RURAL DEMOGRAPHY OF INDIA WITH PARTICULAR REFERENCE TO COMPONENTS OF POPULATION CHANGE

Surender Kumar

Research Scholar MDU Rohtak, Haryana (deptt of Geography)

Abstract: The present study deals with the basic features of rural demography in India. This research paper also describes the rural demographic development in Indian context. According to 2001 census 72.22 % population of India lives in about 6,38,691 villages. As we know in 1901, 89.2 % population of our nation related to villages and by 1961 this percentage had reduced to 82.03%. It shows a declining trend which is bound to continue. There is, however, no doubt that even today a significant proportion of Indians lives in and derives livelihood from villages. Thus, 'rural demography' assumes a considerable significance in any form of discussion on development. This study also deals with village size and their fertility, mortality and migration pattern in rural India. There is a huge decline in crude birth and death rate in India with the passage of time. The CBR and CDR were 36.9 and 14.9 in 1971 census which declined 25.4 and 8.4 in 2001 census. There is also a unique trend in migration pattern in male and female. In 1991 census, the highest migration done by males in search of employment (51.81%) and in females it was (48.57%) due to marriage from village to village.

Keywords: Rural and Urban, Fertility, Mortality, Demography, Population Change.

Introduction: India is the second most populated country in the world with nearly a fifth of the world's population. According to the 2017 revision of the World Population Prospects the population stood at 1,324,171,354. During 1975–2019 the population doubled to 1.2 billion. The Indian population reached the billion marks in 1998. India is projected to be the world's most populous country by 2024, surpassing the population of China.. It is expected to become the first political entity in history to be home to more than 1.5 billion people by 2030, and its population is set to reach 1.7 billion by 2050. Its population growth rate is 1.2%, ranking 94th in the world in 2013.The basic objective of development is to improve the quality of life. We know that building a modern nation depends on the development of people and the organization of human activity. It is the development of human resources that unlocks the door to modernization and is one of the necessary conditions for all kinds of growth-social, political, cultural and economic. The term 'rural society' is used almost interchangeably with terms like 'village', 'countryside', or 'folk society'. Of these, the term most commonly used in sociological literature on rural society is the 'village'. The term 'countryside' is chiefly popular in western world. It primarily denotes a quiet place, away from the hustle and bustle of the city, where one is in close proximity to nature. On chooses to retire the countryside. It is not a place bereft of facilities, as villages are in developing world. There are 'pubs' and recreational facilities in the countryside. In comparison with a rural society, we find that an urban society is 'future oriented'. In general, a **rural area** or **countryside** is a geographic area that is located outside towns and cities. The Health Resource and Service Administration of the U.S Department of Health and Human Services defines the word *rural* as

encompassing "...all population, housing, and territory not included within an urban areas. Whatever is not urban is considered rural.

Literature Review: A literature review is a description of the literature relevant to a particular field or topic. It gives an overview of what has been said, who the key writers are, what are prevailing theories and hypothesis, what questions are being asked, and what method and methodologies are appropriate and useful. Survey of related literature is an essential prerequisite to actual planning and execution of any research project. It guides in respect of selection of problem, its statement, definition and delimitation and avoids wastage of time in research. The review of related literature is of great significance for researcher, as it guides the investigator to know about amount of work done in the discipline in which the researcher conduct the research. In the words of **R. Borg**, "the literature in any field forms the foundation upon which all future work will be built." Without knowing the past, we can't do something new in the field of research.

Poffenberger and Poffenberger(1973)in their study, "the social Psychology of fertility behavior in a village in India" investigations in **Gujrat** village also pointed to higher son preference amongst the women. A majority of women,62% said that they would have six or more daughters if necessary in order to get a son while only 35% of men felt the same. They also emphasized the need to have a son a support in old age and perceived more advantages in having sons and more disadvantages in having daughters.

Robert, Retherford and Roy (2003) findings also reveal that if a son is already present in the family the sex ratio has a tendency to become balanced. To fulfill the desire of a son pre- birth interventions are being practiced, resulting in reducing female births. The literature relates son preference to a variety of social and economic factors in the North-Western states of India, which makes females less valuable than males. People are pressurized to bear sons while limiting the number of daughters in order to conserve scarce household resources.

Gupta (1997) work for the case of India, and the simulation results by Kim (2005) for Korea, bearing this in mind, their studies aim to delve more deeply into the analysis of the theoretical mechanisms linking education and gender bias in natality. In that respect, education affects a person's "freedom and power to act" and "freedom and power to question and reassess the prevailing norms and values". They also conducted that education status change the pattern of fertility and number of children.

Sule and Barkade (2012) studied about literacy and sex ratio pattern of Solapur district in Maharashtra. They found that there were wide disparities in literacy and sex ratio in this district, correlation between literacy and sex ratio found in moderate degree and positive angle (P= 0.33). It means high literacy rate, high sex ratio.

Statement of Problem: In this present study we are dealing with the rural Demography and development with particular reference to Fertility and mortality pattern and Rural population growth. There is a clear trend of rising and falling rate of fertility and mortality pattern. In 2001 census, total population of India was 10,27,015,247, of which 7,41,660,293 or 72.22% was rural population. Though it was 89.16% according to 1901 census. According to the 2017 revision of the World Population Prospects the population stood at 1,324,171,354. During 1975–2019 the population doubled to 1.2 billion. The Indian population reached the billion marks in 1998. India is projected to be the world's most populous country by 2024, surpassing the population of China. It is expected to become the first political entity in history to be home to more than 1.5 billion people by 2030, and its population is set to reach 1.7 billion by 2050. So, by now to know what factors influence the growth rate of rural population.

Methodology: Research methodology is a vital part of any research work. Research methodology deals with the research method and takes into consideration the logic behind the methods researcher uses. It depends on the objectives of the research work. In research methodology, the researcher decides what type of tools he/she would be going to use in the study. Present study will be based on data drawn from secondary sources. Census will be the main secondary source of data. Apart from Census, data also taken from CRS and SRS.

Objectives of Study:

- To define demography and explain how it is related to development.
- To explain the responsible factors for high fertility and low mortality.
- Outline and explain the patterns of internal migration.
- To compare the Haryana and India in respect to above said objectives.

Meaning and Data Base of Rural Demography: Demography is the scientific and statistical study of population and in particular the size of various types of population, their development and structure. There are various branches of Demography like Historical Demography, Social Demography, Economic Demography, Mathematical Demography, and Medical Demography and so on. Though it is not the practice among demographers to study the Rural and Urban Demography separately. It is useful to consider the demographic characteristics of rural population separately, as it will help in providing a better understanding of the issues in rural development. This is important in a country like India, which is predominantly rural in character and will continue to remain so for several decades to come.

Census: Generally Census is a decennial affair. The first census in India was conducted in 1872 and since 1881 it has been undertaken regularly every ten years. Census is a valuable and authentic source and can provide information at the lowest possible aggregation. In addition to the age-sex-marital status of the various types of population, it provides information about their socio-economic characteristics such as literacy and education, religion of the head of the household, occupation and industrial classification of labor force, the available household and community amenities and housing conditions. The compositions of the scheduled caste and the scheduled tribe households are also made available. This information with varying degrees of elaboration at the village level is thus available to decision makers.

Civil Registration System (C R S): CRS is the continuous recording of vital events such as births, deaths, marriages etc. It is generally a compulsory recording done according to the legal requirements of the country as per the provisions made by official orders or rules.

Sample Registration System (SRS): SRS was initiated by Registrar General of India in 1969-70. Conducted on a regular basis at the national level, it is in essence a demographic survey based on a dual recording system. It provides estimates for both rural and urban areas at the state as well as the national level. Both the estimates of birth and mortality rate are made available on an annual basis. But the problem is that SRS does not provide estimates at lower levels of aggregation and the sample units selected remain fixed for a long period of time.

Sample Surveys: Surveys, in which information is collected on a sample basis, are particularly suitable for providing a variety of information with a fair degree of precision. Sample surveys have become a major source for data collecting information on a variety of demographic and health related indicators. In India, since 1990 there has been a noticeable change in the availability of large scale surveys in the field. Two rounds of the National Family Health Survey (NFHS) have been conducted on the lines similar to Demographic Health Survey (DHS). NFHS-1 was conducted in 1992-93 and NFHS-2 in 1998-99. They provide information on

fertility, mortality, and family planning practices. This information has been widely used by planners, policy makers and academicians.

Basic Terminologies used in Fertility and Mortality:

Crude birth rate	$$\frac{\text{Number of live births during the year}}{\text{Mid-year population}} \times 1000$$
Age-specific fertility	$$\frac{\text{Number of live births in a particular age-group}}{\text{Mid-year female population of the same age-group}} \times 1000$$
General fertility rate (GFR)	$$\frac{\text{Number of live births in a year}}{\text{Mid-year female population in the age-group (15-49) years}} \times 1000$$
Total fertility rate (TFR)	$$\frac{5 \sum_{15-19}^{45-49} \text{ASFR}}{1000}$$
Gross reproduction rate (GRR)	$$\frac{5 \times \sum_{15-19}^{45-49} \text{ASFR for female live births}}{1000}$$
Age-specific marital fertility rate (ASMFR)	$$\frac{\text{Number of live births in a particular age-group}}{\text{Mid-year married female population of the same age-group}} \times 1000$$
General marital fertility Fertility rate (GMFR)	$$\frac{\text{Number of live births in a year}}{\text{Mid-year married female population in the age group (15-49) year}} \times 1000$$
Total marital fertility rate (TMFR)	$$\frac{5 \sum_{15-19}^{45-49} \text{ASMFR}}{1000}$$
Crude death rate (CDR)	$$\frac{\text{Number of deaths during the year}}{\text{Mid-year population}} \times 1000$$
Age-specific mortality rate (ASMR)	$$\frac{\text{Number of deaths in a particular age-group}}{\text{Mid-year population of the same age-group}} \times 1000$$

Infant mortality rate (IMR)	Number of infant deaths during the year --- x 1000 Number of live births during the year
Early neo-natal mortality rate	Number of infant deaths of < than 7 days during the year --- x 1000 Number of live births during the year
Late neo-natal mortality rate	Number of infant deaths of 7 days to < than 29 days during the year --- x 1000 Number of live births during the year
Post neo-natal mortality rate(PNMR)	Number of infant deaths of 29 days to < than one year during the year --- x 1000 Number of live births during the year
Pre-natal mortality Rate (PMR)	Number of still births and infant deaths of < than 7 days during the year --- x 1000 Number of live births and still births during the year
Still birth rate	Number of still births during the year -- x 1000 Number of live births and still births during the year

Table no 1. National Picture of Rural Population in India, 1901-2001

Years	Total population	Rural population	% of rural popu.
1901	238,396,327	212,544,454	89.16
1911	252,093,390	226,151,757	89.71
1921	251,321,213	223,235,046	88.82
1931	278,977,238	245,521,249	88.01
1941	318,660,580	274,507,283	86.14
1951	361,088,090	298,644,156	82.71
1961	439,234,771	360,298,168	82.03
1971	548,159,652	439,045,675	80.09
1981	683,329,097	523,866,550	76.66
1991	846,387,888	628,836,076	74.30
2001	1,027,015,247	741,660,293	72.22

Source: Census of India 1981, 1991 and 2001

According to table no 1, in 2001 census, total population of India was 10,27,015,247, of which 7,41,660,293 or 72.22% was rural population. Though it was 89.16% according to 1901 census. So, the percentage of the rural population shows a moderate decline over the years, the absolute number shows a large rural base even during the last census. Obviously, no development policy in India can succeed unless it centres around rural development.

Table no 2. Growth of Rural Population in India, 1901-2001

Years	Rural Population	Decennial variation in popu.	% Decennial variation
1901	212,544,454	-	-
1911	226,151,757	13607303	6.40
1921	223,235,046	-2916711	-1.29
1931	245,521,249	22286203	9.98
1941	274,507,283	28986034	11.81
1951	298,644,156	24136873	8.79
1961	360,298,168	616540012	20.64
1971	439,045,675	78747507	21.86
1981	523,866,550	84820875	19.32
1991	628,836,076	104969526	20.04
2001	741,660,293	112824217	17.94

Source: Census of India 1981, 1991 and 2001

If you look at the table no 2 carefully, you will find four distinct phases of population growth from 1901 to 2001. These are:-

Table no 2.1. Phases of Population Growth

Sr no.	Phases	Duration	Nature
1.	Phase one	1901-1921	Very slow growth
2.	Phase two	1931-1951	Steady state
3.	Phase three	1951-1981	Rapid high growth
4.	Phase four	1981-2001	High growth with definite signs of slowing down

Fertility and Mortality Patterns: The fertility and mortality are very important components of measuring population changes of a given area. Fertility and mortality in a population depend on socio-cultural history, sanitary conditions, and biological factors. Although the last element is generally similar in all human communities, socio-cultural and sanitary factors vary considerably. The Vital rates include mainly fertility and mortality of a group of population. The CBR and CDR are main components of measuring fertility and mortality.

FERTILITY: It means the childbearing performance of individuals, couples, groups or population. It is different from fecundity, which refers to the biological capacity to reproduce that may or may not lead to

fertility. Sometimes, the term Natality is used in the analysis of childbearing process. Fertility is measured by a combination of four classical parameters: birth-rate (number of births per 1,000 total population); fertility rate (birth-rate per 1,000 women fifteen to forty-nine years old), reproduction rate (average number of girls born per woman), and actual fertility (average total number of births per woman).

MORTALITY: The process whereby death occurs in a population. Mortality, the number of deaths per 1,000 population, has declined rapidly in India since the late 21th century, a significant factor in overall population growth. In contrast to birth-rates, death rates are difficult to establish, for they are much less fully registered, so that estimates of the various relevant measures play a much more important role.

Table no 3. Vital rates for India, 1971-2001

Years	Crude Birth Rate	Crude Death Rate	Infant Mortality Rate
1971	36.9	14.9	129
1976	34.4	15.0	129
1981	33.9	12.5	110
1986	32.6	11.1	96
1991	29.5	9.8	80
1996	27.5	9.0	72
2000	25.8	8.5	68
2001	25.4	8.4	66

Source: Sample Registration System, Office of the Registrar General, India

The following table shows that with an improvement in the general health conditions the death rate has also declined. Since the decline in the *birth rate* is more than that in the *death rate*, the rate of growth of population has shown a rapid increase.

Table no 4. Birth Rate, Death Rate and Infant Mortality Rate,2001

States/ U.T.	Birth Rate			Death Rate			Infant Mortality Rate		
	T	R	U	T	R	U	T	R	U
Andhra Pradesh	20.8	21.3	19.6	8.1	8.9	5.6	66	74	39
Assam	26.8	27.8	18.5	9.5	9.8	6.6	73	76	33
Bihar	31.2	32.3	23.4	8.2	8.5	6.3	62	63	52
Gujrat	24.9	26.6	21.5	7.8	8.8	5.6	60	67	42
Haryana	26.7	27.8	22.8	7.6	7.6	7.4	65	68	54
Karantaka	22.2	23.6	19.0	7.6	8.2	6.4	58	69	27
Kerla	17.2	17.4	16.6	6.6	6.8	6.1	11	12	9
M.P.	30.8	32.8	23.0	10.0	10.8	7.2	86	92	53
Maharashtra	20.6	21.0	20.0	7.5	8.5	5.9	45	55	27
Orissa	23.4	23.9	19.6	10.2	10.7	6.8	90	94	60
Punjab	21.2	22.1	18.7	7.0	7.2	6.4	51	55	37
Rajasthan	31.0	32.3	24.7	7.9	8.3	6.2	79	83	57

Tamil Nadu	19.0	19.6	17.8	7.6	8.4	6.0	49	54	35
U.P.	32.1	33.2	27.0	10.1	10.6	7.8	82	86	62
West Bengal	20.5	22.8	13.8	6.8	7.0	6.4	51	53	38
Arunachal Pradesh	22.0	22.8	13.8	6.8	7.0	6.4	39	41	11
Chhattisgarh	26.3	29.0	22.4	8.8	10.1	7.0	76	88	56
Goa	13.9	14.0	13.9	7.5	8.1	6.5	19	21	16
Jharkhand	26.3	28.3	19.5	8.8	9.7	6.0	62	67	40
Himachal Pradesh	21.0	21.3	16.8	7.0	7.1	5.3	54	55	32
J & K	20.1	21.1	16.3	6.1	6.1	6.0	48	50	39
Manipur	18.2	19.0	15.9	5.1	4.8	6.1	20	19	23
Meghalaya	28.3	30.7	15.0	9.0	9.9	3.9	56	57	41
Mizoram	15.7	17.7	13.2	4.4	5.2	3.4	19	23	12
Nagaland	NA	NA	12.4	NA	NA	2.6	NA	NA	13
Sikkim	21.6	21.8	16.7	5.1	5.2	3.2	42	43	31
Tripura	16.1	16.6	13.5	5.6	5.6	5.2	39	40	30
Uttaranchal	18.5	21.1	16.6	7.8	10.0	6.1	48	69	26
Andaman & Nicobar	16.8	17.8	14.2	4.7	5.0	4.1	18	21	8
Chandigarh	16.1	20.6	15.6	3.5	2.2	3.7	24	28	23
Dadra-Nagar Haveli	29.3	30.1	20.0	6.5	6.8	2.9	58	62	9
Daman and Diu	22.3	22.6	22.0	6.7	7.6	5.9	40	42	35
Delhi	18.7	23.2	18.1	5.0	5.4	5.0	29	34	28
Lakshadweep	20.4	22.1	18.7	5.0	4.7	5.2	33	34	33
Pondicherry	17.9	18.7	17.3	7.0	7.7	6.6	22	31	15
India	27.5	27.1	20.2	8.4	9.0	6.3	66	72	42

Source: Sample Registration System Vol 36, No. 1, April 2002.

The following above table shows Birth Rate, Death Rate and Infant Death Rate. Here, Total Birth Rate, Rural B.R. Urban B.R. and Total Death Rate, Rural D.R. Urban D.R. and Total Infant Mortality Rate, Rural IMR and Urban IMR are showing for comparative analysis. By analysing this table we can divide all states into 3 categories regarding fertility and mortality pattern.

1. **States and UTs having high birth rate: (above 25)** In this zone those states and UTs are included which have birth rate more than 25 in rural areas. These are UP, MP, Rajasthan, Bihar, Meghalaya, Dadra Nagar Haveli, Chattisgarh, Jharkhand, Assam, Haryana and Gujrat. These are in decreasing order high to low.

2. **States and UTs having medium birth rate: (20-25)** in this zone all those states and UTs are involved which have birth rate between 20-25. These are Orissa, Karnataka, Delhi, Arunachal Pradesh, West Bengal, Daman and Diu, Lakshadweep, Punjab, Maharashtra, Sikkim, Andhra Pradesh, Himachal Pradesh, J&K, Uttaranchal and Chandigarh. These are also decreasing order high to low.
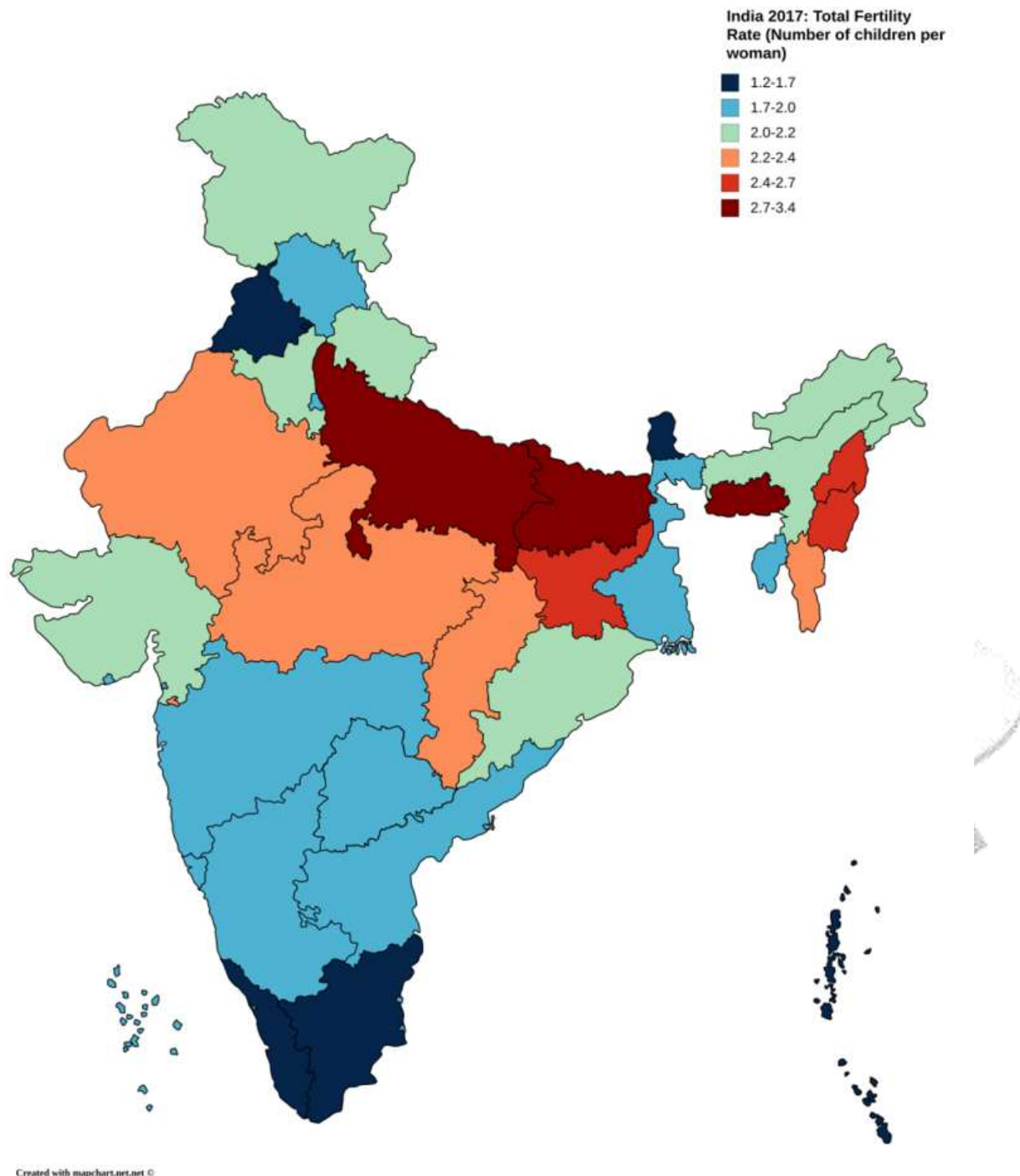
Map of India showing latest Fertility Rate 2017

3. **States and UTs having low birth rate:** (under 20) in this zone all those states and UTs are involved which have birth rate below 20. These are Tamil Nadu, Manipur, Pondicherry, Andaman-Nicobar and Kerla.

4. **States and UTs having high death rate:** (above 8) MP, Orissa, UP, Chattisgarh, Uttaranchal, Meghalaya, Assam, Jharkhand, Andhra Pradesh, Gujrat, Bihar, Karnataka, Tamilnadu, Rajasthan and Mahrashtra are involved in this category.

5. **States and UTs having medium death rate:** **(6-8)** Goa Pondicherry, Daman and Diu, Haryana, Himachal Pradesh, West Bengal, Kerla, Dadra Nagar Haveli and J&K.

6. **States and UTs having low death rate:** **(under 6)** Tripura**,** Delhi, Sikkim, Mizoram, Andaman Nicobar, Lakshadweep and Chandigarh are included in this zone.

Conclusion and Suggestion: in the conclusion it can be aptly said that in rural demography we can discuss about Fertility and Mortality pattern in Rural areas of our nation. We have also analyzed that even though the proportion of rural population in our country has gradually declined over the years, from 82% in 1951 and to 72% in 2001. There has been a considerable increase in the absolute number of people living in rural areas. It can be concluded that those states and UTs having low and medium literacy where there is high fertility rate. In recent years, there are vital changes in fertility pattern in India due to Educational changes in young couples. But in rural areas there are more birth rates in compare to urban areas. It may be due to lack of awareness regarding family planning and there is also a social pressure on a woman to produce a male child, in this negative hope they (husband and wife) produce number of children in the hope of a male child. The patriarchal system of India is also responsible. It is also noticed by following data that there is also a declining IMR & MDR due to basic medical facilities in surrounding areas. The total growth rate in rural population also declined from 1991 to 2001 census. We are suggesting some points for the above said purpose.

1. Need to change the mindset of society.
2. Social awareness programmes must be launched by state and union govt.
3. Sex education must be a part of school and university curriculum.
4. Continues data should be provided in magazines and journals so that people may be awaked

References:

1. Census of India (1981- 2001)

2. Report of NSSO, CRS, SRS on Population.

3. Das Gupta, (1997) 'Fertility decline and increased manifestation of sex bias in India', Population Studies, vol. 51, pp. 307-315.

4. McClelland, G. (1979) 'Determining the impact of sex preference on fertility: A consideration of parity progression ratio, dominance and stopping rule measures', Demography, vol. 16, pp. 377-388.

5. Ministry of Rural Development (2002), Expert Group Report on Identification of Families below Poverty Line, August 2002.

6. World Bank (2002), World Development Report, 'Poverty Reduction and the World Bank' Progress in operationalising the WDR 2000/2001, Oxford.

7. Chandna, R.C. (1980), Introduction to Population Geography, Kalyani Publication, new Delhi.

8. Websites:

- www.jastor.com
- http://india.nic.in/
- www.Poponile.com
- http://censusindia.gov.in/