

FERTILITY TABLES: F-9, F-9 SC, F-9 ST AND F-10

I - INTRODUCTION

The presentation and tabulation of data based on fertility in Indian censuses from time to time, has been made in the background note to Tables F-1 and F-2, which have been released earlier. Tables F-9, F-9 SC, F-9 ST and F-10, under discussion, present data on the number of children born alive during last one year by sex along with the order of birth classified by the present age of the women as well as currently married women. Identical data by Scheduled Castes, Scheduled Tribes and major religious communities have also been presented in three separate Tables.

While the data on children ever born presented in Table F-1 and F-2 helps in understanding the fertility of women over a period of their lifetime, the data presented in Table F-9, on births during last year, is useful as it helps in computing the current fertility rates of women, especially, age specific fertility rates and total fertility rates.

Information on 'children born alive during last one year' to currently married women was collected and tabulated in the earlier censuses without any classification of sex. For the first time in the Census 2001, this information has been collected and tabulated by sex. The data on sex of the child born alive during last one year is also useful for understanding the sex ratio at birth.

Census definition of births during the last year

The instructions issued to the enumerators to collect information on the number of births during the last year implied 'any child born alive to the currently married woman during the last one year i.e., after 9th February 2000.' The relevant portion of the instruction on the definition of this question to collect data by the enumerator is reproduced below:

Q.23 (iii): Number of children born alive during last one year (after 9th February, 2000)

“Find out the number of daughter(s) or son(s) born to a currently married woman in the last one year prior to the date of enumeration and record the number in the appropriate column(s). Initially ascertain if the currently married woman, whom you are enumerating, gave birth to a daughter or a son in the last one year prior to the date of enumeration. You should enquire if a daughter or a son was born alive after 9th February 2000 to the woman you are enumerating. If the daughter or son was born alive, and even if died soon after birth, the answer would be 'Yes', to this question. *Still birth*, i.e., a child which is born dead should not be taken into account for this question.”

Limitations of data

Keeping in view the census question reproduced above, few limitations with regard to the data on number of births last year must be understood while interpreting the data. These are as follows:

1. In the census, the question on births last year was canvassed only for currently married women for operational reasons. In a massive operation like the census, sensitive question as to whether there was any birth during the last one year might not thus be canvassed in case of the single, widowed or divorced woman. There might have been some births during the last one year before the day of enumeration to such women, as have been widowed or divorced subsequently but before or during the census enumeration period. Such births might not have been netted.
2. Another class of births that might have been left out, relates to babies born during the last one year to mothers, who might have died before the census date. In the absence of complete data on deaths during last one year of females, the number of females classified by age-groups as reported in the census has been used as the denominator without any adjustment.
3. The limitations of an enquiry of this nature, in which retrospective data is attempted to be collected, must be kept in mind, particularly, the likelihood of omissions of events, inaccuracies in date of births and distortions in age reporting.

These limitations would imply that the estimates of current fertility rates, should be considered more as indicative of trends.

The present release of Tables F-9, F-9 SC, F-9 ST and F-10 is restricted to the data on the total number of women and total number of currently married women by their present age along with number of children born alive to them during the last one year by sex and birth order separately for total population along with that of Scheduled Castes, Scheduled Tribes and individual religious communities. With a view to make the above mentioned Census 2001 data available to the data users soon after it is processed and produced in the form of specific table, the Office of the Registrar General, India has decided to release it electronically. A printed volume based on these tables will be brought out separately. The present release is restricted to the following tables:

Table No.	Title of the Table	Lowest level of presentation	
		Electronic Format	Printed Volume
F-9	Number of women and currently married women by present age, number of births last year by sex and birth order.	District	State
F-9 SC	Number of women and currently married women by present age, number of births last year by sex and birth order for Scheduled Castes	District	State
	Number of women and currently married		

F-9 ST	women by present age, number of births last year by sex and birth order for Scheduled Tribes	District	State
F-10	Number of women and currently married women by present age, religious community, number of births last year by sex and birth order	District	State

II - DATA HIGHLIGHTS

Trends in children born alive during last one year since Census 1981

At the national level, Census 2001 recorded 236.8 million of currently married women (CMW) against 192.6 million and 147.1 million in Censuses 1991 and 1981 respectively. Since censuses were not conducted in Assam and Jammu & Kashmir in 1981 and 1991 respectively, the comparative figures of CMW in 2001, 1991 and 1981 after excluding both the states in 2001, Assam in 1991 and Jammu & Kashmir in 1981 respectively are 229.4 million, 188.3 million and 145.9 million, these are shown in Statement-1 below. These translate to decadal growth rates 21.8 and 29.0 percent during 1991-2001 and 1981-1991 respectively. Similarly the comparative figures of the number of children born alive during last year (CBLY) in 2001, 1991 and 1981 are respectively 19.2 million, 15.8 million and 17.2 million. For these, the decadal growth rates have been 21.6 percent and -8.5 percent respectively.

Statement-1
Number of currently married women, children born last year
and decadal increase : India 1981-2001

Age-group	Total currently married women			No. of children born last year			Percentage increase			
							CMW		CBLY	
	2001	1991	1981	2001	1991	1981	1991-01	1981-91	1991-01	1981-91
1	2	3	4	5	6	7	8	9	10	11
All ages	229,369,557	188,270,745	145,938,935	19,185,729	15,771,883	17,236,139	21.8	29.0	21.6	-8.5
Less than 15	1,366,209	2,082,505	2,627,175	24,512	36,105	19,924	-34.4	-20.7	-32.1	81.2
15-19	11,003,744	12,730,678	12,998,060	1,248,950	1,305,470	1,656,604	-13.6	-2.1	-4.3	-21.2
20-24	31,979,142	29,560,786	23,746,413	6,245,486	5,102,485	5,296,922	8.2	24.5	22.4	-3.7
25-29	37,283,307	31,714,775	23,348,677	5,520,779	4,375,391	4,609,328	17.6	35.8	26.2	-5.1
30-34	33,614,319	26,441,443	19,557,173	3,024,618	2,408,600	2,824,230	27.1	35.2	25.6	-14.7
35-39	31,060,249	22,897,416	17,514,792	1,551,248	1,298,425	1,644,695	35.6	30.7	19.5	-21.1
40-44	22,547,917	17,489,025	14,070,500	764,615	620,734	737,629	28.9	24.3	23.2	-15.8
45-49	18,977,738	14,744,826	11,430,365	591,747	334,784	285,605	28.7	29.0	76.8	17.2
50+	41,084,774	30,305,572	20,606,099	213,774	289,889	167,480	35.6	47.1	-26.3	73.1

Note : CMW means Currently Married Women and CBLY means Children Born Last Year.

*1981 figures are excluding the State of Assam and 1991 figures are excluding the State of Jammu & Kashmir

It may be observed that during 1991-2001, with the decadal growth rate of 21.8 percent for the CMW, there is a corresponding increase of decadal growth rate of 21.6

percent in CBLY. The situation is different when compared with the decadal growth rates of 1981-1991. During this decade, with the increase of 29 percent of CMW, there has been a negative growth rate of 8.5 percent. It is observed that except for the initial age – group (less than 15 years) and last two age-groups, there are negative growth rates of CBLY for all other age-groups of CMW during 1981-1991.

Direct estimates of fertility rates

Based on the CBLY and the number of women in by age-groups, age specific fertility rates (ASFR) and total fertility rates (TFR) have been computed (direct estimates) for the three Censuses 1981-2001 and presented in Statement-2 below along with similar rates reported in SRS and National Family Health Survey (NFHS-1 and NFHS-2).

Statement-2
Age specific fertility rates and total fertility rates
in Census & SRS 1981-2001 and NFHS-1 and 2- India

Age-group	ASFR-Census			ASFR- SRS			ASFR- NFHS	
	2001	1991	1981	2001	1991	1981	NFHS-2	NFHS-1
1	2	3	4	5	6	7	8	9
15-19	0.028	0.037	0.056	0.049	0.076	0.090	0.107	0.116
20-24	0.149	0.142	0.188	0.216	0.234	0.247	0.210	0.231
25-29	0.137	0.130	0.186	0.177	0.191	0.232	0.143	0.170
30-34	0.085	0.087	0.137	0.099	0.117	0.168	0.069	0.097
35-39	0.047	0.054	0.088	0.050	0.067	0.103	0.028	0.044
40-44	0.031	0.032	0.046	0.021	0.031	0.044	0.008	0.015
45-49	0.027	0.020	0.021	0.007	0.012	0.020	0.003	0.005
TFR	2.52	2.50	3.61	3.10	3.64	4.52	2.84	3.39

Note : 1. ASFR means Age Specific Fertility Rate and TFR means Total Fertility Rate
2. NFHS-1 is for the period 1990-92 and NFHS- is for the period 1996-98.

It may be observed that the direct estimates of Total Fertility Rates (TFR) based on Census 1991 and 2001 are less than that of those based on Sample Registration System (SRS) and National Family Health Survey (NFHS) for the comparable periods. In a situation of declining fertility, TFR in 1991, should have been higher than that based on NFHS-1 (TFR in NFHS-1 relates to the period 1990-92 while TFR in Census relates to 1991). However, the estimates show otherwise, these being 2.50 in Census 1991 and 3.39 in NFHS-1. Lower TFR in 1991 Census might be due to under-reporting of CBLY.

While comparing the TFRs based on 2001 Census with SRS 2001 and NFHS-2 (1998-99), it is observed that the Census TFR is lower by 0.58 and 0.32 respectively, the value of Census 2001 TFR being 2.52 against 3.10 and 2.84 in SRS 2001 and NFHS-2 respectively. The TFR based on Census 2001, when compared with that of NFHS-2, is fairly consistent. It might be due to better reporting of data on CBLY in Census 2001 compared to Census 1991.

Comparison of TFRs based on Censuses 1981, 1991 and 2001 with the respective TFRs based on SRS reveals that the former has been lower than that of the latter. This might be due to the existence of dual recording system in SRS resulting in lower number of omissions compared to one time count in census.

Fertility rates among different social groups

The rates of TFR based on the data of 2001 Census for Scheduled Castes and Scheduled Tribes and religious communities by residence have been computed and presented in Statement-3 below.

Statement-3
Total fertility rates by residence and social group-India : 2001

Social group	TFR		
	Total	Rural	Urban
1	9	10	11
All population	2.52	2.83	1.79
Scheduled Castes	2.89	3.10	2.13
Scheduled Tribes	3.16	3.26	2.22
Hindu	2.47	2.77	1.72
Muslim	3.06	3.52	2.29
Christian	2.06	2.37	1.53
Sikh	1.86	2.00	1.49
Buddhist	2.29	2.65	1.80
Jain	1.50	1.90	1.39
Other R.C.	2.99	3.11	2.00

Note : * Other R.C. indicates Other Religious Communities.

It may be observed that at the national level, TFRs among Scheduled Castes and Scheduled Tribes are higher than that of the all population in Census 2001, their values being 2.89 and 3.16 respectively compared to 2.52 for the total population.

Among the religious communities, TFR is highest for Muslims (3.06) followed by Hindus (2.47) and Buddhists (2.29), the lowest being in case of Jains (1.50).

The limitations of data, as mentioned earlier in the note, might hold good for individual religious communities also.

III – SUMMARY AND CONCLUSIONS

Tables F-9, F-9 SC, F-9 ST and F-10 present data on the number of children born alive during last one year by sex along with the order of birth classified by the present age of the total number of women as well as currently married women. Identical data by Scheduled Castes, Scheduled Tribes and major religious communities have also been presented as three separate Tables.

While the data on children ever born presented in Table F-1 and F-2 helps in understanding the period fertility of women over a period of their lifetime, the data presented in Table F-9, on births during last year, is useful in computing the current fertility rates of women, specifically, age specific fertility rates and total fertility rates.

Information on 'children born alive during last one year' to currently married women was collected and tabulated in the earlier censuses without any classification of sex. For the first time in the Census 2001, this information has been collected and tabulated by sex. The data on sex of the child born alive during last one year is also useful for understanding the sex ratio at birth.

Before coming to any conclusions on the results based on the analysis of the data on births last year, one should keep in mind some limitations of these data. Unlike in specific surveys, the method used for collection of data on births during the last year in census is slightly different and has limitations in regard to completeness and accuracy. Since the question is asked only to the currently married women, the births occurred to women other than currently married, though may be small in number, are bound to be left out. Secondly, the data on births last year collected here are of women, who were alive as on the date of enumeration and hence the total number of births last year may exclude children, whose mothers were not surviving as on the date of enumeration. Thirdly, since the question on netting this information is of retrospective in nature, there are chances of omissions of births during the last year due to inaccuracies in date of births and distortion in age reporting.

The main conclusions, which follow from the data at the national level, are as under.

- Direct estimates of Total Fertility Rates (TFR) based on Census 1981, which was 3.61, has reduced to 2.52 in 2001 thus showing a decline in the fertility level of 1.09 in 2001 compared to 1981. But compared to 1991, there has been no change in 2001. The corresponding decline based on SRS has been 1.42 and 0.54 during 1981-2001 and 1991-2001 respectively. This shows that the change in the values of TFR based on censuses is not consistent with that based on SRS during the same period.
- When the TFR value (2.52), based on Census 2001, is compared with that of SRS (2001) and NFHS-2 (1998-99), the variations are 0.58 and 0.32 respectively. Since NFHS-2 was conducted in 1998-99, which is two years prior to Census 2001, the TFR of 2001 is consistent. This is not the case of TFR values of Census 1991 and NFHS-1 (1990-92), when these are compared. The values are widely apart, being 2.50 and 3.39 respectively.
- Although the TFRs based on censuses for all the three censuses are less than the corresponding figures based on SRS and NFHS, the deviation is more in case of 1991 compared to other two censuses. In Census 2001, the deviations of TFR are 0.58 and 0.32 from SRS (2001) and NFHS-2 respectively. In contrast, the corresponding deviations in Census 1991 from SRS (1991) and NFHS-1 are 1.14 and 0.89, suggesting that under-enumeration in Census 1991 might be more when compared with that of Census 2001.
- TFRs of Scheduled Castes and Scheduled Tribes are higher than that of the total population in Census 2001, the values being 2.89 and 3.16 respectively, compared to 2.52 for the total population.
- Among the religious communities, TFR is higher for Muslims (3.06) followed by Hindus (2.47) and Buddhists (2.29), the lowest being that of Jains (1.50).

