

**DETERMINANTS OF DIFFERENTIAL FERTILITY BEHAVIOUR IN RURAL AND URBAN
AREAS: REFLECTIONS FROM CHANDIGARH U.T.**

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Abstract: This paper investigates the determinants of fertility patterns in rural and urban areas of the union territory of Chandigarh. A stratified sample was selected from rural and urban areas on the basis of their occupational structure to identify specific groups of the working population who contribute to higher fertility rates in rural and urban areas. Further Age-Specific Fertility Rate (ASFR) has been computed for all women in the fertile age groups to determine the most vulnerable age groups that the Family Welfare schemes should be focused on for achieving desired fertility outcomes. The quality of services provided by health departments in rural and urban areas has also been evaluated to assess the impact of those agencies in lowering fertility rates.

Keywords: Age-Specific Fertility Rate (ASFR), Family Welfare Scheme, Socio-religious outlook, Occupational Structure.

Introduction: Studies in fertility patterns have been one of the core concerns of economic demographers. The present study is based on empirical research conducted through a household survey in rural and urban settlements of the Union Territory of Chandigarh so that the rural-urban differences in choices related to fertility and emergent fertility patterns could be studied in proximity.

Since the sample contained all the house ladies, both in urban and rural areas, belonging to only one society, i.e. Hindu Society which included Hindus, Sikhs, Jains etc., therefore fertility behaviour of the females belonging to cross-sections of the society could not be worked out because going beyond the limits of the randomly selected sample for picking-up ladies from outside the sample size could have prejudiced the fundamental conclusions of this study. To analyse the differential fertility behaviour of females belonging to different shades of society, all the sampled females were classified according to differential occupational families and their detailed fertility pattern studies in rural and urban areas. In rural areas, these were classified into five groups belonging to:

- (i) Farm families
- (ii) Labouring class families
- (iii) Working-class families,
- (iv) Service class families and
- (v) Businessmen and traders' families

whereas in the urban areas, only four groups were identified, which include:

- (vi) Labouring class families
- (vii) Working-class families
- (viii) Service class families and
- (ix) Business-class families.

Their fertility behaviour and Age-specific fertility rates (ASFR) have been calculated, and their comparative view is reproduced in the following table.

TABLE SHOWING COMPARATIVE VIEW OF AVERAGE FERTILITY OF DIFFERENT GROUPS OF FEMALES IN RURAL AND URBAN AREAS OF CHANDIGARH U.T.

Sl.No.	Class of the sampled house	No. of house ladies in each class		Their percentage in the sample		No. of children born to them		Average no. of children per house lady	
		Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1	Farming families	X	21	X	32.80	X	88	X	4.2
2	Laboring class families	104	13	11.10	20.30	427	53	4.1	4.1
3	Working class family	282	11	30.10	17.20	1016	42	3.6	3.8
4	Service class family	465	16	49.70	25.00	889	31	1.9	1.9
5	Business class family	85	3	9.10	4.70	221	8	2.5	2.7
Total no. of families		936	64	100	100	3553	222	2.73	3.47

A comparative view of the figures in the table above reveals that there was no farming family in the urban areas, whereas about one-third of the families in the rural areas belong to farming occupation. Service class families, with their share of about half, i.e., 49.7%, dominate the urban scene against only one-fourth in rural areas. The percentage of working-class families, with their percentage share of 30.1%, comes next in urban areas, whereas they occupy the fourth position with a percentage of 17.2% in rural areas. With a percentage share of 11.1%, labouring class families occupy their position in urban areas against the same position in rural areas but with a percentage share of 20.3%. Business-class families occupy the last position in rural and urban areas, with their respective percentages of 4.7 and 9.1%. Thus, families belonging to the labouring class, working class and farming class taken together claim their share of 70.3% in rural areas, whereas the share of the labouring class and working-class families taken together in the urban areas comes to only 41.2%. This can be one of the glaring reasons for fertility differential in both areas because these families have the maximum average fertility in society, as revealed by our analysis and given in the above table.

So far as average fertility per house lady is concerned, it is the highest at 4.2 among farming families in rural areas, followed by 4.1 among labouring class families in rural and urban areas. Among working families, it is 3.8 in rural areas against 3.6 in urban areas. Among business-class families, it is 2.7 in rural areas against 2.6 in urban areas. Average fertility among females of service-class families is the lowest at 1.9 in urban and in rural areas. The net outcome of the fertility pattern is that in rural areas, it is comparatively higher than in urban areas, except in the case of service-class families, where fertility rates are at par with each other. The lower fertility rates may be attributed to the higher education level among both the males and females in those families, particularly of the females in rural and urban areas, which has been higher than in other categories. The ratio of employed females in this category is also higher than in other categories, in some of which female employment is nil. Being educated and belonging to educated families, employed in services, class females have easy access to and use of different family welfare measures without any obstacle from any quarter. Even their socio-religious outlook on such measures is open, broadminded, and not orthodox and rigid, as it may be observed among the females of other categories. The cause of higher fertility among farming families is due to their age-old preference towards larger family sizes and the system of early marriages. However, these lines of thinking are on the decline now. Causes for higher fertility among labouring class families have been a result of their poor socio-economic set-up, religious rigidities, higher level of illiteracy among them and the sub-conscious consideration of greater economic utility from their

children who start supplementing family income at their tender age without any cost of their education and better up-bringing as derived during the course of personal discussion with them.

A comparative view of the fertility behaviour of rural and urban females on the basis of its trend during different age groups shows that in both rural and urban areas, there has been little fertility in actual practice (nil fertility as per data) after the age of 40 years, declining fertility after the age of 30 years and highest fertility in the age group of 25-30 years, followed by that in the age group of 20-25 years, exhibiting thereby the fundamental fact of highest fertility during the decade of 20-30 years which is most crucial for fertility containment. Average fertility during the age groups of 15-20, 20-25, 25-30 and 30-40 years in rural areas has been worked to be 0.77, 1.16, 1.45 and 0.39, respectively, against respective averages in urban areas as 0.02, 0.9, 1.6 and 0.2. In urban areas, it is much below what it is in rural areas in the age groups of 15-20 and 20-25 (0.02 against 0.77 and 0.9 against 1.16) because of the system of delayed marriages in urban areas. It is comparatively more in urban areas than in rural areas in the age group of 25-30 years (1.6 against 1.45) but again falls in the age group of 30-40 years (0.2 against 0.39). This is due to the greater use of family welfare measures and the diversion of greater attention of the parents towards the education career of their children by urban people than by rural people. The average fertility of 3.47 among rural females is higher than the average fertility of 2.73 among urban females due to rural-urban differences in all the socio-economic, socio-religious, and politico-educational fields.

In urban areas, the Age-Specific Fertility Rate (ASFR) of 4.07 is the highest among females above 60, married in the age group of 15-20, followed by similar females married below the age of 15, in which case it is 4.02. Following them are females of the 50-60 age group who has entered wedlock in the age group of 15-20, having an ASFR of 3.46, whereas, in rural areas, an ASFR of 6.5 is the highest among the females of the 30-40 group, married in 15-20 years, followed by 5.25 for females of above 60, married in the age group of below 15 years. 4.14 and 4.0 are for females in the age group of 50-60 years but married in different age groups of below 15 years and 15-20 years, respectively. All these ASFRs are given below in the form of a table below for a comparative view.

TABLE SHOWING COMPARATIVE ASFRs OF SAMPLED FEMALES OF RURAL AND URBAN AREAS OF CHANDIGARH, U.T.

Current Age	No. of house ladies in each age group		Age group at the time of their marriage	Their number in each age group		Total ASFR	
	Rural	Urban		Rural	Urban	Rural	Urban
20-25	2	42	20-25	2	42	0.5	1.26
25-30	7	102	Above 25	X	6	X	0.33
25-30	X		20-25	7	96	1.33	2.22
30-40	18	233	20-25	16	299	3.06	2.02
40-50	24	262	15-20	2	4	6.5	3.25
50-60	-	-	15-20	24	262	3.54	2.76
50-60	9	-	15-20	2	195	4	3.46
Above 60	4	-	Below 15	7	X	4.14	X
Above 60	x	-	Below 15	4	56	5.25	4.02
			15-20	x	46	x	4.07

Source: Self-compilation after analysis of data

A comparison of rural and urban fertility behaviour, as analyzed in the above table, clearly reveals that average fertility is higher among rural females than urban females. Its rate is the highest in the age group of 25-30 years, both in rural and urban females in general, followed by next higher in the age group of 20-25 years and starts declining with the increase in age, particularly after 30 years of age and then becomes negligible or zero after crossing the age of 40 years in both areas. The crucial period for fertility containment in both areas is, thus, a decade of 20-30 years in the lives of females if the population is to be checked and controlled. Family welfare measures have been very useful in arresting fertility rates, particularly in urban areas, because of their nearly total coverage. They may equally prove effective in rural areas if adequately covered by devoted and dedicated staff through their sincere and honest efforts.

Causes of Differential Fertility among Females in Rural and Urban Areas

The most common causes for fertility differential and rural and urban areas are differences in the education of the people in general and of the females in particular and the educational environment prevalent in the families, differences in the degree of female participation in the pursuit of economic activities, differences in socio-religious institutions working through age at marriage, religious

flexibility or rigidity, adherence to old socio-religious thinking etc., differences in socio-economic conditions, occupational differences and difference in the coverage, accessibility, the use as well as whole-hearted acceptance and popularity of family welfare measures. In addition to these common causes, fertility is comparatively higher in rural areas because of a greater ratio of farming and labouring class families, where women have a higher degree of illiteracy, lower social status of females within the family, negligible rates of female employment, a greater degree of religious influences on the people, a greater degree of adherence to social moorings and a lesser degree of the role of family welfare measures because of their inadequate coverage, poor facilities at rural dispensaries, a lesser degree of motivation for them and a greater degree of psychological fear among the rural folk about the use of these measures and so on.

The multi-ethnic character of the urban population and the complexities of their lives, the mechanical nature of their routine, a greater degree of social security provided by the government and employers in the urban areas, a greater degree of keenness to see their children on the highest ladder of success in life through better and professional education, a greater degree of their devotion towards the education and overall development of their children, their busy life schedule and other similar features of the lives are responsible for lower fertility in urban areas as compared to those in rural areas where the facts are either opposite or not at par with those in urban areas. Full-fledged implementation of the use and dissemination of family welfare measures and their dynamic role in urban areas encourages lower fertility among urban females who find easy access to these measures and frequently use them to voluntarily keep their family size small.

Critical Evaluation of Determinants of Fertility Patterns in Rural and Urban Areas:

As discussed in the previous sections of the paper, there has been sufficient coverage of family welfare measures, though not full coverage, in the urban areas compared to only negligible and partial coverage thereof in the rural areas of Chandigarh. Family welfare centres in urban areas have adequate facilities for all types of male and female contraceptives. The centres' staff pay greater attention to the people who come to avail them. Their level of skill for handling different types of cases is also sophisticated, contrary to the situation in rural dispensaries. The staff manning them is just the reverse in the sense that even the necessary material always remains in short supply. The staff in the rural centres could be more sophisticated in terms of skills and needs to pay more attention to the people who happen to attend them.

People in urban areas are comparatively more educated than their counterparts in rural areas on account of adequate and cheap educational facilities in urban areas. Literacy standard among males and females is higher in urban areas than in rural areas in rural areas. Urban females have a diversity of education with greater emphasis on the professional type of education, resulting in their greater degree of participation in economic activities in the form of female employment, etc., compared to their counterparts in rural areas.

Even socio-economic institutions in urban areas are comparatively well suited for liberal thinking about various aspects of life and family welfare measures than in rural areas where these ideas are still in their infancy. The degree of rigidity in religious thinking is also comparatively less in urban areas than in rural areas. Families belonging to farms and labour taken together are in a greater ratio in rural areas than in urban areas where farming families are non-existent. Service-class families in urban areas are more in number than in rural areas.

All these factors have different degrees of impact on fertility containment. Since service-class people in urban and rural areas have more or less identical features. Therefore, their average fertility in both areas has recovered more or less the same at 1.9 and is the lowest among the females of all the categories. These basic differences in socio-economic base, socio-religious thinking, educational facilities and achievements, female employment, the role of family welfare measures and their coverage and occupational distribution have been responsible for fertility differential in almost every category of females in urban and rural areas. Urban females belonging to business and trader families have recorded average fertility of 2.6 against 2.7 recorded by their counterparts in rural areas. Urban females belonging to working-class families have recorded average fertility of 3.6 against 3.8, recorded by their counterparts in rural areas. Urban females belonging to labouring class families have recorded average fertility of 4.1 against 4.1 and 4.2 recorded by females of labouring classes and farming classes, respectively, in rural areas. These differences can be attributed to these socio-religious and socio-economic factors.

Some common facts about the fertility behaviour of females in both rural and urban areas have emerged from this study. These common facts are that average fertility is the highest in the age group of 20-30 years, comparatively more in 25-30 years than in 20-25 years, and then starts declining thereafter and finally touching zero after and finally touching zero after crossing the age of 40 years. Therefore, the crucial period for diverting all the efforts to contain fertility is the age of 20-30 years of

females. Another common fact of fertility differential among the females belonging to different occupational families both in the rural and urban areas has emerged, and that is that females belonging to service class families have recorded the lowest fertility and the females belonging to farm families and labouring class families have recorded the highest fertility in both urban and rural areas. Females belonging to working-class families come next to those belonging to business-class families following them. Thus, the highest rank for higher fertility is achieved by females of farming and labouring classes, followed by those belonging to the working class, business class and service classes. This situation shows that the first target for fertility containment should be labouring, working, and business classes. Service-class people seem to have become self-vigilant in these matters and need lesser and the least attention. Rural areas need a greater degree of coverage with all the sincerity in the hearts of the most devoted and dedicated staff room rural cadre in the rural dispensaries, which need immediate and prompt attention for their upgrading and better development. If the burning problem of the ever-increasing population in the country is to be solved.

Conclusion: The analysis of fertility trends in rural and urban areas of Chandigarh provides important insights into factors that determine fertility behaviour. The paper segregates urban and rural populations on the basis of occupational structure, which effectively throws light on the types of occupations where people tend to have higher fertility rates irrespective of their location in rural or urban locations. The study also helps determine the target population cohort on the basis of Age-Specific Fertility Rates (ASFR) that need to be counselled for family welfare schemes and overall awareness. Finally, the study also reveals the quality of family welfare facilities that are available in rural as well as urban areas that in turn can make a strong impact on the fertility behaviour of the population.

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