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**EMMERGING ISSUES OF FACTORS AFFECTING FERTILITY AMONG RURAL WOMEN IN INDIA**

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**ABSTRACT**

Economic factors like income, occupation, the nature of employment etc. determine the attitude towards the size of the family and towards the use of various methods of family and towards the use of various methods of family planning. Poverty with its associated factors such as illiteracy, ill health, poor diet etc. keeps the birth rate high, whereas, the richness is associated with the lower fertility. Some of the leading economic factors and their role in determining the level of fertility is being examined below.

**KEY WORDS: Economic status, Religious incidence, Social aspects**

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**INTRODUCTION**

Fertility is generally used to indicate the actual reproductive performance of a woman or group of women. The basis for such a performance is the actual number of live – births. It measures the rate at which a population adds to itself by births and is normally assessed by relating the numbers of births to the size of some section of the population, such as the number of married couples or the number of women of child bearing age. It is an appropriate yard-stick for measuring potential fertility. It means that a woman is considered fertile, if she had ever born a child. Prof Barclay states that fertility can be ascertained from the statistics of births. It must be distinguished from fecundity, potential level of performance (or physical capacity for bearing children) of the population. Fecundity denotes the ability to bear a child and has no reference to whether or not a woman actually has born a child. A woman is fecund; necessarily mean that she is firths too, fecundity is a biological concept for which there is no direct measurement. The proportion of all Women who are fecund is not known with any person.

On the other hand, fertility is the result observed in a given group of females at a period of time. It is a statistical concept with social relevance. Thomson and Lewis observe that most students of “population” use the total fertility of evidence of the actual reproductive performance of a woman or women. Fecundity, on the other hand, denotes the physiological capacity to conceive and bear children. The fertility is measured as a frequency of births. The definition, remain ambiguous in two respects: frequency during what period and a frequency reckoned within which distinguish the two major approaches – (1) To view fertility as the number of births per Persian or per couple, during the child bearing period of life (ii) fertility to be measured as a vital rate based on births and population data of some calendar years.

**FACTORS AFFECTING FERTILITY**

- (1) Education and fertility:- The role of education in the determination of the patterns of population can be viewed in many ways. The effect of the school system increases aspirations and broaden the horizon which is bound to effect the attitude of the size of the family. Alternatively the importance of educational qualifications as a screening device for job selection allows us to classify people according to economic status i.e. Higher the education, higher will be the economic status, and thus lower the fertility. Higher education enables the funds to seek employment which may act as a base in increasing the size of family. Education makes her aware about the meaning of living and purpose of life. It inculcates a habit of reading and enables, the people to develop other hobbies. Thus recreational avenues increase. People become more responsible to themselves and towards the society. This consciousness towards happenings

and events inspires them to play an active role in shaping the society. The values of liberty and urge for maintaining social status force the people to shift this centre of activity from family to community, thus increase their vertical as well as horizontal immobility. This social interaction of the people is bound to influence this family size.

### **EDUCATION AND FERTILITY**

The role of education in the determination of the patterns of fertility can be viewed in many ways. The effects of the school system increase aspirations and broaden the horizon which is bound to affect the attitude towards the size of the family. Alternatively the importance of educational qualification as a screening device for job selection allows us to classify people according to economic status, i.e., the higher the education, the higher the economic status and thus lower the fertility. Higher education enables the females to seek employment which may act as a barrier in increasing the size of the family. Education makes her to know the meaning of living and the purpose of life. It inculcates a habit of reading and enables the people to develop other hobbies, thus recreational avenues increase. People become more responsible to themselves and to the society. Their consciousness towards happenings and events inspires them to play an active role in shaping the society. The values of liberty and social status get recognition. The craze for liberty and urge for maintaining social status force the people to shift their centre of activity from family to community thus increases their vertical as well as horizontal mobility. This social interaction of the people is bound to influence their family size.

Demographers have often pleaded for an increase in the female age of marriage so that fertility may be reduced. Female education increases such 'mean-age at marriage'. Researches on fertility and migration have established an inverse relationship between the two. The migratory people used to have small family. Education increases such migratory tendencies. Sociologists propagate the individuation is inversely related to fertility and education makes a female more self-conscious. The above account of education and fertility relationship can be summarized as under:

- Educated girls get married at a later average age. This reduces the total number of children they eventually give birth.
- An educated couple usually shares a life style in which there is less reason to have many children and more reason to have fewer.
- An educated female is usually less closely confined physically and psychologically with in her husband's family and her. Narrow familiar concerns, than a woman who is brought into their home as an uneducated girl shortly after her puberty.
- An educated female is usually married in a family which affords medical care and she is likely to be more secure of being cared in her old age.
- The proportion of using modern contraceptive devices rises steadily with increasing education.

### **With new emphasis given to family planning in school and in mass – media, the female education affects fertility adversely.**

The relevant survey shows that women who have attended high school have significantly fewer children than those having less education. The Mysore Population Study revealed that in Bangalore City, the average number of children born to every married illiterate or educated upto middle school woman above the age of 45 was about 5.5, while that for woman with high school or college education was 3.9.

The National Sample Survey, conducted in urban areas revealed that the number of births to women with education up to the primary level only was of the order of 6.5%. Corresponding figures for women with middle and high school were 5.04 and 4.58 respectively. For women with university education it was as low as 2.01

Driver obtained the average number of children as 4.7 in case of uneducated husband, 4.5 for primary passed, 4.3 for middle passed, 3.9 for high school and 4.0 for college educated husband. The average for uneducated wives was 4.6, for primary school passed 4.7, and above primary educated it was 3.8.

Dutta, in a study of a sample of women from rural tracts of eight districts of West Bengal and Calcutta proper, classified rural couples into three groups: (i) both husband and wife literate; (ii) husband literates, wife illiterate; (iii) both husband and wife illiterate. He found that couples of high literacy had a higher average number of children born and surviving, and considers it due to higher living standard.

He found that among those couples where wife is merely literate, fertility increases with increasing level of education and there-after declined considerably. He concluded that up to a certain critical level the positive association between fertility and education is due to other factors and after that level, education moulds the attitude of couples in making conscious efforts to reduce fertility. He also found that lower standard of education is associated with smaller number of living children due to higher child mortality. Hussain based her study on the data collected in the Lucknow educational status of the household, a direct association between educational attainment of household members and the mean age of male and female marriages. The study makes a quite pertinent departure, since to a great extent it is the atmosphere of the family as a whole which moulds the reproductive behaviour of individual couples.

In Greater Bombay, it was found that the average number of children ever born were 3.41 for those who were either illiterate or literate without formal education; 3.01 for those who had education from primary up to matriculation; and 1.95 for those who had education above matriculation from the above account one may very safely include that formal education is ordinarily associates with low fertility.

Achieved through more prevalent and effective practice of contraception. The implication of this conclusion is that the indirect effects of raising the marriage age are likely to be more important than its direct impact on birth rate.

## **RURAL URBAN RESIDENCE AND FERTILITY**

The urban population is less fertile than rural and the reproductive pattern varies inversely with the size of the city is a fact most widely observed in all over the world. The lower birth rate in urban areas may be attributed to the following reasons:

First, family life in the city is less cohesive because family members participate in other institutions and have a broader range of contacts outside the family. Second, children are not regarded as an economic asset in the city rather they are a liability as they absorb huge funds in education and health care. They usually go to work at a late stage and do not subscribe to their parents. Third, women become more independent and less sub-servant to men. Women avoid child-bearing and restrict their number in order to maintain jobs. The increase in the source of income makes possible a wider selection of leisure-time activities other than sex. Fourth, as people become richer and educated, they plan to reproduce themselves at least at the same level of education and training as of their own. Fifth, status and aspirations, the achievements of which are difficult where support of a large family is mandatory are probably more pronounced in cities than in the rural areas. Sixth, the spirit of rationality and independence of tradition prevailing in the cities, housing shortage, economic insecurity and under-employment are other factors limiting and size of the families in the urban areas. Seventh, the poverty and ignorance which are more prevalent in rural areas interfere with the practice of contraction. But in urban areas the availability of clinical aids and the contraceptives help family planning practices. Eighth, the low birth rates in cities like Bombay, Delhi and Calcutta are due to the low proportion of women in population, because migration is by and large masculine.

But the studies based on census returns and survey data indicate that the urban-rural difference was not at least until 1961, a significance factor in India's population growth partly because of the small proportion of urban people in the country and partly because of the narrowness of the difference in fertility rates. It appears that institutional factors predominate and the usual western socio-economic models of fertility determinates are not very relevant in India. Robinson has also supported the same viewpoint, "This absence of a substantial rural-urban fertility gap in many non-western nations is merely another indication

that urbanization in Asia and Africa is proceeding along with different lines from those followed by urbanization in the west at a different rate of speed.”

## RELIGION AND FERTILITY

Studies on differential fertility with reference to religion showed that the Muslims in India has a higher fertility than non-Muslims. Kingsley Davis calculated child-woman ratio from the census data for the Hindu and the Muslim females from 1981 – 1941 and found that the Hindu ration was lower than the Muslim throughout the period. Davis further observed that the number of children per 1000 married women indicating the level of marital fertility was also greater among Muslims (900) as compared to Hindus (817). Census of India 1931 revealed that the average number of children per family was 4.3 for Muslims and 4.1 for Hindus. A few more findings can be quoted to substantiate the opinion that Muslim fertility exceeds than of the Hindus. In the Kanpur survey, it was found that the completed fertility of Muslim women was 8.0 as compared to 7.0 of the Hindu Women.

In central India a Muslim woman was found to give birth to an average of 4.6 children as against 4.5 by an average Hindu woman, 4.9 by Buddhists and 4.1 by others. Patnaik found that Muslim fertility is higher at all levels of education than that of Hindu female. Results of his study are as under:

**Table : 1.1**  
**Mean Fertility According to Religion and Education of Wife**

| Religion | Education of Wife |          |           |         |
|----------|-------------------|----------|-----------|---------|
|          | Illiterate        | Literate | Schooling | College |
| Hindu    | 4.95              | 3.42     | 3.07      | 2.77    |
| Muslim   | 5.69              | 4.32     | 3.80      | 3.28    |

It may be observed that irrespective of the level of education of wife, the fertility among Hindu is less than that of Muslims.

N.S.S. survey (19<sup>th</sup> round, 1964 – 65) found that the Hindus and Muslims differ little so far as fertility is concerned. But the fertility of the Sikhs was substantially higher in both rural and urban areas. The total fertility rate for the Sikhs was 5.72 for rural and 5.83 for urban areas whereas the Hindu fertility rates were 5.45 and 5.14 for rural and urban areas respectively S.P. Jain study showed that the average number of children born per couple among Hindus in rural Punjab was 4.87, among Sikhs 4.78, among Muslims 5.12 and among Christians it was 5.58.

## MARRIAGE AGE AND FERTILITY

Marriage is the legal union of persons of opposite sex. The legality of the union may be established by civil, religious or other means as recognized by law of each country. In demography, it is not the formal ceremony of marriage but the age of effective marriage (the marriage after which husband and wife live together) which is relevant.

The age at marriage is crucial factor in determining the level of fertility. Demographers usually confine themselves to the marriage age of girls, as it has greater relevance in the context of fertility. In many of communities in India, the bride does not start living with the husband immediately after the formal ceremony of marriage. There is a second ceremony (called Muklawā, Gauna, Karyan etc.) This may be called ‘return marriage, after which the couple starts its married life. The age of the wife at this time may be considered the effective marriage age. For demographic analysis, it is this age, which is relevant. The National Sample Survey in recognition of its relevance has produce useful data on effective marriage age. The N.S.S. 7<sup>th</sup> round (1953 – 54) has shown that in the rural areas, in 28% of marriage performed , the bride was below 12 years, in 49%, 12 – 16 in 18%, 17 – 21 years and in 44%, 22 years and over. The N.S.S. 17<sup>th</sup> round has shown that the average age of effective marriage increase steadily in the rural area from 15.62 years in 1921- 30 to 16.11 years in 1961 – 62. The 19<sup>th</sup> round of N.S.S. provides the % distribution of effective marriage age for the different communities classified by religion for both rural and urban areas.

**Table 1.2 : Age of Marriage by Religion**

| Rural                        |       |       |      |              | Religion         | Urban                        |       |       |      |              |
|------------------------------|-------|-------|------|--------------|------------------|------------------------------|-------|-------|------|--------------|
| Effective marriage age (yrs) |       |       |      |              |                  | Effective marriage age (yrs) |       |       |      |              |
| 0-15                         | 15-19 | 20-24 | 25 + | Not recorded |                  | 0-15                         | 15-19 | 20-24 | 25+  | Not recorded |
| 24.3                         | 63.4  | 8.0   | 2.7  | 0.7          | <b>Hindu</b>     | 20.6                         | 61.8  | 14.1  | 2.9  | 0.6          |
| 29.8                         | 58.0  | 7.9   | 3.2  | 1.1          | <b>Muslim</b>    | 21.3                         | 62.9  | 12.6  | 2.9  | 0.3          |
| -                            | 62.4  | 23.0  | 7.6  | -            | <b>Sikh</b>      | 5.2                          | 55.78 | 38.3  | 0.7  | -            |
| -                            | 79.0  | 16.8  | 1.4  | -            | <b>Christian</b> | 5.1                          | 61.0  | 22.8  | 11.1 | -            |
| 24.1                         | 63.2  | 9.1   | 2.8  | 0.8          | <b>All</b>       | 19.9                         | 61.7  | 14.6  | 3.3  | 0.5          |

**Source:** N.S.S. 19<sup>th</sup> round (1964 – 65)

In the above table, figures for Sikhs and Christians in rural areas do not sum upto to 100, probably due to a printing error. The table indicates that Sikhs and Christians have a late marriage pattern. Hindus and Muslim have an early marriage pattern. 15– 19 is the most likely age for female marriage among all religious communities in rural as well as in urban areas.

In India girls get married early and universally. There is an interesting debate regarding the effectiveness of increasing the marriage age and reduction in fertility. Demo graphs opine that it can be an effective measure provided the age at marriage is raised to 20 or more. However, the indirect effects of such increment in age are significant and will ultimately help in reducing the fertility. The postponement of marriage can be an important component of population control, even if it is not accompanied by a reduction in a completed family size. Postponement would provide substantial and immediate transitory reduction in the birth rates, as well as smaller permanent decline and would augment further decline ultimately achieved through more prevalent and effective technique of contraceptive. The implication of this conclusion is that the indirect effects of raising the marriage age are likely to be more effective on birth rates.

## OCCUPATION AND FERTILITY

Occupation is an important economic factor that influences fertility very much. Several studies have been conducted by the demographs in this field; some leading research-findings are being given below:

Sovani in his Kolhapur Survey observed that the wives of agricultural labourers had an average 4.0 live births while small cultivators had 4.7 births and large cultivators had 5.1 live births.

## INCOME AND FERTILITY

Income is an important economic factor that determines the levels of fertility. Income influences fertility indirectly as it determines the socioeconomic status of the couple and that in turn determines fertility. Women of lower income groups tend to bear more children partly because more of their children die in infancy and so these women have shorter lactation and hence they conceive again and partly because they need more children to replace the lost ones, so they continue to bear children at later age too. At lower levels of income, children are not the liabilities rather they are the assets. The parents spend a very little on their education or on medical care. Children start earning at an early age. To them more children means more hands to earn. So poor people do not see harm in increasing the size of the family. Many studies have confirmed this view. The 19<sup>th</sup> Round, of National Sample Survey (1964 – 65) established a negative association between expenditure and birth rate.

From the various studies conducted by the United Nations, it has been found that a clear cut inverse relationship between income and fertility levels is found in developed countries. Mandlebaum very rightly observes that Women of wealthier, higher status families tend to stop having children at early age according to the relevant studies, than do women of lower status. They also have a lower average number of children borne to them. Children of wealthier families have a much higher rate of survival. Illnourished women may



not be able to bear children for as many years as do healthy women. But in India it is generally the women of the better nourished groups who stop earlier.

### **FEMALE EMPLOYMENT AND FERTILITY**

The female employment has proved to be the most dominant factor that arrests the size of family, Patnaik in a study found that working female had 2.48 children where as non-working had 4.41. The lower fertility among working women may be attributed to several reasons: they may be more educated than non-working women; they are more exposed to communication and mass – media than non – working; they have lesser time for family rearing than others, they may have more means secrete on and finally may have their own social life and an Important style of living than that of the housewife.

### **DEEP ROOTED VALUES**

The gap between attitude and practice seems to be due to deep rooted values. Agricultural community have the view that children as a source of economic section and security in old-age, such values tend to change. Gradually and steadily. In a study of social change in three groups (Pre Industrial, Semi Industrial and Industrial, Mathew K.K. and Kesir e.v. (ed.) has supports that all the three groups were worried about education of children who wanted their children to have a bathe standard of living and security of employment than that of themselves. This is an encouraging trends Bethe understanding of these values and changes that take place, are really needed.

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### **VARIABLES AFFECTING FAMILY PLANNING**

The acceptance and practice of family –planning methods or regulation and control of fertility is essentially an individual at his own level, usually in contestation with some significant persons. Such a decision reflects the acceptance of change on the part of the individual. Adoption of family planning methods by the individuals are the influenced by factors at the level of individual, the family and the society. The process of methods of fertility control by an individual can, therefore, be understood by considering factors at the individual level i.e. the personal variable related to individual, Recent studies on these variables are therefore, briefly presented as below.

1. **Age** – Adoption of family – planning is generally associated with age which has been substantiated by another study conducted by Government of India in 1972. In which the change in the mean age and the mean number of living children at the line of sterilization at a complete younger age whereas females accepted tubectomy at a slightly higher age. Anotrns sliedy was conducted on 171 married women of different age-group which revealed that women belonging to age group 25-34 years were more favorable to family planning than woman of other age-group.
2. **Sex** – In his earlier study, Chandrasekhar, c. noted that sex was not a factor for determining people's attitude towards family planning and practices. This was supported by seal. K.C. who also found that makes and females did not differ significantly in this attitude towards family planning. However, Bhattacharya P.J. and shastri G.N. found that sex was a potential variable, among background factors, which was significantly associated with attitude and family planning practices.

3. **Education** – Mitra. A (1971) in this study revealed that adoption of family planning was also associated with education for both groups, and permanent inhabitant. Kohli (1972, in this study concluded that 96% respondents had opinion that by planning, the size of family, upbringing of children and education of the children could be facilitated, whereas 92% of the respondents felt that in a planned family one could satisfy his wants even when resources were limited. It was also found that the level of education of the people was significantly associated with their attitude towards family planning. Singh Baljeet (1986). Revealed that significant proportion of acceptors belonged literary group. Also found that acceptors of family planning were more in higher economic and literacy groups. An aggressive and defence attitude to others was not more frequent among acceptors whereas depressive attitude was more frequent among non. Acceptors in general, knowledge acceptance and practices of family planning Programme appears to be directly related to literacy level of education.
4. **Income – Economic Status-** In a study by Saxena (1978) revealed that people belonging to a higher income groups were. Proportionally more inclined towards family planning Programme. Similarly, mazumdas and Dass also discovered that adoption of family planning was associated with income. However, Anand, K3, concluded that economic condition did not affect the number of desired children. More found that income had nothing to do with the peoples altitude towards family – planning. Kuthy. M. George, in an intestine sliedy found that remain determinants of perception of higher incentives was economic status of eligible classes for acceptance of vasectomy. It means, “poorer the people higher the positive perception of incentives and greater the acceptance of vasectomy.
5. **Family Size:** Studies have also revealed short family size is equally associated with adoption behavioral (Mitra. A 1972) considered the ideal family size of three children. The birth of a child is still regarded as a God’s gift by most of them and they desire a large numbere of children, giving more important to males as they look of after them in old-age. Family size had nothing to do with the peoples attitude and practice towards family planning was discovered. Samuel J.J. observed that every respondent expressed the desire to have at least on make issue, the majority considered two sons and one daughter to be an ideal combination. Among the various correlates studies, social, economic, educational were found to be correlates to preference for smalls families. Small family was consicured to be ideal by younger age groups, having fewer children and practicing family planning methods regularly, Knowledge of family planning methods did not seen to influence opinion regarding family size.

He also predicted that the condition for acceptance of vasectomy will be more conductive where the age of last living child of the case has richest three to four years. Saxena D.N. (1975) found that number of children’s and attitude towards family planning were significantly related. Snigha (1976) found overall significant relationship between attitudes towards family planning and family size and indicated that large family size because of more unfouvouable attitude various demographic factors such as education, income, family-size and family structure are significantly associated with family planning adoption. The adopters were found to be better educated, coming from middle income group, living in nucleus family and observing small family norms.

Security and money were the main motivating factors for the acceptance of vasectomy on the basis of empirical evidences it may be suggested that incentives gives inducement to those in majority who have already realized the need to limit the family size but were looking that internal forces of motivating a person to decide in of accepting the operation. This is a clear cut evidence that these acceptors had favouable attitude which could be implemented into action with the help of incentives.

## CONCLUSION, SUGGESTIONS

A questionnaire having close type questions regarding the family planning practice was administered on the female of the study and following results were obtained in this regard.

1. It was found that highest percentage of females (87.41 %) have used and only 12.59% females have never used in the past one or the other family planning method. This trend of High percentage of

- females who have used family planning method in the past, is found consistently high, irrespective of rural-urban, economic status, educational level.
2. Analysis of responses in regard to question “ are you using family planning method now a days’ has revealed that the only 50.98 percent females marked on “Yes” that they are using while 49.02 % females marked on “No” that they are not using males on locale, economic status, educational level and rural-urban region have demonstrated that highly literate females of high economic status living in urban area of urban region are using family planning method in higher percentage that the other combinations.
  3. Analysis of item released to source of knowledge about family planning has revealed that highest percentage of females get information from neighbor and friends. The second best source of knowledge, was found to be close relative. This holds true in all categories of females.
  4. Analysis is responses found to sources of obtaining the family planning materials has demonstrated that highest percentage of females irrespective of local, economic status, educational level and region variations have reported husband as a source who brings family planning materials. Another not able fact which has emerged from the analysis is that females irrespective of variations in educational level and economic status still hesitate in purchasing family planning materials.
  5. Analysis of item related family planning method use first time has brought out the fact that highest percentage of females, irrespective of locale, economic status, educational level and region variations have reported the use of condom followed by oral pills as the second highest.
  6. Analysis of responses related to the question of family planning method being used now a days has revealed the fact that highest percentage of females irrespective of locale, economic status, educational level and region variation have reported that they are using now a days condom as family planning method. The second most popular method being used currently for family planning is oral pills by all categories of women.
  7. Analysis of responses of females obtained with regard to be in favour or not be in favour of family planning, has shown that the highest percentage of females irrespective of other variations like locale, educational level, economic status and rural-urban region are in favour of family planning. However, highly literate females of high economic status living in urban areas are more in favour than other group of women.

## **REFERENCES**

1. Barclay e.w. Techniques of population, analysis, John Wiley and sons. Inc. Newyork 1958. p 167.
2. Thompson Lewis, population Problems, Tata Mc Growtire , N. 1965. 240
3. Thompson & Lewis, population problems, Tata Mc Growtire, New Delhi, 1965 p. 240
4. Driver, E.D., ‘Differential Fertility in Central India’, Princeton University Press, Princeton, 1963, p. 101
5. Dutta, Subodh; Differential Fertility in West Bengal in 1956, Artha Vijnan a (1), p.67.
6. Hussain, I.Z; Educational Status and Differential Fertility in India, Social Biology, 72(2) 132, June 1970
7. Rele, J.R. and Tara Kanitkar, Residence Background and Fertility in Great Bombay, population studies, Vol. 29, No. 2, July 1972, p. 303.
8. Age pattern of Marriage and Fertility of Couples, NSS 19<sup>th</sup> round July 1964 to June 1965 No. 185, 1971.
9. Sovani, M.V.: The Social Survey of Kolhapur City, Part – I , Gokhale Institute of Economics and Politics, Poona, Publication No. 18 (1946), p. 57
10. Davis Kingsley; The population of India and Pakistan Princeton University Press Princeton 1951, p. 77-78
11. Kutty, M. George: Feritlity Differential in Rural community, The Journal of Family Welfare, Vol. XII, No. 4, June 1976, p.3
12. Sinha, J.N.: Differential Fertility and Family Limitation in an Urban Community of Uttar Pradesh, Population studies, XI (2), Nov. 1957
13. Saxena, G.B.: Differential Fertility in Rural Hindu Community, Eugenics Quarterly, vol. 12, No. 3, p. 141
14. Mysore Population Study, Population studies No. 34, UN Department of Economics and Social Affairs, New York, 1961.
15. Patnaik, M.M. Fertility Behaviour, Janaki Prakashan, New Delhi, 1985, p.43.
16. Mandlebaum , Dand, G.: Human Fertility in India. Social Components and Policy Perspectives, Oxford University press, Bombay, 1974, p. 54.



17. Mathew K.K. and Kisar C.V. (ed) – Research in family Planning, Princeton university, Press, Princeton, 1962
18. Dr. Parthasarathi NR – Fertility Decline I India – During 1991-2001. the Journals of family welfare vol. xx
19. Agarwal S.K. family planning is selected areas of rural and urban both awareness belief knowledge and practice, Ashuza publishing house – 1972.
20. Kohli, B.K. and Goel. O.P. “Factors associated ...knowledge and practice of family planning” National institute of family planning New – Delhi - 1974
21. Singh, Baljeet – family planning work in utter Pradesh, Report, all India conference of family planning association of India Bombay 1968.
22. Saxena. D.N. – preliminary finding of Regional survey and acceptance of family planning, Gorakhpur Division, Uttar Pradeshs, Demographic research centre, Lucknow, 1983
23. Anand K. “An analysis of differential fertility The Journal of family welfare, 1966.
24. Kuthi, M George – “Fertility deferential in rural community.” The Journal of family welfare Vo,. XXIII No. 4 June 1976 p. 88.
25. Mitra. A – The small family norms and family size , family planning news. Vol. xx No.2 1965
26. Bouge D.J. – Sociological contribution to family Planning Research, community and family study centre university of Chicago, Chicago 1976 p. 82.