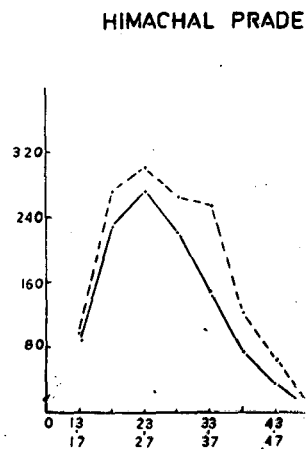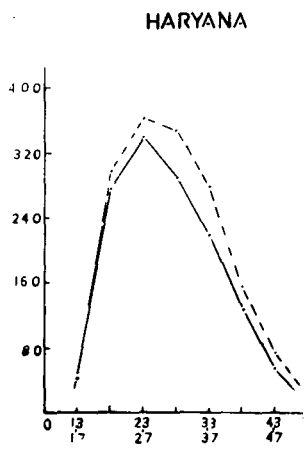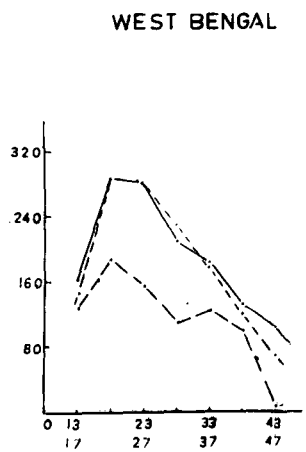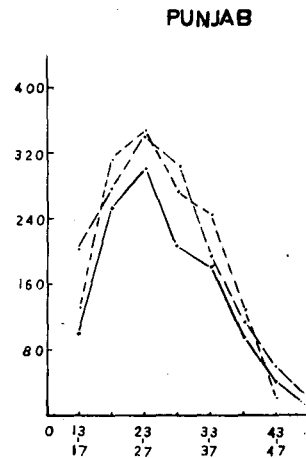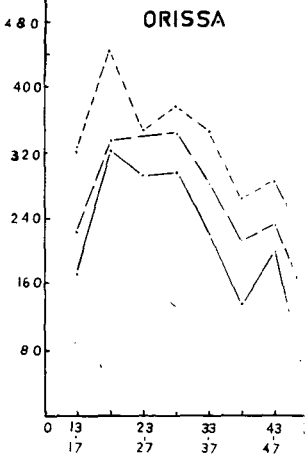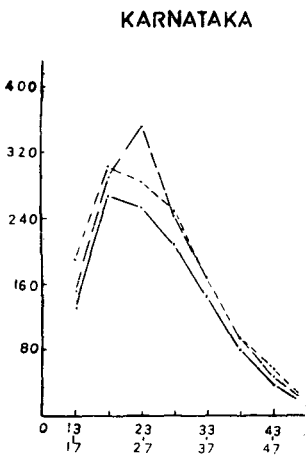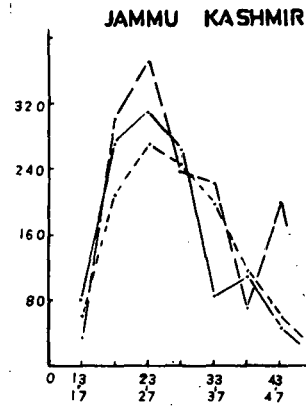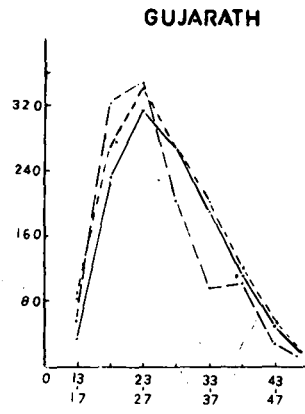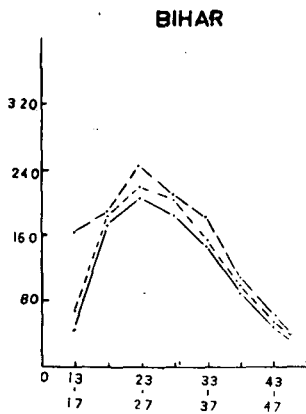
———— Hindu
········· Muslim
—·—·— Christian

younger age group, namely, 18-22 years in Andhra, Assam, UP and West Bengal. The ASMFR started declining from the age group of 28-32 for these three religions. In the broad peak pattern of 23-32, Christians have high ASMFR than Hindus and Muslims in Kerala, Tamil Nadu and Mysore. Haryana and Himachal Pradesh have the lowest ASMFR for Christians. This is mainly due to small sample size. The proportion of married women reported in this sample were found to be less in the following age groups: 38-42, 43-47 in these two states. In rural Jammu and Kashmir, Hindus have high ASMFR in the age groups of 13-17, 18-22, 23-27 and 28-32 (Table-5a) than Muslim. As mentioned earlier this may be due to small sample size. There was no difference in median age at marriage for these two religions (18.67 for Hindus and 18.61 for Muslims).

Urban: The urban data show that the ASMFR attained its peak for these three religions in the age group of 18-22 i Assam, Himachal, Kerala, Mysore and West Bengal. In urban areas also Christians have high ASMFR in the following age groups of 13-17, 18-22, 23-27, 28-32, than Hindus and Muslims in Kerala, Mysore and Tamil Nadu. This may be due to high age at marriage among them in these states.
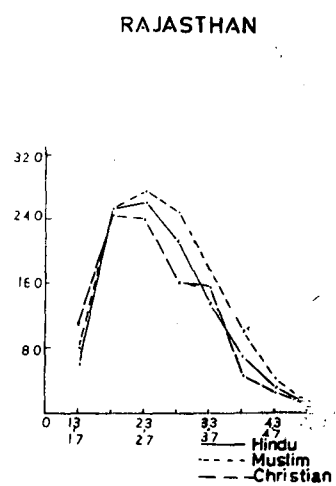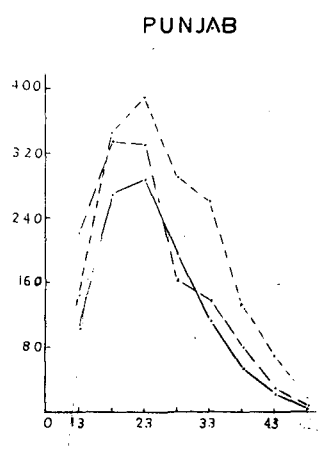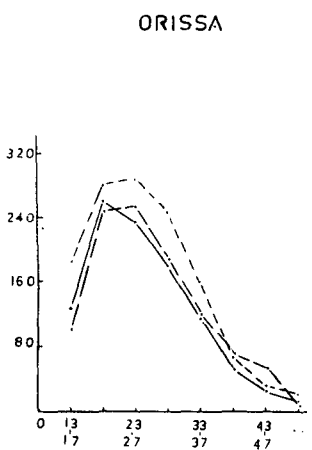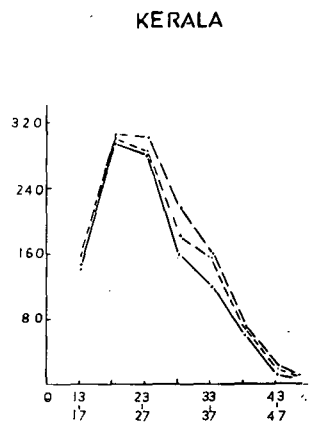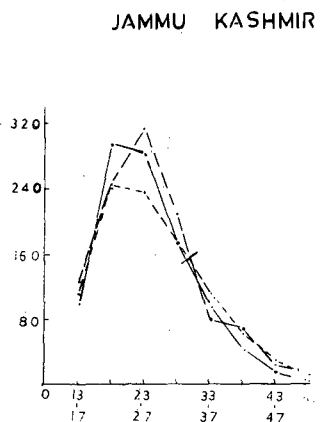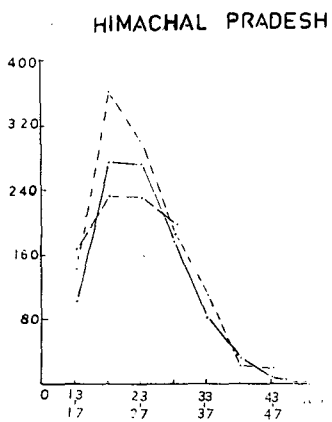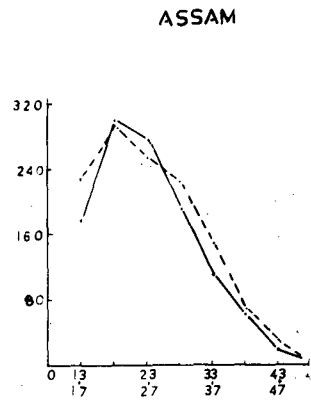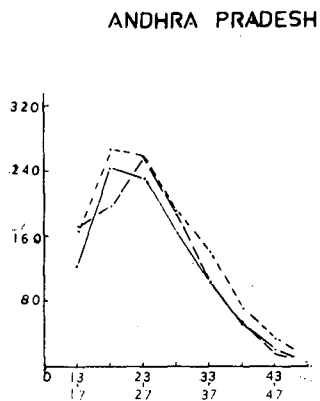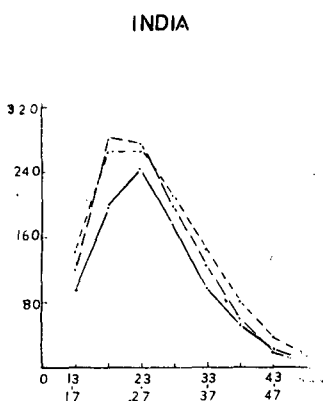
AGE SPECIFIC MARITAL FERTILITY RATE
By Religion Urban 1971

AGE SPECIFIC MARITAL FERTILITY RATE
By Religion Urban 1971

BIHAR
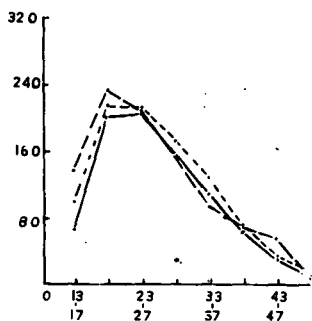
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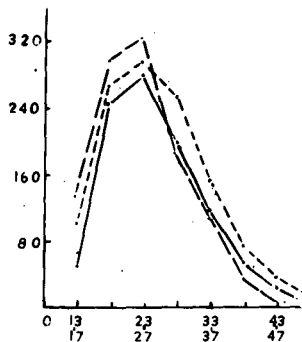
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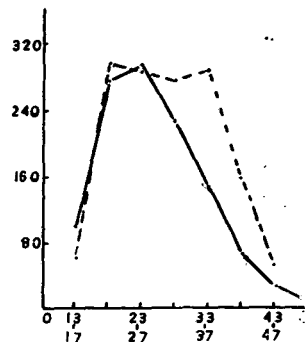
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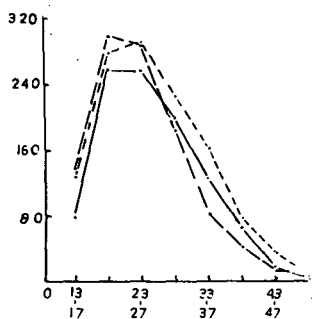
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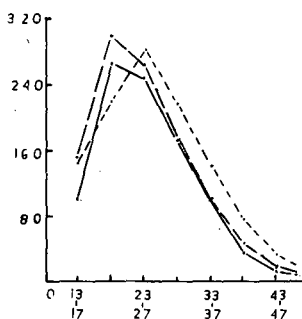
KARNATAKA
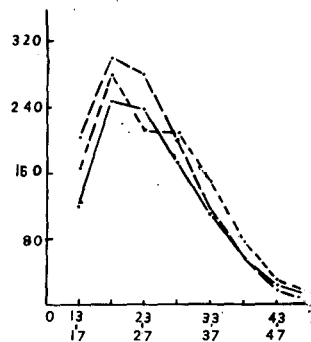
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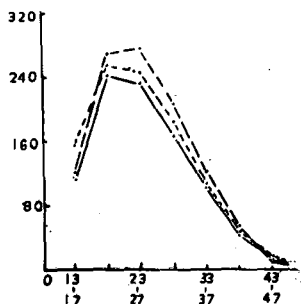
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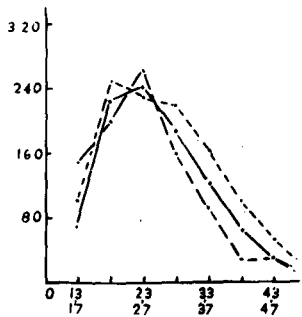
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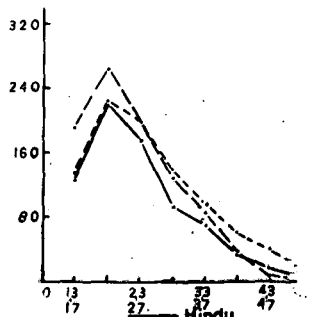
——— Hindu
.... Muslim
— — —Christian

Table-13b: Age-Specific Marital Fertility Rate: India and its
States - Urban, 1971.

States	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
INDIA							
Hindu	093.7	196.8	245.1	173.9	097.3	053.4	022.5
Muslim	139.7	263.3	264.5	209.4	144.9	079.7	038.0
Christian	119.5	281.1	278.7	197.5	123.7	056.3	019.4
Andhra Pradesh							
H	121.2	244.0	230.3	162.2	102.4	052.9	020.8
M	166.8	266.1	257.6	189.7	140.4	070.5	035.0
C	170.4	196.7	256.9	185.6	103.3	052.9	016.7
Assam							
H	177.6	299.9	273.7	194.6	112.9	062.0	019.7
M	225.6	306.7	254.0	223.1	147.5	085.7	029.4
C	125.0	435.0	409.0	268.9	131.4	109.5	041.2
Bihar							
H	070.3	203.5	208.8	162.4	113.6	067.1	034.5
M	102.6	218.3	215.6	176.8	132.6	076.2	035.1
C	142.9	235.6	209.1	158.4	098.9	072.0	058.6
Gujarat							
H	051.9	246.7	280.2	199.8	118.0	055.9	023.5
M	098.9	267.9	293.1	232.6	152.7	075.4	035.7
C	133.3	295.8	321.2	184.6	107.0	033.7	006.2
Haryana							
H	098.8	274.2	292.6	225.1	147.1	065.5	023.9
M	062.5	297.5	287.0	276.6	288.9	159.0	054.0
C	—	363.6	431.8	219.5	148.1	—	—
Himachal Pradesh							
H	104.9	275.5	273.1	178.3	083.9	035.1	010.9
M	142.8	361.4	303.2	185.4	111.1	022.5	020.4
C	166.7	235.3	231.7	200.0	—	—	—

States	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
Jammu & Kashmir							
H	107.5	295.1	283.9	171.9	096.5	044.2	018.9
M	126.3	247.1	237.9	175.4	112.9	064.1	029.9
C	100.0	242.9	317.4	213.7	080.4	069.4	025.6
Kerala							
H	139.6	294.9	280.4	160.2	122.1	061.5	013.4
M	156.1	300.4	287.4	182.1	156.2	072.3	019.9
C	148.5	305.8	302.3	215.5	160.7	070.1	023.3
Madhya Pradesh							
H	078.7	255.8	254.3	196.6	123.0	064.9	015.8
M	125.1	279.2	289.8	224.9	159.7	078.2	034.2
C	134.6	296.8	305.6	183.1	081.8	043.4	014.0
Maharashtra							
H	100.5	265.3	245.5	169.8	096.0	045.3	019.3
M	144.9	219.9	281.8	217.3	139.6	076.4	034.5
C	150.7	289.4	262.9	171.5	099.8	035.4	014.5
Mysore							
H	117.9	246.9	238.7	172.8	107.9	055.8	022.2
M	163.6	277.4	210.3	206.9	146.3	075.3	028.0
C	203.0	298.4	278.2	199.8	114.9	053.7	015.5
Orissa							
H	127.7	263.4	238.4	181.3	117.9	052.6	025.4
M	186.9	282.2	290.0	209.2	161.6	067.9	033.3
C	101.7	250.7	235.2	191.1	123.2	072.7	056.0
Punjab							
H	103.9	270.8	288.7	197.8	113.1	056.0	025.7
M	145.2	347.6	381.9	292.1	260.1	135.3	070.0
C	222.2	337.4	333.3	184.2	139.3	081.0	031.3
Rajasthan							
H	061.6	253.4	263.1	194.8	136.3	069.2	030.8
M	079.7	254.4	276.9	251.0	176.5	102.4	043.1
C	111.1	245.3	242.0	163.2	159.4	045.0	027.8

States	Age Group						
	13-17	18-22	23-29	28-32	33-37	38-42	43-47
Tamil Nadu							
H	122.0	242.8	233.9	168.6	104.2	045.3	016.3
M	155.6	257.4	248.3	187.8	110.9	051.1	018.6
C	113.5	270.2	276.7	207.9	124.1	058.7	015.2
Utter Pradesh							
H	069.4	224.7	243.0	190.9	123.7	067.2	031.5
M	103.1	251.3	270.6	222.9	167.1	102.6	054.4
C	150.0	200.1	264.2	163.3	093.9	030.8	031.6
West Bengal							
H	127.0	219.7	178.1	113.7	074.4	036.3	019.8
M	133.8	224.2	200.2	141.2	099.4	063.9	042.0
C	191.5	266.9	201.8	132.8	091.4	039.2	009.0

Source: Computed from 1971 Census, Series 1, India, Social and Cultural Tables, Part II-c-iii, vol.II.

Their higher order birth was found to be less in Tamil Nadu, Mysore and slightly higher in Kerala than other religions. As noted earlier Jammu and Kashmir shows high ASMFR for Hindus than Muslims in the age groups of 18-22 and 23-27.

Besides this all States show religious differences in marital fertility after controlling the effect of place of residence (Rural/Urban).

1. __Total Marital Fertility__

It is observed from Table-14a that the TMFR is higher for Muslims than Hindus and Christians in both rural and urban areas at the national level. In rural areas it was 5.8 for Hindus, 6.9 for Muslims, and 5.9 for Christians, in urban it was 4.3, 5.3, and 5.2 respectively. The difference in TMFR between Muslims and Christians was insignificant, 5.3 and 5.2 respectively, for urban India, but the difference between Hindus and Muslims was substantial in both rural and urban areas.

__Regional Variation:__

Table-14a shows that Orissa had the highest TMFR for these three religions (Hindus 9.0, Muslims 13.0 and Christians 9.3) followed by Assam, West Bengal, West Bengal and Madhya Pradesh. Tamil Nadu had recorded lowest TMFR for these three religions. Jammu and Kashmir which had the high GMFR and ASMFR for Hindus than Muslims, show low TMFR for Hindus. But the difference was insignificant. As is mentioned in the earlier analysis Christians have low TMFR in Rajasthan, Haryana, Himachal Pradesh and Jammu and Kashmir.

Table-14a: Total Marital Fertility by Religion:
India, State wise Rural, 1971.

States	Hindu	Muslim	Christian
INDIA	5.8	6.9	5.9
Andhra Pradesh	5.7	7.2	5.6
Assam	6.6	7.7	8.1
Bihar	5.1	5.3	6.2
Gujarat	5.2	6.0	5.7
Haryana	5.8	4.6	4.6
Himachal Pradesh	4.9	7.2	4.5
Jammu & Kashmir	6.1	6.3	4.9
Kerala	5.8	6.1	6.2
Madhya Pradesh	6.4	6.2	6.4
Maharashtra	5.7	6.9	5.3
Mysore	6.0	5.9	6.6
Orissa	9.0	13.0	9.3
Punjab	5.8	5.0	5.9
Rajasthan	5.9	4.8	4.5
Tamil Nadu	4.9	5.1	5.8
Uttar Pradesh	5.3	6.9	5.1
West Bengal	7.1	7.8	5.5

Source: Computed from 1971 Census, Series 1,
India, Social and Cultural Tables,
Part II-C-iii, vol.II.

Table-14b: Total Marital Fertility by Religion:
India - Statewise, Urban, 1971.

States	Hindu	Muslim	Christian
INDIA	4.3	5.3	5.2
Andhra Pradesh	4.7	5.9	5.1
Assam	5.5	6.2	6.5
Bihar	4.3	4.6	4.5
Gujarat	4.6	5.5	5.0
Haryana	5.3	6.2	5.3
Himachal Pradesh	4.7	5.5	3.9
Jammu & Kashmir	4.9	5.0	4.5
Kerala	5.3	5.7	5.9
Madhya Pradesh	4.9	5.9	5.1
Maharashtra	4.2	5.8	4.9
Mysore	4.9	5.7	5.7
Orissa	5.5	5.1	5.1
Punjab	5.0	4.9	6.1
Rajasthan	4.5	6.0	5.0
Tamil Nadu	4.5	4.9	5.1
Uttar Pradesh	4.6	5.8	4.9
West Bengal	3.7	4.4	4.3

Source: Computed from 1971 Census, Series 1,
India, Social and Cultural Tables,
Part II-c-iii, vol.II.

<u>Urban:</u> Table 14bb shows TMFR was low for Hindus and Muslims in Urban areas compared with rural areas. But for Christians the difference was insignificant. In urban areas Assam had the highest TMFR for these three religions (5.5, 6.2, and 6.5) followed by Haryana and Kerala. West Bengal had the lowest TMFR for these three religions followed by Bihar (Table-14b).

Religionwise analysis also shows that high fertility group of UP and Bihar have the lowest marital fertility rates. Orissa and West Bengal shows was difference in Total marital fertility between rural and urban areas for these three religions.

The above analysis indicate that the difference in marital fertility was existing in all the states after controlling the effect of place of residence.

IV   FERTILITY DIFFERENTIAL AMONG RELIGION by RURAL-
      URBAN RESIDENCE, EDUCATIONAL STATUS AND AGE
      AT MARRIAGE

In this section, an attempt was made to isolate the specific effect of the social characteristics of the religious groups which may explain the fertility

differences between different religious groups. In
turn this may perhaps help to conclude on the role of
religion in influencing the fertility. The following
factors were taken as dependent variables which in
turn explain the religious differentials in marital
fertility in India and its states: (1) place of resi-
dence, (2) Wife's education, and (3) Age at marriage.
By controlling these variables, TMFR, were computed
for Hindus, muslims and christians. The calculated
rates are presented in Appendix Table 2.

It is evident from the Appendix that religious
differences in marital fertility persisted even when
the effect of place of residence, educational status
and age at marriage was controlled. Appendix-1 shows
that, muslims have higher marital fertility even with
increase in age at marriage and educational status.

Total Marital Fertility Rate

TMFR shows a clear picture of difference in
marital fertility with increase in educational status
and age at marriage for these three religions (Hindus,
muslims and christians). But religions differences in
marital fertility was existing after controlling the
above said variables. Women of the three religions
(Hindus, Muslims and Christians), who had studied matricu-

culation. Graduation and above show the following
TMFR at the national level: For Hindus it was 6.4
in rural and 4.1 in urban, for muslim it was 7.7 and 5.4 and
for christians it was 5.9 and 4.2 respectively. It
shows clearly the difference in marital fertility
among these three religions after controlling the
effect of educational status. Similar differences
in marital fertility also exist for literater and semi-
illiterate women in both rural and urban areas.

Table 2 (in Appendix) shows that religious diffe-
rences in marital fertility persisted, even when the
effect of 'age at marriage' was controlled. Table
shows that for the matriculate, graduate and above
women, who married in the age group of 23-27 had the
following TMFR for these three religions: for Hindus
it was 4.1 in rural and 3.1 in urban for muslim 5.5
in rural and 3.8 in urban and for christians it was
4.6 in rural and 3.7 in urban areas respectively.
Similar differences in TMFR were found for women
who married in different age groups with different
educational status.

State level analysis also reveals (Table-2 Appendix)
the same pattern of difference in marital fertility for
these three religious groups after controlling the above
said variables.

USE OF CONTRACEPTION

If religious differentials in marital fertility
were in part due to deliberate control of fertility
through contraceptive use the data on knowledge and
use of contraception by religions should reflect such
pattern. The relevent data for all India are available
from Sample Registration Scheme and Ministry of Health
and Family Welfare Reports. They are summerised in
table   religionwise. Spread of knowledge of family
planning methods reveals that there was no significant
difference between Hindus and Muslims. About 59-61
per cent of them had knowledge of family planning methods.
In contrast most of the Sikhs (98 per cent) interviewed,
had knowledge of family planning methods followed by
Christians (74 per cent) and other religions (64 per cent).
As regards practice of family planning methods it is
observed from SRS data that among Hindus who were inter-
viewed, 18 per cent reported to be using contraception
while only 10 per cent of muslims did so. In fact the
practice rate is least among muslims. Among christians
the practice rate was reported to be slightly less than
that of Hindus although 74 per cent of them had knowledge
of family planning methods. The lesser acceptance of
family planning by muslims and christians than other
religions is indicated also by the data on family welfare

statistics published by Ministry of Health and Family Welfare, Government of India. It can be seen, while comparing the religious composition of the adoptors with that of the general population from table - that Hindus had more than a proportionate share in the adoption of vasectomy, tubectomy and IUD. Muslims and christians, on the other hand, had less than a proportionate share in the adoption of family planning methods considered here. Though muslims constituted about 11 per cent of the population, their proportion was only 6 per cent among adoptors. The corresponding figure for adoptors among christians is less than one per cent while they constituted about 2.6 per cent of the population. It is difficult to assertain whether this dispersion in the use of family planning was due to religious reasons or socio-economic factors. It is how ever observed from the SRS data that relatively small proportion of muslims adopted family planning methods irrespective of their socio-economic status than Hindus. Nevertheless the relative unpopularity of family planning methods among the muslims and to some extent among the christians is in conformity with the higher fertility among them.

Table-15: Extent of knowledge and practice of Family
Planning in India. Simple Registration
System 1971-72. Family Welfare Statistics,
1971-72

Religion	Total inter- viewed	Knowl- edge of FP me- thod in %age	Prac- tice of FP methods in %age	% of Re- ligious popula- tion, 1971	% of Acceptors of Steri- lisation or IUD
Hindus	34,197	60.90	18.06	82.7	88.0
Muslims	05,948	58.67	09.88	11.2	06.0
Christians	10,102	73.60	17.50	02.6	00.8
Sikhs	01,349	97.63	23.31	01.9	02.6
Others	00,556	63.50	25.11	01.6	02.6

Source: 1. Survey of the extent of KAP of Family
Planning methods in a sub-sample SRS
units: SRS Analytical Series, no.6-1973,
vital statistics division, ORGC, Ministry
of Home Affairs, New Delhi, p.5.

2. Year Book: FWP in India, Government of
India, Ministry of Health and Family
Planning, Department of FP, New Delhi
1974-75, p.81.

RELIGIOUS INFLUENCE

As discussed earlier, each religion has its own
religious beliefs, norms and values related to ferti-
lity and it is different from all other. Fertility
differentials seem to be in conformity with their basic
religious beliefs and principles. The relatively,
lowest marital fertility among Hindus shows that they

do not have any adequate doctrine prescribed for or against planned parenthood. Relatively high adoption of family planning by this religion in comparison to others might have helped them to check their fertility.

Religion and fertility are perhaps more highly correlated for muslim and christian populations. The fertility was found to be high among them compared to Hindus. And it is perhaps these religious communities - muslims and christians (Roman catholics) have a strong pro-fertility social forces and favour a high fertility. Influence of conservatism and strong faith in Allah seem to contribute to high fertility among muslims.

In this analysis, the ASMFR and TMFR was found to be little higher for christians than muslims and much higher than that of Hindus in Kerala, Tamil Nadu and Mysore (Table-13 & 14) inspite of the relatively high literacy and high age at marriage. Under those circum-stances when the gap between knowledge and practice of family planning is reasonably high, the influence of religion is obvious. In fact the Roman catholics have strong pro-fertility elements and their numerical strength is almost equal, if not higher to protestents. On the other hand though protestant teachings favour to limit their fertility. Indian christians are dispensing with many of the birth limiting customs of

the Hindus without yet adopting the western pattern of birth control. More over, like Buddhists the christian converts, as discussed earlier are also mainly from the lower strata of the society. Thus there is reason to believe that their marital fertility may exceed that of all the groups.

V.   COMPARISON OF 1971 MARITAL FERTILITY RATES BY RELIGION WITH 1978 SRS RATES

The comparison of 1971 census fertility analysis by religion with 1978 SRS rates show a little decline of TMFR in rural areas, but the urban rates of 1978 SRS data show a little increase in TMFR for the Hindus and and Muslims, and a little decline for the christians at the national level (Appendix - Table 5). According to 1978 SRS rates christians were found to have the lowest TMFR than Hindus and muslims at the national level (Table 5 - Appendix). One may conclude that it may be due to under estimation of SRS data.

The statewise comparison shows a decline in marital fertility rates in 1978 for the three religions except UP and Gujarat. The decline was found to be insignificant in Tamil Nadu and Rajasthan for the three religions. This comparison brings out some similerities between these two analysis. The following results were

found true in 1971 analysis as was in 1979: (1) The
TMFR for Hindus was high in rural Jammu and Kashmir
than Muslims and Christians, (2) Christians had the
highest marital fertility rates in Tamil Nadu than
Hindus and muslims.

From the above discussion the following conclu-
sions can be reached.

(1) It was hypothesized that Religious differen-
ces in fertility are existing among both rural and
urban women. This hypothesis are found to be true
that impact of urbanisation does not eliminate religious
differentials in fertility.

(2) It was hypothesized that literate women have
low fertility rates but religious differences in ferti-
lity existing even for highly educated women. This hypo-
thesis are found to be true that the fertility differen-
tials by religion does not disappear after controlling
the effect of education.

(3) It was hypothesised that fertility is decrea-
sing with increase in age at marriage. Religious diffe-
rences existing even with increase in age at marriage,
that is even at higher age at marriage the differences
are likely to persist. This hypothesis are found to be

true that though a sharp fall in fertility is associa-
ted with rise in female age at marriage beyond 23 years,
the differentials in marital fertility still persisted
with respect to religion.

There is thus some evidence that religious diffe-
rences in marital fertility remained unaffected by
all these factors which were persumed to affect it.
In any case, the influence of those factors, if any, was
small and will need in depth investigations to be
confirmed.

CHAPTER-IV

CHAPTER - IV

AGE AT MARRIAGE AND FERTILITY

India is currently transforming herself from
a semi-feudal and agrarian social structure into an
industrial nation. This transition which has so far
been smooth is expected to produce a greater impact
in future on the social, economic and cultural confi-
gurations and the value of orientations of the society;
that is, some of the social and cultural factors res-
ponsible for the high levels of fertility might not
be present in future, but at the same time the social
changes, such as the increase in widow remarriages,
lowering the incidence of widowhood, reduction in mis-
carriages, lowering of infant mortality and the increase
in economic standards might be expected to increase fer-
tility rates in future. With the current sustained
levels of growth in the economic sphere and agricul-
tural production and the changing value structure of the
society, the general standards of health, the span of
reproductive capacity of Indian women to bear children
are expected to show considerable improvement. In
other words this transition from agrarian to industrial
order might produce two opposite effects, lowering of

birth rates, and increasing levels of fertility. In this chapter the importance of rise in age at marriage as a factor supporting lower fertility in India and its states has been discussed.

Before proceeding for the analysis of fertility differentials it is also desirable to know the pattern of age at marriage in India and its stages and the causal mechanism through which age at marriage affects fertility behaviour.

I.   MARRIAGE IN INDIA

Marriage in India is not only universal, but takes place at an early age. Marriage is considered to be a duty of all individuals according to religious scriptures of both the Hindus and the Muslims. Monastic tendencies are frowned upon in both Hinduism and Islam. The young age at which marriage takes place has given rise to the ritual of consummation of marriage or return marriage, which takes place usually after the girl reaches puberty and constitutes a social sanction for the married couple to live together. In India early marriages are preferred because girls who have attained puberty are objects of great anxiety and care for the parents.

MEAN AGE AT MARRIAGE IN INDIA

Relative to many developing countries, including
Sri Lanka and Thailand, age at marriage is low in
India. In 1891 the age at marriage among the males
was 19.6 years whereas amongthe female it was 12.5.
It continued to increase till 1921 as would be evident
from Table-16. But after 1931, there has been a marked
fall in the mean age at marriage of both sexes presumably
due to the passing of the Child Marriage Restraint Act
in 1929. The period between the passing of the Act and
its actual enforcement was utilized by the people to
perform child marriages on a large scale, leading to
a sharp decline in the average marriage age. However,

Table-16: Mean Age at Marriage in India - 1891-1971

Year	Males (in years)	Females (in years)
1891	19.6	12.5
1901	20.0	13.1
1911	20.3	13.2
1921	20.7	13.7
1931	18.6	12.7
1941	18.9	14.7
1951	19.9	15.6
1961	21.6	15.9
1971	22.4	17.2

Note : The 1971 figures are calculated from the one
percent Sample data (census) and are provisional.

Source: Agarwal, S.N., "Age at Marriage in India",
Kitab Mahal, Allahabad, 1962, p.71.

after 1931 the female marriage age has tended to increase. It was 15.6 years in 1951, 15.9 years in 1961 and 17.2 years in 1971. The average age of male marriage was 19.9 years in 1951, 21.6 years in 1961 and 22.4 years in 1971. It may be noted that between the period 1891 and 1951, the average age of male marriage was around 20 years. A direct question on age at effective marriage* was asked in the 17th round of the NSS (1961-62) which indicated the same average age at marriage as 1961 Census.[1]

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*   A distinction is made between girls age at her wedding ceremony and the beginning of her marital sexual relations. A girl who is married before puberty does not necessarily begin living with her husband until after her first menstruation. Then a nuptial ceremony (commonly called Gauna) is celebrated for the coupel and after that they begin regular sexual relations. When a girl is married several years after he menarche, the rites are usually celebrated together, though in few such marriages some months elapse between the wedding and the nuptial ceremonies. The time of the nuptial rites marks the consummation of the Union, it is the date of effective marriage.

1.   National Sample Survey, Report No.154, Tables with notes on Couple Fertility, 17th Round September, 1961, July 1962, Manager of Publications, New Delhi, 1970, pp.4-6.

The rise in the age of marriage has been accompanied by virtual elimination of the traditional interval between formal ceremonies of marriage and the start of cohabitation. The increase in the marriage of males and females during 1931-71 is largely because of a reduction in child marriage, while in the 1891 Census 51 per cent of the girls in the age group 10-15 were reported as married only 20 per cent of the girls in the same age group were reported as married in 1961. The sample data for the 1971 census show that the corresponding figure has dropped to 12 per cent. The increase in female age at marriage was largest in Jammu and Kashmir (1.3 for males and 1.7 years for females) and lowest in Assam (0.2 years for male and a decline of 0.1 year for female).

At the national average, the ages of girls at wedding and at effective marriage has increased markedly in recent years/decades. Between the census of 1921 and that of 1961, the average age of women at wedding increased by 1.94 years from 13.89 to 15.83 years. The rise in average age at effective marriage was 1.12 years from 15.29 to 16.41 as reported by rural women in the National Sample Survey covering a

Table-17: Mean Age at Marriage in Different States of India - 1961 and 1971.

States	Males		Females	
	1961	1971	1961	1971
INDIA	21.6	22.4	15.9	17.2
Andhra Pradesh	21.9	22.6	15.4	16.4
Assam	24.9	25.1	18.6	18.5
Bihar	18.6	19.9	14.7	15.5
Gujarat	21.3	22.1	17.2	18.3
Jammu & Kashmir	22.1	23.4	16.1	17.8
Kerala	25.8	26.3	20.1	20.9
Madhya Pradesh	18.4	19.2	14.3	15.2
Maharashtra	22.2	23.3	15.9	17.5
Mysore	24.2	24.8	16.5	17.9
Orissa	21.7	22.6	16.5	17.2
Punjab	21.6	22.4	17.6	18.8
Rajasthan	19.2	19.5	14.6	15.4
Tamil Nadu	24.8	25.5	18.4	19.6
Uttar Pradesh	18.7	19.4	14.8	15.6
West Bengal	23.5	24.3	16.1	17.8
Himachal Pradesh	21.3	22.5	15.8	17.5

Source: R.P. Goyal, Shifts in Age at Marriage in India, and Different states during 1961-71, 1975, Table-4, p.12.

REGIONAL DIFFERENCES IN THE AVERAGE MARRIAGE AGE

Among the states the median age at marriage for women in 1971 was lowest in Madhya Pradesh (15.2 years) followed by Rajasthan (15.4 years) UP (15.6 years) and relatively high in Assam (18.5 years), West Bengal (17.8 years), Kernataka (17.9 years), Panjab and Haryana (18.8 years) and Kerala (20.9 years) (Table-17). It can be seen that the states in South, North and West and East have higher mean ageas at marriage. Low marriages are found in Northern states.

AGE AT MARRIAGE AND FERTILITY - CAUSAL MECHANISM

The following may be considered as a causal mechanism through which age at marriage affects fertility behaviour.

1)   Family size is positively related to the duration of the marriage in the reproductive span i.e., the higher the duration of the marriage within the reproductive span, the higher the number of children. Keeping other factors constant, a woman who is married at an early age has a higher chance of pregnancy than a women married at a later age. Therefore late age at marriage

may affect family size by shortening the duration of married life, within the reproductive span.

2)   There may be loss of fecundity as a function of advancement in marriage age.

The increase in age at marriage often has an important role in reducing fertility besides reducing exposure to reproduction attitude of women to reproduction change in favour of its reduction with higher ages at marriage. Review of literature in Chapter-I indicate that increase of women age at marriage is one of the important cause for reduction in fertility. This chapter deals with the effect of increase in age at marriage on marital fertility and its differentials by rural-urban residence, religion and educational status, in India and its states.

FERTILITY DIFFERENTIALS BY AGE AT MARRIAGE

The effect of increase in age at marriage on fertility is not equally felt across all age groups and social strata. It varies with ones socio-economic position. This section mainly deals with the fertility differentials of age at marriage by rural - urban residency, religion and educational status of

the currently married women during 1971 in India and
its states. To find out the differentials, marital
fertility rates were computed for different social groups by
age at marriage and their rates are presented in the
following tables.

1. Age Specific Marital Fertility Rates:

The ASMFRs are represented as graphs for both
rural and urban areas separately by age at marriage.
The graph 4 shows that for the women married in the
age groups 13-17, 18-22, and 23-27, the peak of the
ASMFR curve was in the age group of 23-27 at the
national level. In rural areas high ASMFR was found
for the women married at ages between 13-17 years,
than for the women married at the age group of 18-22.
For rural women married in the age group of 13-17
the ASMFR curve was consistently higher till their
reproductive age group 38-42. The urban women who
were married in 13-17 years age group showed lower
fertility rates than the rural women as one would
expect. Their fertility declined from the age group
33-37 onward. It was found that women married after
23 years of age and above started reproducing at
relatively younger ages (Table 18). But their fertility
started declining after the age group of 33-37, then the

AGE SPECIFIC MARITAL FERTILITY RATE
By Age at Marriage Rural 1971

INDIA

ANDHRA PRADESH

ASSAM

HIMACHAL PRADESH

JAMMU KASHMIR

KERALA

PUNJAB

RAJASTHAN

TAMIL NADU
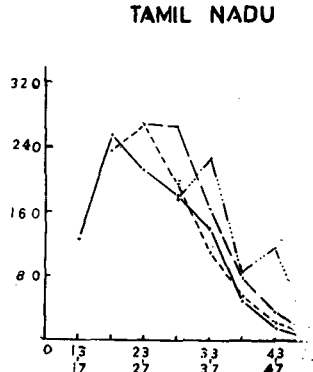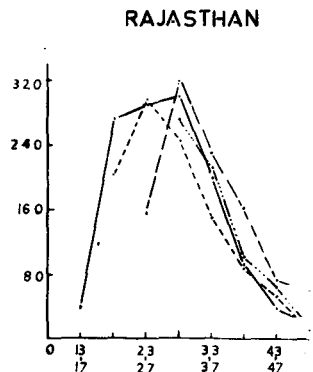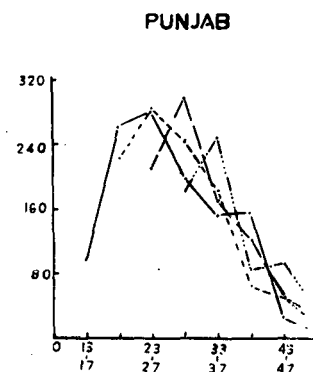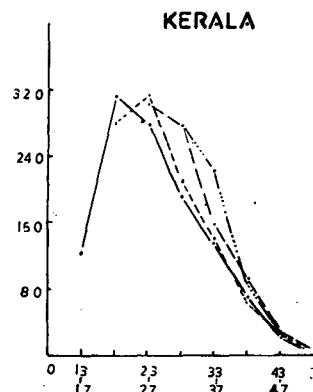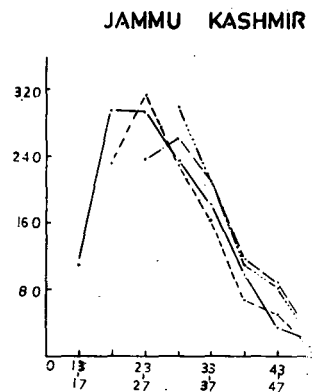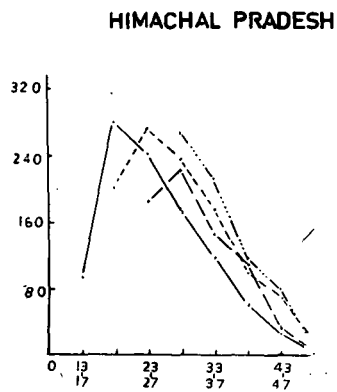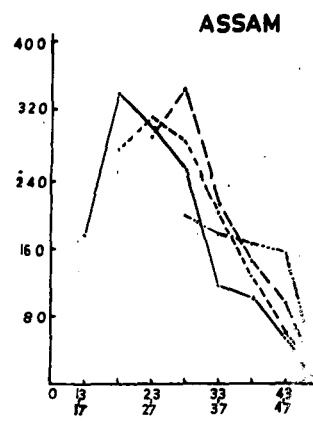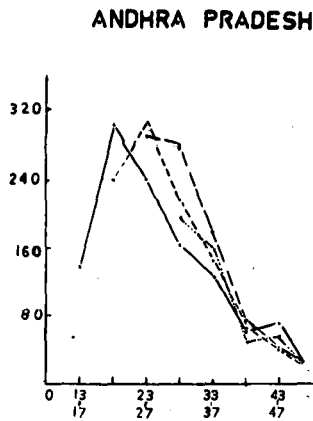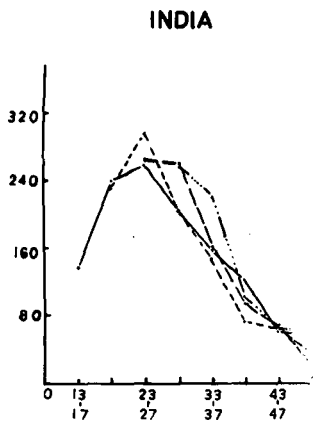
——— 13-17
– – – 18-22
— — 23-27
—····— 28+

AGE SPECIFIC MARITAL FERTILITY RATE
By Age at Marriage Rural 1971

BIHAR
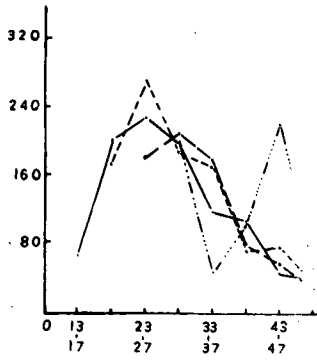
GUJARATH
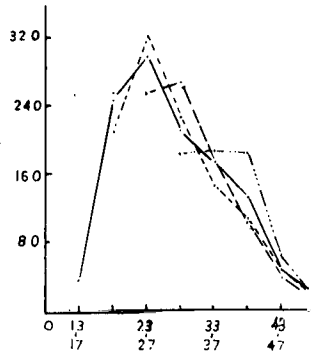
HARYANA
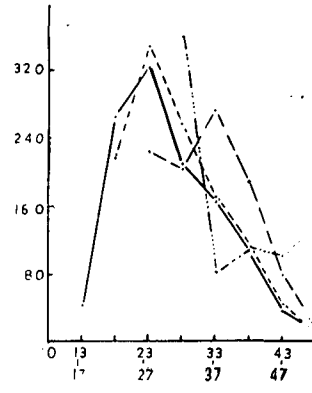
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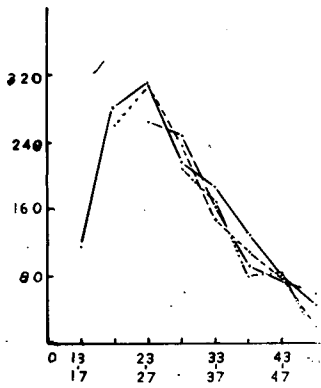
MAHARASTRA
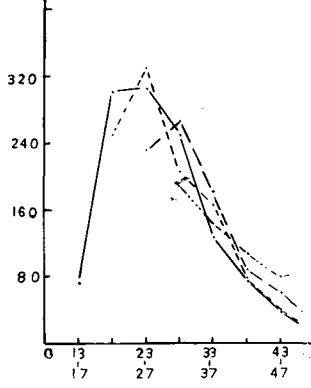
KARNATAKA
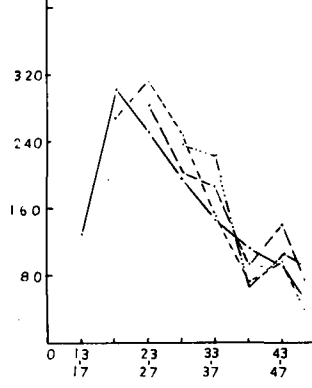
UTTAR PRADESH
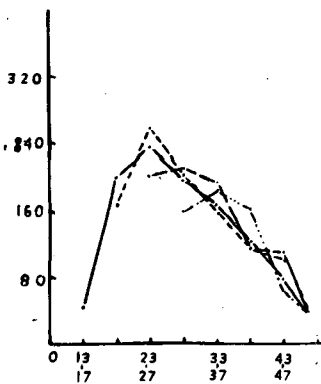
WEST BENGAL
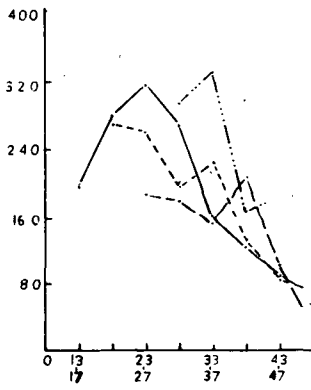
ORISSA
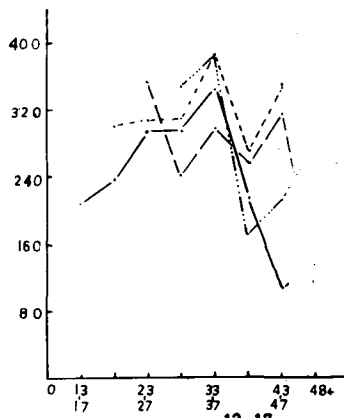
———— 13-17

- - - - - 18-22

— — — 23-27

—·······—·— 28+

the women who were married in the age group of 13-17
years. Rural women who married after 28+ years had
higher ASMFR than the urban women, who married in
the same age group. The table shows that fertility
of women who married late shows a decline after five
years of married life. On the other hand, for women
who married relatively earlier, fertility actually
increased especially in rural areas, after five years
of married life.

REGIONAL VARIATION
Rural:

In rural areas for the women married below 22
years, the peak of ASMFR curve was in the age group
of 23-27 years. This peak shows high ASMFR in Assam,
Gujarat, Haryana, Jammu and Kashmir, Kerala, Medhya
Pradesh, Rajasthan, Orissa, Punjab, and West Bengal.
The high fertility group of UP and Bihar shows lowest
ASMFR in this age group. Fertility started declining
much in Kerala from the age group 38-42 followed by
Tamil Nadu and Maharashtra. In rural areas high
ASMFR was found for the women married at ages
between 13-17 years, in all the states except in Assam,
Haryana, Himachal Pradesh and Tamil Nadu. For the
women married after 28+, the fertility peak was con-

Table-18a: Age Specific Marital Fertility Rate: By
Age at Marriage - India and its States,
Rural, 1971.

States/ Age at marriage	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	48-47
INDIA							
13-17	137.9	240.9	260.8	203.8	158.3	122.1	060.8
18-22	---	233.8	296.4	205.0	148.6	071.8	061.4
23-27	---	---	266.8	260.0	160.2	093.7	068.6
28+	---	---	---	258.4	223.4	102.9	067.2
Andhra Pradesh							
13-17	138.2	307.4	242.7	163.8	127.9	063.8	070.7
18-22	---	240.2	305.0	218.7	145.5	065.0	039.5
25-27	---	---	289.7	279.6	180.9	076.9	039.4
28+	---	---	---	198.8	157.1	050.2	053.6
Assam							
13-17	178.7	340.9	298.0	251.1	135.6	102.3	054.3
18-22	---	273.4	310.5	284.6	201.0	125.6	057.3
23-27	---	---	290.1	344.7	212.5	146.2	093.5
28+	---	---	---	199.8	178.8	167.1	153.8
Bihar							
13-17	64.7	199.6	225.6	192.1	135.5	103.6	041.1
18-22	---	172.2	271.4	185.2	168.5	077.0	054.1
23-27	---	---	178.2	207.8	175.2	070.1	073.8
28+	---	---	---	193.9	425.0*	100.4	237.0*
Gujarat							
13-17	33.3	245.9	297.9	211.8	173.1	131.8	036.8
18-22	---	209.8	321.3	226.5	143.7	105.1	045.3
23-27	---	---	253.9	266.9	172.8	102.3	045.5
28+	---	---	---	181.1	186.9	184.6	061.9
Haryana							
13-17	44.5	265.3	326.9	210.9	164.8	105.5	035.5
18-22	---	218.2	350.9	258.9	168.7	111.1	044.5
23-27	---	---	245.2	206.7	274.2*	187.5	078.1
28+	---	---	---	360.0	080.0	111.1	101.4

States/ Age at marriage	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-57
Himachal Pradesh							
13-17	094.5	281.1	242.9	172.4	118.9	060.9	027.1
18-22		202.1	275.1	236.2	177.5	099.2	070.3
23-27		—	184.1	203.7	145.2	088.8	032.6
28+		—	—	269.7	210.6	118.9	080.1
Jammu & Kashmir							
13-17	109.8	295.6	295.1	236.7	182.4	096.8	03614
18-22		229.7	313.4	229.9	161.1	068.2	050.4
23-27			238.1	264.4	210.1	116.2	091.2
28+				300.4	208.8	107.5	082.0
Kerala							
13-17	123.7	315.7	277.9	191.2	134.0	073.1	021.5
18-22		297.9	313.2	207.8	140.1	064.7	021.7
23-27			303.1	276.1	157.7	091.7	023.8
28+			—	275.8	222.3	086.6	029.2
Madhya Pradesh							
15-17	094.8	282.9	311.8	217.8	185.6	150.4	083.2
18-22	—	261.9	308.9	236.9	148.0	109.7	078.0
23-27	—	—	265.6	249.6	163.8	095.2	077.0
28+	—	—	—	211.7	168.7	080.8	083.64
Maharashtra							
13-17	074.9	302.3	303.8	255.2	128.4	076.1	040.9
18-72		249.5	329.1	205.9	166.7	077.8	038.9
23-27			229.2	265.8	181.9	088.3	062.9
28+				189.7	124.4	105.5	080.9
Mysore							
13-17	149.6	301.3	252.2	197.6	146.7	113.0	092.1
18-22	—	268.9	315.2	248.6	151.1	074.4	098.1
23-27	—	—	286.9	204.4	186.7	093.5	141.4*
28+	—	—	—	238.7	221.2	068.2	105.1
Orissa							
13-17	207.9	237.4	295.4	295.1	344.1	214.0	109.2
18-22	—	299.9	306.9	308.7	388.6	269.0	352.0*
23-27	—	—	373.1	241.9	298.3	256.8	316.5*

States/Age	Age Group						
at marriage	13-17	18-22	23-27	28-32	33-37	38-42	43-47
Punjab							
13-17	098.9	262.0	279.7	194.6	153.5	156.5	026.6
18-22	—	224.5	304.2	243.6	164.3	066.4	051.7
23-27	—	—	211.7	297.2	169.9	124.8	051.5
28+	—	—	—	183.6	249.3	086.9	093.8
Rajasthan							
13-11	39.9	274.8	292.5	300.4	202.3	094.2	039.2
18-22		204.3	297.9	245.8	153.4	088.8	053.7
23-27			158.2	319.6	231.5	164.4	074.8
28+				272.5	215.0	102.9	065.2
Tamil Nadu							
13-17	125.8	255.7	212.2	180.5	120.5	050.5	016.3
18-22		236.2	268.6	193.6	112.5	056.6	024.6
23-27			268.6	265.5	164.2	080.2	038.0
28+				178.1	228.6	086.2	118.4
Uttar Pradesh							
13-77	044.9	204.4	236.8	203.2	169.6	125.9	080.8
18-22	—	169.2	258.9	206.7	159.5	117.9	104.9
23-27	—	—	205.3	215.0	197.9	118.5	111.8
28+	—	—	—	163.4	187.8	165.9	066.7
West Bengal							
13-17	197.9	280.6	317.2	270.8	162.9	126.1	091.6
18-22		269.8	259.3	196.2	224.6	135.0	088.8
23-27			191.4	181.2	156.7	208.9	103.3
28+				295.7	334.7	168.1	188.9

*Small Sample Size

Source: Computed from 1971 Census, Series I, India, Social and
Cultural Tables, Part II-c-iii, vol.II.

tinuously high upto the reproductive age group of 43-47, in the states of Assam, Gujarat, MP and West Bengal. The ASMFR for the women who married after 28+ was not clear in Bihar, Haryana, and Orissa. (Table-18a). This may be due to small sample size.

Urban:

The graph 5 shows the same pattern of fertility peak for women married below 22 years of age as was found in rural, i.e., the peak was attained in the age group of 23-27. The ASMFR was found to be higher for the women married below 22 years of age in Gujarat, Haryana, Jammu and Kashmir, Kerala and Punjab. For the women who married after 28+ years, the fertility peak was found to be higher till the reproductive age group of 43-47, in the states of Haryana, Bihar, and Rajasthan. Kerala had the lowest ASMFR from the reproductive age group of 43-47 and also shows lowest ASMFR for the women married after 28+ years. Higher order birth was found to be low in Kerala compared with other states.

Both rural and urban ASMFRs show a decline in marital fertility rates for the women married after 23 years of age.

AGE SPECIFIC MARITAL FERTILITY RATE
By Age at Marriage   Urban   1971

INDIA
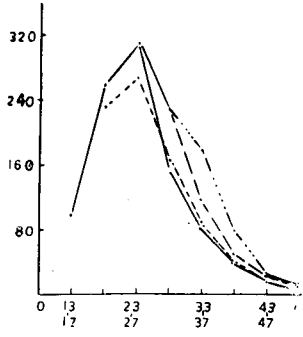
ANDHRA PRADESH
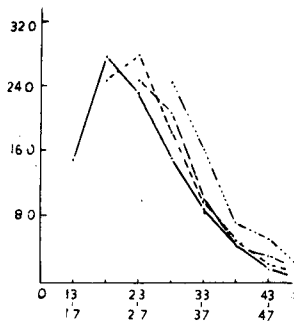
ASSAM
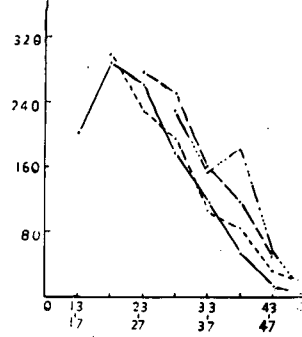
HIMACHAL PRADESH
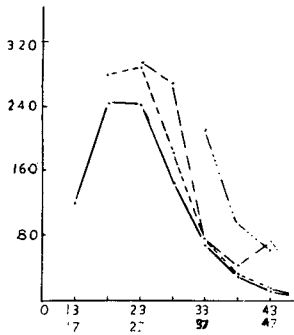
JAMMU KASHMIR
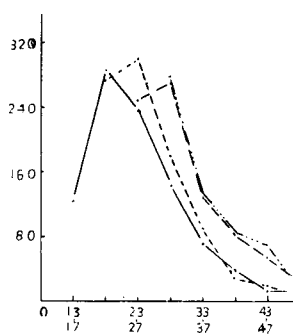
KERALA
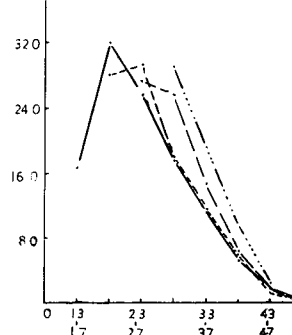
ORISSA
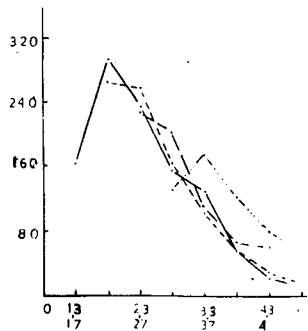
PUNJAB
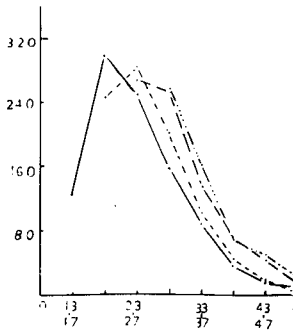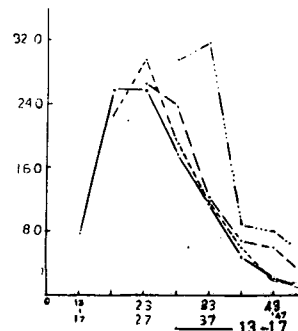
RAJASTHAN

——— 13-17
- - - - 18-22
— — — 23-27
·—·—· 28+

GRAPH·4·b

AGE SPECIFIC MARITAL FERTILITY RATE
By Age at Marriage Urban 1971

BIHAR

GUJARATH

HARYANA

MADHYA PRADESH

MAHARASTRA

KARNATAKA

TAMIL NADU

UTTAR PRADESH

WEST BENGAL
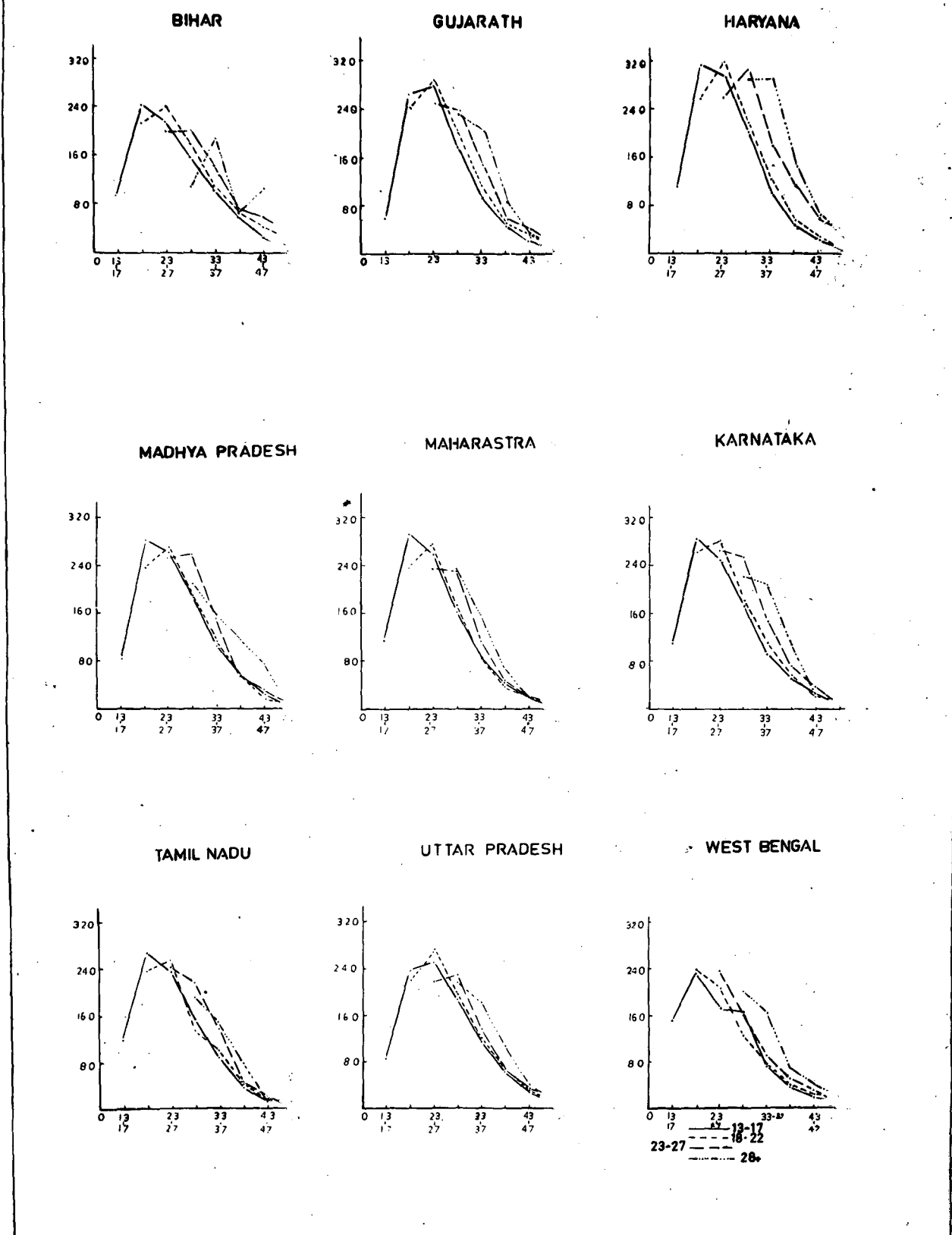
13-17
18-22
23-27
28+

Table-18b: Age Specific Marital Fertility Rate: by Age at
Marriage — India and its States, Urban, 1971.

States/Age at Marriage	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
INDIA							
13-17	97.8	259.6	307.6	149.7	082.8	039.9	017.9
18-22		235.3	268.6	165.5	088.7	040.9	017.4
23-27			312.0	229.7	116.8	051.4	021.4
28+				228.3	177.9	079.0	023.3
Andhra Pradesh							
13-17	149.6	279.5	233.0	155.2	091.0	046.5	018.1
18-22		248.9	278.1	183.9	097.7	050.7	021.1
23-27			248.9	208.9	098.9	042.7	032.9
28+				247.2	161.4	075.4	054.2
Assam							
13-17	204.3	291.3	262.5	17815	117.8	054.7	014.9
18-22		298.3	229.2	195.3	107.2	084.3	033.6
23-27			276.2	252.8	159.6	117.7	050.2
28+				230.2	153.2	182.5	052.6
Bihar							
13-17	095.3	241.9	216.4	157.6	101.6	057.9	024.7
18-22		209.0	240.9	176.3	107.2	066.3	041.8
23-27			199.3	199.2	141.3	074.8	057.8
28+				107.2	186.1	068.3	104.5*
Gujarat							
13-17	058.2	261.4	276.1	176.4	090.7	044.5	019.8
18-22		239.8	305.2	199.1	109.3	047.4	031.0
23-27			248.9	236.3	145.2	056.9	040.9
28+				230.0	200.5	082.7	026.6
Haryana							
13-17	109.8	312.1	289.7	199.0	099.8	046.4	020.2
18-22		254.8	215.9	213.7	121.3	054.4	026.4
23-27			257.1	313.0	176.3	110.4	056.6
28+			—	285.9	286.9	142.8	060.0
Himachal Pradesh							
13-17	120.1	244.1	242.6	144.3	066.7	028.4	009.9
18-22		280.4	287.8	183.1	073.6	031.3	014.9*
23-27			293.9	267.9	083.6	043.0	072.7
28+			—		212.8	097.6	063.3

States/Age at Marriage	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
Jammu & Kashmir							
13-17	123.9	286.9	237.3	142.6	072.9	039.2	013.7
18-22		273.0	300.8	179.1	091.3	033.5	019.9
23-27			250.4	271.3	136.9	084.8	056.6
28+				280.5	128.8	085.9	069.0
Kerala							
13-17	168.8	320.7	258.2	176.8	114.6	053.2	017.3
18-22		282.1	292.0	180.8	116.1	059.5	013.0
23-27			275.0	257.9	148.4	065.9	020.1
28+				292.6	193.1	099.8	025.1
Madhya Pradesh							
13-17	082.8	281.5	261.3	185.2	103.7	056.1	024.4
18-22		236.7	275.3	190.6	113.1	055.6	016.4
23-27			252.5	258.3	151.2	055.5	032.3
28+				209.6	157.9	117.2	075.9
Maharashtra							
13-17	115.3	294.7	257.4	163.4	088.9	044.7	017.0
18-22		238.2	278.3	173.9	086.3	038.8	018.4
23-27			236.6	232.7	115.1	048.6	019.9
28+				233.0	159.3	070.2	020.5
Mysore							
13-17	127.5	283.6	249.9	172.3	090.6	049.7	025.1
18-22		261.1	281.3	180.7	109.3	056.0	020.2
23-27			266.6	254.0	145.2	071.7	038.1
28+				222.3	208.9	105.9	025.1
Orissa							
13-17	162.0	294.9	234.8	155.8	128.1	056.6	021.2
18-22		264.8	258.0	163.8	103.0	056.2	029.8
23-24			227.8	203.1	110.5	065.6	060.8
28+				129.0	174.0	121.9	080.0
Punjab							
13-17	123.9	297.8	249.3	157.8	088.9	035.8	016.5
18-22		243.8	304.7	202.3	099.1	043.9	017.3
23-27			268.3	253.4	135.2	072.4	044.7
28+				256.8	163.1	070.8	051.1

States/Age at Marriage	Age Group						
	13-17	18-22	23-27	28-32	33-37	38-42	43-47
Rajasthan							
13-17	077.4	258.8	259.2	178.7	116.3	050.7	023.9
18-22		225.9	295.1	189.0	113.0	062.3	021.6
23-27			263.5	236.7	122.4	070.2	062.5
28+				294.8	316.1	090.2	080.6
Tamil Nadu							
13-17	120.9	268.4	236.1	153.7	088.9	037.2	015.2
18-22		238.4	255.9	136.6	101.9	043.8	018.0
23-27			243.6	218.4	120.6	047.9	021.3
28+				194.2	153.3	079.7	018.4
Utter Pradesh							
13-17	087.0	235.7	250.8	185.1	113.5	061.0	029.2
18-22		220.7	272.0	195.5	120.4	067.0	030.0
23-27			218.1	231.2	138.6	061.7	035.8
28+				218.8	182.1	106.4	043.3
West Bengal							
13-17	151.7	232.6	172.8	166.8	071.6	035.9	019.8
18-22		237.9	206.7	126.0	075.9	040.5	025.6
23-27			236.0	161.8	092.3	051.7	034.9
				202.5	164.6	070.9	044.7

*   Small Sample Size

Source: Computed from the 1971 Census, Series I, Social and
          Cultural Tables, Part II-c-iii, vol.II.

TOTAL MARITAL FERTILITY RATES

At the national level the TMFR was found to be high for the women married at ages below 22 years than the women married after 23 years of age. The TMFR for the women married in the age groups 13, 13-17, 18-22, 23-27 and 28+ was as follows: 6.2, 5.6, 5.3, 4.4 and 2.8 in rural areas, and 4.7, 4.6, 3.9 3.4 and 2.6 in urban areas respectively. This shows a clear picture of decline in TMFR as increase in age at marriage in both rural and urban areas at the national level.

REGIONAL VARIATION

Rural:

All the States show a decline in TMFR for the women married after 23 years of age. TMFR was found to be higher for the women married at ages below 22 years in Assam, Haryana, MP, Mysore, Orissa and West Bengal. The TMFR was found to be low for the women married after 28+ years in Haryana (1.5), Rajasthan (1.6) and MP (2.0). This is mainly due to small sample size in this age at marriage. This indicates the low age at marriage in these states*.

---

* The percentage of female literacy rate was 8.7 in Bihar, and 10.5 in UP. Their mean age at marriage was 15.5 in Bihar and 15.6 in UP respectively. This rate was quite low compared to the southern states.

Table—19a: TMFR by age at Marriage — Rural 1971

States	Age Group				
	13	13—17	18—22	23—27	28 +
INDIA	6.2	5.6	5.3	4.4	3.8
Andhra Pradesh	5.7	5.5	5.0	4.5	2.2
Assam	7.4	6.7	5.9	5.0	2.3
Bihar	4.3	4.9	4.6	2.9	3.0
Gujarat	4.9	5.5	5.0	4.0	2.2
Haryana	6.5	5.6	5.5	3.9	1.5
Himachal Pradesh	5.3	4.9	5.4	3.2	3.4
Jammu & Kashmir	4.8	6.2	5.1	4.2	3.2
Kerala	4.6	5.7	5.2	4.3	3.0
Madhya Pradesh	5.9	6.9	5.8	3.9	2.0
Maharashtra	5.2	5.7	5.2	3.7	2.5
Mysore	6.4	6.4	5.8	4.5	3.3
Orissa	7.8	9.2	11.3	7.3	6.1
Punjab	6.0	5.3	5.2	4.0	2.9
Rajasthan	5.2	5.5	4.7	4.4	1.6
Tamil Nadu	3.5	4.7	4.5	4.0	2.6
Uttar Pradesh	5.7	5.4	5.2	4.3	2.8
West Bengal	8.6	7.4	6.2	3.9	4.7

Source: Computed from 1971 Census of India,
Series 1, India, Social and Cultural
Tables, Part II-c-iii, vol.II.

Table-19b: TMFR by Age at Marriage, Urban 1971

States	13	13-17	18-22	23-27	28+
INDIA	4.7	4.6	3.9	3.4	2.6
Andhra Pradesh	4.6	4.8	4.4	3.3	2.6
Assam	4.5	5.6	4.9	3.9	2.5
Bihar	4.4	4.5	4.3	3.5	2.2
Gujarat	4.7	5.2	4.6	3.7	2.7
Haryana	5.9	5.4	4.9	4.4	3.3
Himachal	4.4	4.1	4.3	3.8	3.0
Jammu & Kashmir	3.7	4.6	4.5	3.8	2.5
Kerala	4.8	5.5	4.7	3.8	3.0
Madhya Pradesh	4.7	5.0	4.5	3.7	2.4
Maharashtra	4.8	4.9	4.2	3.3	2.4
Mysore	5.0	4.9	4.6	3.9	2.8
Orissa	4.4	5.2	4.4	3.0	1.7
Punjab	3.8	4.8	4.3	3.8	2.6
Rajasthan	4.9	4.7	4.6	3.6	4.0
Tamil Nadu	4.4	4.7	4.2	3.3	2.4
Uttar Pradesh	4.7	4.8	4.2	3.5	2.8
West Bengal	4.4	4.3	3.1	2.9	2.3

Source: Computed from 1971 Census of India, Series 1, India, Social and Cultural Tables, Part II-c-iii, vol.II.

<u>Urban:</u>

In urban areas the TMFR was high for the women
married below 22 years of age in Haryana, Assam,
Gujarat, Kerala, MP and Mysore. In Orissa TMFR was
low after 28+ years. Even the age at marriage and
literacy rate was low among females in UP*, the TMFR
was found to be low compared to the low fertility
group of southern states, where the literacy level
and age at marriage was higher than UP and Bihar.
These shows clearly the under estimation of 1971
Census fertility data in UP and Bihar.

Both rural and urban analysis show a decline
in marital fertility as increase in age at marriage.
The decline was much in urban compared to rural.
This may be due to high age at marriage and literacy
level among urban women.

III. FERTILITY DIFFERENTIALS BY AGE AT MARRIAGE AFTER
CONTROLLING RURAL-URBAN RESIDENCE AND EDUCATIONAL
STATUS

This section presents the effect of age at
marriage on fertility by educational status of the
currently married women in India and its states. To
find out the differentials TMFR was computed for India

and its states. The calculated rates are presented
in the Appendix - Table-4.

TOTAL MARITAL FERTILITY RATE

Table-4 in the Appendix shows that as increase
in age at marriage and educational status the TMFR
was found to decline. The decline was much clear
in urban areas than in rural.

NATIONAL LEVEL

The decline of marital fertility as increase in
educational status and age at marriage was found to be
insignificant in rural areas, among illiterate, literate,
matriculate, Graduate and above women. But the urban
data show a clear picture of decline in marital fertility
as increase in educational status and age at marriage.
For example in urban areas for the women married in the
age group of 18-22, 23-27, the TMFR was found to be in
the following order.

1. For the Women married in the age Group of 18-22:

4.7 for illiterate, 4.5 for literate and 3.9 for
matriculate and graduate and above women.

2.   <u>For the women married in the age group of 23-27:</u>

3.7 for illiterate, 3.6 for literate, 3.2 for matriculate, graduate and above women respectively.

This clearly shows the decline in marital fertility as increase in educational status and age at marriage, in urban areas. The insignificant rate in rural areas is mainly due to the small sample size of litterate, matriculate and graduate women. But little difference was existing among them as increase in age at marriage (Appendix - Table-4).

<u>Regional Variation:</u>

Table -4 (Appendix) shows higher marital fertility rate for literate, matriculate and graduate women in rural areas of Madhya Pradesh, Mysore, Maharashtra, Orissa, UP and West Bengal. This is mainly due to small sample size of literate and educated women in rural areas. Other states show a decline in marital fertility as increase in age at marriage and educational status. In Assam and Haryana, no births were reported for the matriculate and graduate women married after 28+ years except in the unspecified age group. Further the proportion of women in this age at marriage was found to be

less in number. Assam, Haryana, Jammu and Kashmir, MP, Mysore, Orissa, Punjab and West Bengal shows higher TMFR for different educational group of women who married before 22 years. In general the TMFR was found to be less for the women married after 22 years in all the states.

Urban difference:

The decline in marital fertility as increase in age at marriage was high in urban areas than the rural. In urban areas all the states show low TMFR for the matriculate and graduate women married after 18 years than the illiterate and literate women. But the decline is much only from the age at marriage of 23-27 years. TMFR was found to be low for the matriculate and graduate women who married after 28+ years in Assam, Jammu and Kashmir, and Orissa. This is mainly due to small sample size. Despite of low literacy and low age at marriage Bihar shows a low TMFR for different educational group of women married in different age at marriages.

Both rural and urban data show a decline in marital fertility as increase in age at marriage and educational status. But the decline was much, only for the matriculate,

graduate and above women in both rural and urban areas.
Further it was found that all the states show a decline
of TMFR only from the age at marriage 23-27 i.e. women
married after 23 had low TMFR than the women who married
below 22 years, even after controlling the effect of
education.

FERTILITY DIFFERENTIALS BY AGE AT MARRIAGE: AFTER
CONTROLLING RELIGION, AND PLACE OF RESIDENCE

Despite of religious faith on marriage and birth
control, marital fertility was found to be decline as
increase in age at marriage. Appendix-6 shows a clear
picture of ddecline in marital fertility for the Hindus
Muslims and Christians as increase in age at marriage.
At the national level the decline was found to be sig-
nificant for these three religions, especially for
Hindus. For example, the TMFR for the Hindu women
married below 17 years of age wasfound to be 6.1 in
rural and 5.1 in urban, the corresponding figure for
the women married after 28+ years was 3.5 and 2.5 res-
pectively. Similar difference in marital fertility was
existing among muslims and christians as increase in
age at marriage.

Regional Variation:

All the states show a decline in marital ferti-
lity as increase in age at marriage for these three
religions. Due to small sample size the marital ferti-
lity was too low and very high for the muslim and
christian women who were married after 28+ years of
age, in the states of Andhra, Assam, Bihar, Gujarat,
Haryana, Himachal Jammu and Kashmir, Orissa, Rajasthan
and UP. In both rural and urban areas the fertility
was declining from the age at marriage 23-27 for all
the religions.

From the above discussion the following conslu-
sions can be reached.

1) Fertility was lower in both rural and urban areas
as age at marriage increased. It was found that in
both rural and urban areas the marital fertility was
significantly lower only in case of women married
after 22 years of age.

2) It was hypothesised that female literacy plays
negative effect on age at marriage of women and upon
their levels of fertility. This was found true that as
increase in educational status, the marital fertility

was found to decline i.e., for the women who had studied matriculation and above, the TMFR was found to be low than the literate and illiterate.

3)   Despite religious faith on marriage and birth control all religions show a decline of fertility as increase in age at marriage.

The 1971 Census data show that women married below the age of 17 years had more children than women married after the age of 18 years. Further the difference in marital fertility between the women married below the age of 17 years and 18-22 years was found to be insignificant. This was found true in all the States. So a substantial effect on the birth rate in India can be possible only when the marriages for females are postponed beyond 23 years of age. Further difference in marital fertility between the women married below the age of 17 years and 18-22 years was found to be insignificant. This was true in all the states.

The 1971 Census analysis by age at marriage cannot be compared with 1972 and 1979 Sample Surveys, because of difference in age group of the age at Marriage. Due to this reason, comparison with the sample surveys were omitted.

SUMMARY AND CONCLUSION

CHAPTER – V

SUMMARY AND CONCLUSION

The analysis of 1971 census fertility data based on the currently married women and its comparison with 1972 and 1979 SRS data based on the currently married women leads to the following conclusions.

The SRS, 1971-81 (three year moving average) shows that the crude birth rate was continuously high in the states of UP, Bihar, Rajasthan, Madhya Pradesh and Gujarat, compared with the 1971 census birth rate. In contrast the southern and western regions comprising Karnataka, Kerala, Tamil Nadu and Maharashtra had low CBRs, while Himachal, Jammu and Kashmir, Assam and West Bengal had some what medium birth rates.

Even though crude birth rate based on SRS was high in UP and Bihar their marital fertility rates obtained from 1971 census fertility data were lower than the low fertility group. This may be due to gross under reporting of births in the 1971 Census.

The rural urban difference in marital fertility was found to be insignificant in Kerala. This may be due to more or less equal status of literacy, mean age

at marriage and other socio-economic conditions in both rural and urban areas in this state.

Orissa and West Bengal showed vast differences in marital fertility rates between rural and urban areas, that is their marital fertility was very high in rural areas. Compared to the 1972 and 1974 SRS analysis the marital fertility was found to be very high in rural areas in 1971 in these states. This may be due to over estimation or difference in age-sex structure of 1971 census fertility data in rural areas of Orissa and West Bengal. This will need in-depth investigations to be confirmed.

The comparison of 1972 SRS rate with 1971 Census analysis does not show any clear picture of decline in marital rate in 1972. Instead of that TMFR was found to be very high in Jammu and Kashmir and Utter Pradesh. But the GMPR was lower in 1972 compared to 1971 Census analysis in most of the states except Assam, Orissa, Gujerat, Haryana, Himachal Pradesh, Rajasthan, Bihar, UP, and MP. Uttar Pradesh and Bihar showed high marital fertility as CBR in 1972 SRS compared with 1971 Census analysis. This indicates clearly the under-estimation of 1971 census fertility data in UP and Bihar.

Marital fertility seems to have declined in 1972,
according to SRS rates compared to 1971 Census rates.
The decline was much clear for all the states in both
rural and urban areas.

The observed variations in birth rate within the
country imply that India's birth rate can be reduced
basically by increasing female education and age at
marriages especially in the northern parts of India,
where the birth rates were quite high. Besides that
achievement of family planning through population edu-
cation and adult education is very important, especially
among rural masses. Therefore it would be necessary to
introduce population education and adult education in
all the schools and colleges. This kind of education
should be given not only to students but also to illi-
terate agricultural labourers and other mannual workers
through PHC staff like health visitors and by other
social organisations.

It was found that religious differences in marital
fertility persisted even after controlling the effect of
education, age at marriage, and place of residence.

Though fertility was lower in urban areas than in
rural areas among all women irrespective of religion,
impact of religion did not vanish with urbanisation.

Though education has a consistent impact on fertility, the fertility differentials by religion did not disappear after controlling the effect of education.

Though a sharp fall in fertility associated with the female age at marriage beyond 23 years, was revealed by the data in all the states, the dispersion in marital fertility still persisted with respect to religion.

This was found to be true in all the states of India. In conformity with the earlier studies, Hindus have lower marital fertility than muslims and christians, in all the states except in rural areas of Jammu and Kashmir where the Hindu population had higher fertility.

The observed differentials in marital fertility appear to be unequal due to unequal acceptance of family planning methods by different religious groups. Therefore effort should be made to promote family planning among all segments of the population. There is enough flexibility among Hindus for modern reformers to put forward the case of scientific methods of family planning. This misconception from the minds of those people who reject family planning on religious ground should be removed and correct knowledge should be imparted through their own religious communities and religious leaders,

particularly for muslims and christians, where the
fertility was found to be higher than Hindus and
muslims in all the states. In fact like protestant
churches the other religious institutions should pro-
vide framework for responsible parenthood. As sugges-
ted earlier education of females among all religious
communities and their socio-economic upliftment must
receive increasing attention in our development
programmes.

In conformity with the earlier studies, fertility
was found to decline with increase in age at marriage.

Fertility was lower in both rural and urban areas
as age at marriage increased. It was found that in
both rural and urban areas, the marital fertility
was significantly lower only in case of women married
after 22 years.

Fertility was found to decline for women with
different educational levels, viz., illiterate, literate,
matriculate, graduate and above with increase in age
at marriage. But the fertility was reasonably low only
for the matriculate, graduate and above women in all
the states.

As age at marriage increased, fertility declined among various religious groups.

Census data show that women married below the age of 17 years have more children than women married after the age of 18 years. But the differences in marital fertility between the women who got married below 17 years and 18-22 years were insignificant. So a substantial effect on birth rate in India seems to be possible only when the marriages for females are postponed beyond 20 years of age.

APPENDICES

Table-1: Total Marital Fertility Rate by Place of
Residence - 1971 (Census), 1972 (SRS), and
1978 (SRS)

States	1971, Census		1972, SRS		1978, SRS	
	Rural	Urban	Rural	Urban	Rural	Urban
INDIA	5.8	4.4	6.8	6.0	5.4	4.6
Andhra Pradesh	5.6	4.4	5.6	4.9	4.8	3.7
Assam	6.8	5.5	7.4	5.4	6.0	5.2
Bihar	4.8	4.4	5.7	4.9	4.8	4.1
Gujarat	5.3	4.7	7.8	6.1	5.7	5.0
Haryana	5.8	5.3	8.2	6.4	5.4	4.5
Himachal Pradesh	5.4	4.7	6.5	5.1	4.1	4.7
Jammu & Kashmir	5.9	4.9	9.6	8.4	5.7	4.8
Karnataka	6.0	4.9	5.8	4.8	5.0	4.5
Kerala	5.9	5.7	6.9	6.8	4.8	4.7
Madhya Pradesh	6.4	4.9	7.8	6.5	5.9	5.1
Maharashtra	5.7	4.8	5.9	5.4	4.3	4.4
Orissa	8.1	5.1	5.9	5.5	5.6	5.1
Punjab	6.2	4.9	7.3	6.7	5.7	5.2
Rajasthan	5.5	4.3	7.8	6.2	6.0	4.6
Tamil Nadu	5.2	4.7	5.9	5.1	4.8	4.3
Uttar Pradesh	5.3	4.8	8.0	6.4	6.6	5.6
West Bengal	7.3	5.8	—	—	4.8	4.3

Table-2: Total Marital Fertility Rate by Religion, Age at Marriage, Educational Status and Place of Residence - India and its States, 1971

INDIA

Religion	Age at marri-age	Illiterate		Litterate but<Matric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	5.67	4.80	5.83	4.75	6.37	4.13
	13	5.35	4.98	5.89	4.53	7.43	4.27
	13-17	5.69	6.74	6.11	4.82	6.52	3.92
	18-22	5.82	4.54	5.39	4.50	5.75	3.82
	23-27	4.46	3.57	4.89	3.55	4.09	3.14
	28+	3.79	2.52	4.61	2.50	2.08	2.63
Muslim	All Ages	6.28	5.73	6.86	5.07	7.72	5.39
	13	6.19	5.95	6.29	5.35	9.86	4.87
	13-17	6.29	6.09	6.82	5.39	7.66	5.78
	18-22	5.77	5.29	6.19	5.22	6.49	4.95
	23-27	5.50	4.08	5.76	4.47	5.52	3.85
	28+						
Christian	All Ages	6.41	5.35	6.69	6.31	5.99	4.19
	13	5.98	5.06	5.48	5.05	6.48	2.89
	13-17	6.26	5.36	6.38	5.89	4.28	4.63
	18-22	5.84	4.43	5.95	5.23	5.11	3.41
	23-27	5.67	3.92	5.06	4.20	4.66	3.73
	28+	4.65	3.13	3.20	3.09	3.21	3.26

Table—2: Contd./-   Andhra Pradesh

Religion	Age at marriage	Illiterate		Literate but <metric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	5.46	4.65	4.94	4.65	6.73	4.71
	13	5.52	4.95	5.42	4.64	7.92	5.15
	13-17	5.39	4.81	4.74	4.68	6.13	4.48
	18-22	5.10	4.08	4.67	4.35	4.93	4.29
	23-27	4.03	3.03	4.51	3.42	2.38	2.94
	28+	3.95	1.97	3.66	3.24	1.71	2.80
Muslim	All Ages	6.47	5.61	6.42	5.94	8.75	6.19
	13	6.71	6.05	6.06	5.90	5.00	8.74
	13-17	6.52	6.20	6.30	6.19	7.85	7.08
	18-22	5.44	6.47	7.01	5.74	5.61	5.80
	23-27	2.96	3.67	2.02	2.93	0.50	3.38
	28+	2.58	2.19	—	2.26	—	1.87
Christian	All Ages	5.23	4.94	6.00	5.26	5.48	5.06
	13	5.87	4.63	5.73	5.21	6.34	5.42
	13-17	5.78	5.14	5.79	5.38	4.85	3.62
	18-22	4.87	5.11	5.73	4.71	4.54	6.17
	23-27	2.47	3.09	5.06	3.63	3.86	3.30
	28+	3.60	3.21	—	1.66	5.14	—

Table—2: Contd./-

Assam

Religion	Age at marriage	Illiterate		Literate but ∠matric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	7.07	5.55	7.30	5.92	5.48	5.07
	13	6.45	4.76	7.30	5.23	4.39	3.12
	13-17	7.15	5.88	7.10	5.88	6.01	5.09
	18-22	6.48	5.32	6.87	5.52	4.36	4.16
	23-27	5.33	4.15	5.14	4.81	3.95	2.98
	28+	3.32	2.91	3.29	2.56	—	1.59
Muslim	All Ages	8.02	6.26	7.13	6.63	7.87	5.58
	13	8.63	6.68	7.42	8.13	—	1.66
	13-17	7.76	6.43	7.35	7.23	4.58	5.82
	18-22	7.30	5.56	5.61	4.51	5.25	2.98
	23-27	5.89	4.08	3.11	1.62	—	1.00
	28+	3.49	3.83	4.50	1.00	—	—
Christian	All Ages	7.95	5.32	8.02	7.87	8.41	6.27
	13	5.65	—	6.12	5.83	2.50	3.30
	13-17	8.40	6.61	6.97	8.24	5.19	7.24
	18-22	7.11	5.37	7.70	6.84	7.41	4.58
	23-27	5.49	3.51	8.44	5.44	2.50	2.68
	28+	6.00	1.00	3.00	2.25	—	3.34

Table-2: Contd./-

Bihar

Religion	Age at marri- age	Illiterate		Literate but < matric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	4.57	4.29	4.83	4.49	5.74	4.14
	13	4.66	4.24	4.61	4.56	3.76	4.21
	13-17	4.49	4.57	4.40	4.66	4.94	4.08
	18-22	4.40	4.25	4.37	4.59	4.10	3.36
	23-27	3.84	3.55	2.81	3.48	0.55	2.27
	28+	3.69	2.15	3.00	1.57	--	2.75
Muslim	All Ages	5.04	4.63	5.81	5.48	5.15	3.62
	13	5.08	4.81	5.68	6.14	2.50	2.20
	13-17	4.92	4.95	5.87	5.79	5.80	3.55
	18-22	4.59	4.59	5.12	5.09	1.45	3.94
	23-27	3.89	2.76	6.28	4.86	--	1.33
	28+	2.19	1.94	1.25	2.25	--	--
Christian	All Ages	6.15	4.71	6.37	5.40	6.20	3.57
	13	4.61	5.37	2.03	3.70	5.00	1.23
	13-17	5.83	4.37	6.41	6.28	4.37	4.19
	18-22	5.57	3.70	5.41	4.64	3.48	3.62
	23-27	5.26	5.59	3.47	4.35	1.10	4.18
	28+	3.72	5.00	1.50	--	5.00	1.42

Table-2: Contd./-

Gujarat

Religion	Age at marriage	Illiterate		Literate but <Metric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	6.21	5.45	4.96	4.37	4.46	3.87
	13	5.94	5.39	4.85	4.35	3.91	4.29
	13-17	5.69	5.77	4.99	4.48	5.22	3.58
	18-22	6.10	5.48	4.99	4.40	4.16	3.77
	23-27	4.45	4.10	3.39	3.74	3.30	3.36
	28+	3.70	2.71	1.69	2.33	5.00	2.77
Muslim	All Ages	6.39	6.04	6.57	5.38	5.04	5.16
	13	5.94	5.97	5.89	5.80	—	6.60
	13-17	6.86	6.34	6.31	5.16	1.33	4.89
	18-22	6.33	5.86	6.39	5.31	4.11	4.08
	23-27	5.33	4.97	6.92	4.28	1.66	3.49
	28+	4.45	3.04	1.66	2.30	—	2.10
Christian	All Ages	5.52	4.53	5.87	5.82	5.62	4.76
	13	5.12	3.75	4.72	2.50	—	—
	13-17	5.01	4.73	6.39	7.70	2.50	4.31
	18-22	6.71	4.26	5.42	3.53	5.83	4.56
	23-27	5.00	5.00	3.25	4.07	—	4.05
	28+	2.50	2.50	2.50		—	3.12

Table—2: Contd./—

HARYANA

Religion	Age at marriage	Illiterate		Literate but < Matric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	6.87	5.78	5.66	5.39	4.87	4.84
	#3	6.83	6.03	5.95	5.17	8.17	4.06
	13—17	7.14	6.12	5.66	5.43	5.10	4.42
	18—22	8.11	5.59	5.55	4.95	4.59	4.66
	23—27	4.48	5.61	5.30	4.06	2.28	3.87
	28+	3.46	3.23	1.66	1.66	—	3.20
Muslim	All Ages	7.80	7.26	6.06	7.05	—	4.16
	13	7.89	9.05	—	—	—	—
	13—17	8.06	7.02	7.24	5.86	—	—
	18—22	7.71	7.22	4.64	1.60	—	5.00
	23—27	2.70	4.16	—	7.50	—	—
	28+	2.94	5.00	—	—	—	—
Christian	All Ages	4.37	4.50	7.29	4.06	2.00	7.21
	13	—	—	—	—	—	—
	13—17	5.00	3.81	6.15	5.33	—	5.50
	18—22	5.00	3.50	3.21	5.30	—	3.78
	23—27	—	—	—	4.16	—	1.50
	28+	—	—	—	5.00	5.00	—

Table-2: Contd./-

Himachal Pradesh

Religion	Age at marriage	Illiterate		Literate but < Matric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	4.11	5.01	5.22	4.77	5.53	4.24
	13	4.33	4.61	5.97	4.21	3.68	3.32
	13-17	4.18	5.05	5.02	4.64	4.70	3.65
	18-22	4.11	4.63	4.98	4.55	5.81	3.83
	23-27	2.59	3.98	3.28	2.93	2.56	3.21
	28+	2.28	2.51	3.79	3.05	2.90	3.78
Muslim	All Ages	6.85	5.87	9.02	4.40	5.86	6.33
	13	7.10	3.92	15.40	5.00	5.50	5.00
	13-17	6.99	5.95	2.12	3.19	4.58	2.00
	18-22	6.12	6.01	7.57	3.65	—	3.89
	23-27	3.02	5.00	5.83	2.50	—	—
	28+	2.26	—	—	—	—	—
Christian	All Ages	5.59	3.89	5.32	3.42	2.49	4.53
	13	—	—	5.00	1.66	—	—
	13-17	5.83	3.68	5.83	3.08	5.00	3.75
	18-22	3.80	1.50	4.58	3.37	1.83	3.94
	23-27	—	—	—	2.00	1.66	4.09
	28+	—	—	—	—	—	—

Table-2: Contd./-

Jammu & Kashmir

Religion	Age at marriage	Illiterate		Literate but < Metric		Metric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	6.45	5.38	6.00	4.86	5.75	4.47
	13	6.20	5.12	5.08	3.88	5.17	3.40
	13-17	6.47	5.33	6.03	4.71	6.43	4.06
	18.22	6.33	5.06	5.84	4.79	4.48	4.03
	23-27	4.57	4.36	4.41	4.20	2.85	2.91
	28+	3.40	4.50	5.50	2.00	4.35	2.23
Muslim	All Ages	5.88	5.01	6.36	5.38	6.41	4.49
	13	5.83	3.96	5.93	4.05	—	2.76
	13-17	5.95	4.95	6.56	4.88	5.33	4.40
	18-22	5.50	4.86	5.99	4.68	6.14	3.57
	23-27	4.50	4.37	4.56	3.91	8.20	3.16
	28+	3.09	3.35	1.83	—	—	—
Christian	All Ages	7.51	5.89	4.40	5.81	2.65	1.66
	13	7.94	5.32	—	5.00	—	—
	13-17	6.57	6.10	1.00	5.48	—	6.25
	18-22	5.50	3.71	8.30	6.22	2.50	1.38
	23-27	5.00	—	—	3.33	—	1.00
	28+	2.50	5.00	—	—	—	—

Table-2: Contd./-

Kerala

Religion	Age at marriage	Illiterate		Literate but < Matric		Matric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	5.64	5.67	5.65	5.56	6.00	4.67
	13	5.11	4.20	6.71	3.39	2.50	1.66
	13-17	4.51	4.86	5.50	5.38	4.60	4.18
	18-22	5.08	4.97	5.12	4.89	4.69	3.99
	23-27	4.10	3.70	4.10	4.05	4.22	3.21
	28+	3.76	2.75	2.84	2.54	2.90	3.48
Muslims	All Ages	6.11	6.17	6.28	6.13	6.25	4.76
	13	6.32	6.34	6.25	6.10	---	5.00
	13-17	6.18	6.50	6.30	6.18	8.80	7.57
	18-22	5.66	4.92	5.89	5.35	4.95	3.74
	23-27	4.12	3.55	4.50	5.42	4.34	3.80
	28+	3.45	3.05	3.25	1.45	5.00	5.00
Christian	All Ages	6.54	5.68	6.44	6.40	5.80	5.80
	13	3.72	0.20	3.90	3.50	5.00	---
	13-17	6.36	5.12	2.37	6.24	4.34	4.52
	18-22	5.60	5.73	5.95	5.72	4.96	4.27
	23-27	5.45	3.82	4.86	4.48	4.38	4.65
	28+	5.31	2.95	3.15	3.66	2.64	3.42

Table-2: Contd./-

Madhya Pradesh

Religion	Age at marri- age	Illiterate		Literate but < Metric		Metric, Grad- uate and above	
		R	U	R	U	R	U
Hindu	All Ages	6.08	5.02	6.23	4.95	6.80	4.76
	13	6.13	5.09	6.45	4.99	5.78	3.71
	13-17	6.20	5.57	6.34	5.13	9.37	3.65
	18-22	5.86	4.63	5.99	4.56	4.47	3.71
	23-27	4.35	3.90	3.57	3.80	5.39	2.64
	28+	2.69	1.59	2.59	1.48	1.25	3.63
Muslim	All Ages	6.76	6.01	6.85	5.90	4.91	5.92
	13	6.70	6.09	6.57	6.15	2.50	4.34
	13-17	3.39	6.26	6.75	6.28	—	6.26
	18-22	6.00	5.66	6.71	4.95	7.11	5.28
	23-27	6.18	4.67	3.14	3.59	—	4.54
	28+	2.50	2.98	—	2.42	—	—
Christian	All Ages	7.03	5.26	6.95	5.00	5.11	4.92
	13	7.89	6.69	1.66	4.52	—	2.00
	13-17	6.61	5.71	6.47	4.87	5.00	4.41
	18-22	7.27	4.49	6.25	5.25	4.77	4.42
	23-27	2.43	1.66	3.84	4.09	5.41	4.03
	28+	2.48	—	2.50	1.66	—	2.72

Table-2: Contd./-

Maharashtra

Religion	Age at marriage	Illiterate		Literate but $<$ Matric		Matric, Graduate and abov	
		R	U	R	U	R	U
Hindu	All Ages	5.86	4.92	6.06	4.82	5.04	2.88
	13	6.06	5.18	6.10	4.68	4.00	3.68
	13-17	5.93	5.13	6.11	4.44	5.05	2.95
	18-22	5.50	4.40	5.72	4.37	5.24	2.82
	23-27	4.11	3.30	4.14	3.32	2.40	3.04
	28+	2.37	2.60	2.96	2.33	1.60	2.56
Muslim	All Ages	6.92	5.93	6.32	6.09	7.47	5.42
	13	7.16	6.40	6.12	4.98	—	4.96
	13-17	7.19	6.21	6.49	6.47	7.19	5.52
	18-22	6.09	5.24	5.65	4.99	8.02	4.83
	23-27	4.35	3.83	5.90	3.94	—	3.26
	28+	3.24	3.01	2.25	2.91	—	1.42
Christian	All Ages	6.02	4.86	5.82	5.33	4.09	4.75
	13	4.23	3.94	4.57	5.16	2.69	3.88
	13-17	6.90	4.82	5.89	5.26	10.00	2.01
	18-22	5.75	4.64	5.85	4.43	4.03	4.23
	23-27	2.75	3.51	3.55	4.02	4.35	3.19
	28+	5.00	2.77	—	2.96	2.50	2.55

Table-2: Conte./-

Mysore

Religion	Age at marriage	Illiterate		Literate but < Metric		Metric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	5.69	5.63	6.13	4.88	6.31	4.14
	13	5.65	5.15	5.81	4.62	7.02	4.43
	13-17	5.92	5.27	6.43	5.07	7.05	3.85
	18-22	4.10	4.63	5.67	4.67	6.28	3.94
	23-27	3.70	3.73	5.28	3.96	5.05	3.54
	28+	2.75	2.18	3.39	3.38	3.58	2.49
Muslim	All Ages	6.91	5.72	6.07	6.21	4.86	5.16
	13	7.31	6.39	7.75	7.11	3.68	4.66
	13-17	7.16	6.18	6.58	6.80	5.15	5.51
	18-22	6.28	5.17	5.77	5.49	3.45	4.69
	23-27	4.09	4.63	2.25	3.98	5.00	5.12
	28+	2.06	2.11	2.25	3.47	—	3.62
Christian	All Ages	6.69	6.05	7.95	5.94	5.17	5.36
	13	6.86	4.58	7.91	3.07	—	7.13
	13-17	6.64	6.92	7.56	6.42	6.60	6.42
	18-22	7.36	5.06	7.19	5.65	6.45	4.75
	23-27	4.22	4.29	6.94	3.92	4.01	3.18
	28+	1.94	1.00	5.87	3.76	5.00	3.92

Table-2: Contd./-

Orissa

Religion	Age at marriage	Illiterate		Literate but ∠Metric		Metric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	7.95	4.76	8.56	6.54	13.06	5.13
	13	6.54	5.13	6.77	5.33	11.99	2.55
	13-17	7.76	4.76	7.62	5.53	12.05	5.11
	18-22	6.38	4.15	9.69	4.98	16.77	3.71
	23-27	6.86	3.01	10.56	4.06	3.76	2.92
	28+	6.16	2.09	6.17	1.83	4.83	0.76
Muslim	All Ages	11.81	6.59	18805	5.61	11.77	2.97
	13	10.81	5.53	23.63	4.86	14.37	—
	13-17	10.79	6.77	14.36	5.60	7.26	3.08
	18-22	10.31	4.62	14.45	5.01	6.99	2.66
	23-27	8.94	4.04	12.74	1.66	4.99	—
	28+	8.61	5.00	11.91	—	5.00	—
Christian	All Ages	9.92	5.06	17.18	5.12	1.25	5.04
	13	17.80	5.34	11.66	4.50	—	—
	13-17	8.58	4.84	12.30	5.06	—	3.08
	18-22	8.76	4.88	18.11	4.71	—	4.83
	23-27	10.18	4.12	12.74	1.75	—	2.89
	28+	10.31	1.83	5.00	2.50	5.00	5.00

Table-2: Contd./-

Punjab

Religion	Age at marri-age	Illiterate		Literate but ∠ Matric		Metric, Grad-uate and above	
		R	U	R	U	R	U
Hindu	All Ages	6.27	5.65	5.69	4.73	5.31	4.76
	13	6.13	5.53	3.90	4.14	2.50	2.92
	13-17	6.21	5.62	5.62	4.52	6.10	4.17
	18-22	6.01	4.99	5.49	4.52	4.40	3.97
	23-27	4.99	4.37	4.07	3.96	3.57	4.46
	28+	2.12	3.47	1.62	2.01	1.42	2.94
Muslim	All Ages	7.34	8.36	7.60	5.21	—	1.25
	13	5.23	6.35	2.50	—	—	—
	13-17	6.98	8.39	6.25	4.69	—	—
	18-22	7.35	5.90	8.75	6.66	—	—
	23-27	5.37	5.92	—	—	—	1.25
	28+	2.50	3.30	—	—	—	—
Christian	All Ages	7.90	7.17	4.94	6.48	5.00	4.65
	13	7.15	12.20	—	2.50	—	5.00
	13-17	7.59	6.73	5.14	4.38	—	1.66
	18-22	6.61	4.99	5.21	8.40	—	3.76
	23-27	4.74	4.50	—	—	—	5.83
	28+	7.50	—	—	—	5.00	—

Table-2: Contd./-

Rajasthan

Religion	Age at marriage	Illiterate		Literate but ∠ Metric		Metric, Graduate and above	
		R	U	R	U	R	U
Hindu	All Ages	6.28	4.97	5.89	4.76	5.59	3.91
	13	6.25	5.53	5.88	4.62	3.83	4.60
	13-17	6.55	5.48	6.13	5.01	4.93	3.84
	18-22	5.87	5.05	5.33	4.51	4.24	3.67
	23-27	4.86	3.75	5.00	3.72	2.98	3.25
	28+	3.39	3.18	—	6.97	1.25	2.19
Muslim	All Ages	6.50	5.97	6.16	6.05	1.66	6.04
	13	6.39	6.32	5.68	5.66	—	2.50
	13-17	6.83	6.33	6.76	6.44	2.50	6.85
	18-22	5.98	5.81	6.31	6.34	5.00	4.35
	23-27	4.49	4.14	2.50	4.94	—	2.63
	28+	4.68	3.52	—	4.91	—	—
Christian	All Ages	8.50	4.92	5.58	3.94	—	4.58
	13	2.50	4.00	—	2.50	—	2.50
	13-17	6.79	4.58	2.50	4.35	—	3.92
	18-22	16.20	—	8.33	4.49	—	4.73
	23-27	—	—	—	—	—	2.27
	28+	—	—	—	—	—	6.66

Table-2: Contd./-

Tamil Nadu

Religion	Age at marri-age	Illiterate		Literate but ∠ Matric		Matric, Grad-uate & above	
		R	U	R	U	R	U
Hindu	All Ages	4.66	4.53	5.15	4.97	5.11	4.14
	13	4.34	4.25	3.96	4.73	2.50	2.74
	13-17	4.59	4.70	4.96	4.95	4.28	3.72
	18-22	4.24	4.09	4.72	4.46	3.84	3.75
	23-27	3.48	3.13	4.08	3.68	4.66	2.96
	28+	1.96	1.67	2.16	2.74	3.19	2.35
Muslim	All ages	5.13	5.01	5.77	5.38	3.82	3.82
	13	3.90	4.46	5.34	5.84	—	1.25
	13-17	5.13	5.31	5.72	5.62	2.34	3.85
	18-22	4.29	4.34	4.75	4.60	2.96	3.94
	23-27	2.52	2.91	3.78	3.57	—	2.33
	28+	0.72	1.69	2.43	2.52	—	1.66
Christian	All ages	5.54	5.26	6.14	5.49	5.81	4.54
	13	4.31	3.93	3.84	3.82	—	6.66
	13-17	5.32	5.33	6.16	5.37	5.13	4.28
	18-22	5.25	5.20	5.44	5.17	5.60	4.40
	23-27	3.43	3.70	4.54	3.91	4.05	3.63
	28+	2.72	1.46	3.25	1.52	5.25	3.26

Table-2: Contd./-

Uttar Pradesh

Religion	Age at marriage	Illiterate		Literate but < Matric		Matric, Graduate & above	
		R	U	R	U	R	U
Hindu	All Age	5.18	5.01	5.34	4.55	5.40	4.17
	13	4.90	5.20	5.34	4.73	7.08	3.97
	13-17	5.51	5.72	5.50	4.74	6.43	4.10
	18-22	5.03	4.67	5.20	4.43	5.83	3.87
	23-27	4.51	4.11	4.70	2.66	4.71	3.20
	28+	3.61	2.59	3.39	2.14	1.51	2.47
Muslim	All Ages	6.03	5.96	6.20	5.81	8.40	5.58
	13	6.07	6.26	5.99	6.78	9.34	3.21
	13-17	6.37	6.23	6.55	6.05	8.73	6.26
	18-22	6.34	5.67	5.83	5.62	6.49	5.22
	23-27	6.68	4.32	4.97	5.13	6.37	3.96
	28+	3.95	3.08	3.30	3.63	3.30	3.03
Christian	All ages	4.34	5.08	3.21	4.78	7.64	4.75
	13	1.74	6.25	2.50	5.00	5.00	4.41
	13-17	6.58	3.18	5.00	6.35	3.50	6.15
	18-22	6.38	7.05	2.45	3.40	3.01	3.09
	23-27	7.50	2.50	—	3.62	—	3.85
	28+	6.60	2.50	—	4.85	—	5.14

Table-2: Contd./-

West Bengal

Religion	Age at marriage	Illiterate		Literate but ∠Matric		Matric, Graduate & above	
		R	U	R	U	R	U
Hindu	All ages	6.99	3.92	7.84	4.03	6.61	3.17
	13	6.60	4.26	9.50	4.28	11.29	3.46
	13-17	7.08	5.14	7.62	4.52	7.34	3.07
	18-22	6.01	3.98	6.68	3.77	6.01	2.96
	23-27	4.16	3.50	5.35	2.95	1.73	2.98
	28+	3.76	3.48	9.27	2.08	1.63	1.89
Muslim	All ages	6.61	4.60	8.10	4.71	8.80	3.79
	13	7.52	5.44	7.58	5.70	7.40	5.00
	13-17	5.90	5.64	8.37	5.92	7.37	4.79
	18-22	5.85	4.84	7.25	4.61	7.84	3.16
	23-27	4.40	3.20	3.94	2.58	3.50	1.95
	28+	3.13	2.09	5.56	0.62	5.00	—
Christian	All ages	3.99	5.38	6.03	4.80	7.16	2.95
	13	2.22	4.46	3.50	4.50	—	1.25
	13-17	3.79	5.31	6.99	5.99	5.00	2.18
	18-22	3.58	3.04	5.68	3.30	7.50	3.59
	23-27	2.10	—	2.16	4.08	5.00	3.09
	28+	3.21	2.66	2.50	3.75	—	2.67

Table-3: Religious Differentials in Fertility by Place of
Residence - India and its States, 1971 and 1978

1971 Census

States	Rural			Urban		
	Hindu	Muslim	Chris -tian	Hindu	Muslim	Chris -tian
INDIA	5.8	6.9	5.9	4.3	5.3	5.2
Andhra Pradesh	5.7	7.2	5.6	4.7	5.9	5.1
Assam	6.6	7.7	8.1	5.5	6.2	6.5
Bihar	5.1	5.3	6.2	4.3	4.6	4.5
Gujarat	5.2	6.0	5.7	4.6	5.5	5.0
Haryana	5.8	4.6	4.6	5.3	6.2	5.3
Himachal Pradesh	4.9	7.2	4.5	4.7	5.5	3.9
Jammu & Kashmir	6.1	6.3	4.9	4.9	5.0	4.5
Kerala	5.8	6.2	6.2	5.3	5.7	5.9
Madhya Pradesh	6.4	6.2	6.4	4.9	5.9	5.1
Maharashtra	5.7	6.9	5.3	4.2	5.8	4.9
Mysore	6.0	5.9	6.6	4.9	5.7	5.7
Orissa	9.0	13.0	9.3	5.5	5.1	5.1
Punjab	5.8	5.0	5.9	5.0	4.9	6.1
Rajasthan	5.9	4.8	4.5	4.5	6.0	5.0
Tamil Nadu	4.9	4.9	5.8	4.5	4.8	5.1
Uttar Pradesh	5.3	6.9	5.1	4.6	5.8	4.9
West Bengal	7.1	7.8	5.5	3.7	4.4	4.3

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1979 SRS

States	Rural			Urban		
	Hindu	Muslim	Chris-tian	Hindu	Muslim	Chris-tian
INDIA	5.37	5.98	5.07	4.37	5.53	4.54
Andhra Pradesh	4.78	5.93	5.08	3.64	4.13	3.24
Assam	5.99	6.08	—	5.28	5.23	—
Bihar	4.78	4.91	—	3.95	5.04	—
Gujarat	5.7	5.50	—	4.82	5.80	—
Haryana	4.05	5.33	—	4.53	4.28	—
Himachal Pradesh	4.13	4.67	—	4.70	3.27	—
Jammu & Kashmir	5.86	5.5	—	4.65	4.77	—
Kerala	4.60	5.63	4.85	4.50	5.23	3.77
Madhya Pradesh	5.92	6.24	—	5.06	5.43	—
Maharashtra	4.22	5.51	—	4.11	5.38	—
Mysore	5.05	4.30	—	5.16	5.90	—
Orissa	5.58	8.58	—	5.04	6.00	—
Punjab	5.72	5.73	—	4.90	5.95	—
Rajasthan	5.98	6.80	—	4.55	5.34	—
Tamil Nadu	4.75	4.99	5.72	4.15	4.75	5.69
Uttar Pradesh	6.50	7.35	—	5.17	6.77	—
West Bengal	4.62	5.73	—	4.06	5.95	—

Table-4: Total Marital Fertility Rate by Age at Marriage,
Educational Status and Place of Residence –
India and its States, 1971

Age at Marri-age	Illiterate		Literate but < Matric		Matric, Grad-uate & Above	
	Rural	Urban	Rural	Urban	Rural	Urban

INDIA

All Ages	5.70	4.90	5.95	4.80	5.90	3.90
13	5.60	5.11	6.00	4.70	6.20	4.33
13-17	5.60	5.30	5.30	5.03	5.90	4.06
18-22	5.35	4.71	5.50	4.51	5.20	3.91
23-27	4.64	3.72	4.90	3.60	4.27	3123
28+	3.90	2.59	4.41	2.60	3.25	2.48

Andhra Pradesh

All Ages	5.52	4.85	5.09	3.66	6.24	4.80
13	5.56	5.04	5.45	3.95	6.04	5.40
13-17	5.54	5.07	4.90	4.91	6.24	4.66
18-22	5.12	4.27	4.93	4.68	5.08	4.40
23-27	5.12	3.19	4.42	3.38	4.01	3.25
28+	2.96	2.02	2.20	2.81	1.26	3.18

Assam

All Ages	7.37	5.68	7.32	6.09	5.69	4.80
13	7.57	5.09	7.37	5.59	4.22	2.88
13-11	7.35	5.96	7.16	6.07	5.48	4.77
18-22	6.66	6.37	6.82	5.51	4.43	3.94
23-27	5.40	4.15	5.38	4.90	4.34	2.92
28+	3.54	2.36	3.46	2.62	—	1.96

Bihar

All Ages	4.66	4.35	5.02	4.68	4.71	4.17
13	4.72	4.52	4.56	4.78	3.75	3.94
13-17	4.59	4.64	5.25	4.88	5.05	4.11
18-22	5.07	4.30	4.71	4.70	4.13	3.98
23-27	4.17	3.52	3.48	3.86	1.24	3.20
28+	3.11	2.66	2.61	1.53	3.30	2.46

Age at Marriage	Illiterate		Literate but < Metric		Metric, Grad-uate & Above	
	Rural	Urban	Rural	Urban	Rural	Urban
Gujarat						
All Ages	6.24	5.56	5.07	4.49	4.64	3.99
13	5.93	5.30	4.87	4.53	3.80	4.53
13-17	6.39	5.87	5.07	4.54	5.22	3.47
18-22	6.12	5.57	4.77	4.56	4.28	3.81
23-27	4.79	4.31	3.89	3.71	3.35	3.21
28+	3.75	2.97	1.71	2.36	1.16	2.82
Haryana						
All Ages	6.89	5.87	5.57	5.42	4.78	4.74
13	6.88	6.04	5.76	4.93	7.06	6.86
13-17	7.00	6.09	5.59	5.60	3.88	4.39
18-22	6.45	5.45	5.55	4.96	4.57	4.29
23-27	4.72	5.65	5.01	4.51	2.11	2.94
28+	3.39	3.97	1.25	2.94	—	2.84
Himachal Pradesh						
All Ages	5.42	5.11	5.23	4.74	5.67	4.22
13	3.06	4.60	6.79	4.28	3.99	4.24
13-17	5.29	5.09	5.03	4.66	4.69	2.47
18-22	5.58	4.69	4.97	4.52	5.60	3.84
23-27	3.71	4.19	3.27	4.20	2.72	3.26
28+	3.59	3.18	3.75	2.45	2.92	3.50
Jammu & Kashmir						
All Ages	6.13	5.08	6.07	4.96	5.76	4.53
13	5.96	3.78	5.32	3.93	3.25	3.49
13-17	6.14	5.02	6.14	4.79	6.53	4.14
18-22	5.29	4.74	5.82	4.80	4.19	3.98
23-27	4.67	4.38	4.16	3.82	3.82	3.19
28+	3.23	3.49	3.90	2.14	2.50	1.87
Kerala						
All Ages	5.81	5.92	5.94	5.81	5.80	5.46
13	5.79	5.84	6.12	5.13	2.00	3.33
13-17	5.86	6.13	5.80	5.76	5.31	4.70
18-22	5.22	4.95	5.42	5.12	5.07	4.11
23-27	4.21	3.66	4.33	4.21	4.28	3.54
28+	3.33	2.77	2.91	2.76	2.84	3.61

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Age at Marriage	Illiterate		Literate but < Matric		Matric, Graduate and above	
	Rural	Urban	Rural	Urban	Rural	Urban

Madhya Pradesh

All ages	6.10	5.23	6.22	5.09	6.79	4.37
13	6.14	5.28	6.37	5.08	5.31	3.73
13-17	6.23	5.50	6.32	5.25	8.03	4.26
18-22	5.91	4.91	6.09	4.59	5.35	3.99
23-27	4.48	3.71	3.64	3.87	3.48	3.60
28+	2.70	1.83	2.43	1.85	1.00	3.46

Maharashtra

All Ages	5.93	5.13	6.08	5.00	5.15	4.39
13	6.11	5.05	6.23	4.83	3.16	4.73
13-17	6.01	5.38	6.06	5.18	5.06	4.22
18-22	5.51	4.58	5.60	4.40	4.76	3.59
23-27	4.14	3.42	4.38	3.48	2.52	3.00
28+	2.48	2.51	3.33	2.47	1.58	2.39

Mysore

All ages	5.8	5.14	6.10	5.20	6.20	4.42
13	6.2	5.36	5.9	5.03	7.12	4.74
13-17	6.1	5.50	6.41	5.31	6.8	4.12
18-22	5.4	4.82	5.7	4.86	6.3	4.10
23-27	3.0	4.16	5.3	3.94	5.3	3.59
28+	2.7	2.18	3.7	3.46	3.4	2.83

Orissa

All Ages	8.03	4.88	9.13	5.55	12.85	5.13
13	6.87	5.19	7.60	5.37	8.95	2.50
13-17	8.11	4.88	7.92	5.57	11.61	5.13
18-22	6.98	4.21	10.20	5.31	17.07	3.79
23-27	7.23	3.03	11.04	2.96	3.70	3.04
28+	6.40	2.91	7.39	1.50	5.83	0.64

Punjab

All Ages	5.72	5.70	5.47	4.83	7.55	4.26
13	5.88	5.42	4.67	3.89	7.61	2.20
13-17	5.57	5.68	5.00	4.62	5.39	4.29
18-22	5.47	5.07	5.58	4.13	4.53	4.04
23-27	4.76	4.41	3.72	3.54	3.58	3.56
28+	3.15	3.09	2.97	1.82	2.50	3.06

Age at Marri-age	Illiterate		Literate but ∠Matric		Matric, Graduate and above	
	Rural	Urban	Rural	Urban	Rural	Urban

Rajasthan

All Ages	6.28	4.07	5.63	4.85	4.41	3.97
13	6.25	5.05	5.78	4.76	3.50	4.75
13-17	5.48	5.62	6.07	5.06	5.02	3.49
18-22	5.67	5.24	5.40	4.78	3.04	3.77
23-27	4.88	3.93	4.35	3.62	3.86	3.40
28+	3.72	3.44	—	5.58	1.22	3.20

Tamil Nadu

All Ages	4.70	4.92	5.30	5.02	5.68	4.21
13	4.45	5.22	4.06	4.38	2.08	3.67
13-17	4.71	5.18	5.10	5.09	4.38	4.00
18-22	4.34	4.26	5.18	4.53	4.10	3.82
23-27	3.46	3.06	4.35	3.68	4.42	3.09
28+	1.30	2.40	2.44	2.59	4.07	2.48

Uttar Pradesh

All Ages	4.99	5.35	5.41	4.79	5.63	4.18
13	4.64	5.28	5.39	5.08	7.10	3.94
13-17	5.26	5.44	5.61	4.96	5.42	4.23
18-22	5.19	4.08	5.27	4.68	5.06	3.93
23-29	4.96	4.15	4.72	3.12	3.17	3.32
28+	3.69	2.91	3.38	2.83	1.74	2.71

West Bengal

All Ages	6.86	4.05	7.86	4.07	7.20	3.19
13	7.24	4.60	8.58	4.35	9.95	4.16
13-17	6.87	4.75	7.73	4.44	7.66	3.71
18-22	6.01	4.15	6.71	3.82	5.94	1.96
23-27	4.32	3.44	4.97	2.99	2.53	2.37
28+	5.15	3.33	7.60	2.08	2.02	1.94.

Table-5: Total Marital Fertility Rate by: Age at Marriage Religion and Place of residence (India and Its States - 1971).

States	13-17		18-22		23-27		28+	
	R	U	R	U	R	U	R	U
INDIA								
Hindu	6.1	5.2	5.6	4.3	4.5	3.4	3.5	2.5
Muslim	6.9	5.7	6.2	5.2	5.6	4.1	4.4	2.6
Christian	5.6	5.3	5.6	4.4	5.1	3.9	3.7	3.2
Andhra Pradesh								
H	5.4	4.6	4.9	4.2	3.6	3.1	3.1	2.7
M	6.9	6.5	6.0	6.0	1.8	3.3	0.86	2.1
C	5.6	5.3	5.6	4.8	3.6	3.5	1.7	1.0
Assam								
H	6.7	5.6	5.7	5.0	4.8	3.9	2.2	2.3
M	6.6	6.5	6.0	4.3	3.0	2.2	2.6	1.6
C	6.8	7.3	7.4	5.6	5.4	3.8	3.0	2.2
Bihar								
H	4.6	4.4	4.3	4.2	2.4	3.1	2.2	2.1
M	5.5	4.8	3.7	4.5	3.3	2.9	1.1	1.4
C	5.5	4.9	4.8	3.9	3.2	4.7	3.4	2.1
Gujarat								
H	5.3	4.6	5.1	4.5	3.7	3.7	3.5	2.6
M	4.8	5.5	5.6	5.1	4.6	4.2	2.0	2.5
C	4.6	5.6	5.9	4.1	2.7	4.4	8.3	2.5
Haryana								
H	5.9	5.3	6.1	5.1	4.0	4.5	2.6	2.7
M	7.6	6.4	6.2	4.6	2.7	5.8	2.9	5.0
C	5.6	4.9	4.9	4.2	—	2.9	5.0	5.0

States	13-17		18-22		23-27		28+	
	R	U	R	U	R	U	R	U
Himachal Pradesh								
Hindu	4.6	4.4	4.9	4.2	2.9	3.4	2.9	3.1
Muslim	4.6	3.7	6.8	4.5	4.4	3.7	2.3	—
Christianity	5.5	3.5	3.7	2.9	1.6	3.0	—	—
Jammu & Kashmir								
H	6.3	4.7	5.5	4.6	3.9	3.8	4.4	2.9
M	5.9	4.7	5.9	4.4	5.7	3.8	2.5	3.3
C	3.8	6.1	5.4	3.8	5.0	2.2	2.5	5.0
Kerala								
H	4.9	4.8	4.9	4.6	4.1	3.6	3.2	2.9
M	7.1	6.7	5.5	4.7	4.2	4.2	3.9	3.2
C	4.4	5.3	5.5	5.2	4.9	4.3	3.7	3.5
Madhya Pradesh								
H	7.3	4.8	5.4	4.3	4.4	3.4	2.2	2.2
M	5.1	6.3	6.6	5.3	4.7	4.3	2.5	2.7
C	6.0	4.9	6.1	4.7	3.9	3.3	2.5	2.7
Maharashtra								
H	5.7	4.2	5.5	3.9	3.6	3.2	2.3	2.5
M	6.9	6.1	6.6	5.0	5.1	3.7	2.8	2.4
C	7.6	4.3	5.2	4.4	3.6	3.6	3.7	2.7
Mysore								
H	6.5	4.7	5.3	4.4	4.7	3.7	3.2	2.7
M	6.3	6.2	5.2	5.1	3.8	4.6	2.2	3.1
C	6.9	6.6	7.0	5.2	5.0	3.8	4.3	2.9
Orissa								
H	9.1	5.1	10.9	4.3	7.1	3.3	5.7	1.6
M	10.8	5.1	10.6	4.1	8.9	2.9	8.5	5.0
C	10.4	4.3	13.4	4.8	11.5	2.9	6.8	3.1

Table-5: Contd./-

States	13-17		18-22		23-27		28+	
	R	U	R	U	R	U	R	U
Punjab								
Hindu	5.9	4.8	5.3	4.5	4.2	4.2	1.7	2.8
Muslim	6.6	6.5	8.0	6.3	5.4	5.9	2.5	3.3
Christian	6.3	4.3	5.9	5.7	4.7	5.1	6.0	—
Rajasthan								
H	5.9	4.8	5.1	4.4	4.3	3.6	2.3	4.1
M	5.4	6.5	5.8	5.5	3.5	3.9	4.7	4.2
C	4.6	4.3	4.2	4.5	—	2.3	—	3.3
Tamil Nadu								
H	4.6	4.5	4.3	4.1	4.1	3.3	2.4	2.2
M	4.4	4.9	4.0	4.3	3.1	2.9	1.6	1.9
C	5.5	4.9	5.4	4.9	4.0	3.8	3.7	2.1
Uttar Pradesh								
H	5.8	4.9	5.3	4.3	4.6	3.3	2.8	2.4
M	7.2	6.2	6.2	5.5	6.0	4.5	3.5	3.2
C	5.0	5.2	3.9	4.5	7.5	3.3	6.6	4.2
West Bengal								
H	7.4	4.2	6.2	3.6	3.7	2.9	4.9	2.5
M	8.2	5.4	6.9	4.2	3.9	2.6	4.6	2.6
C	7.3	4.5	5.6	3.3	3.1	3.6	2.9	3.0

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