

DEMOGRAPHIC PROFILE AND ITS RELATION WITH WORKING FORCE OF RURAL AREA: A SURVEY OF MURSHIDABAD DISTRICT, WEST BENGAL

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ABSTRACT

The importance and application of demographic studies is ever increasing. No detailed demographic study has been conducted on rural area of Murshidabad district so far. From the demographic point-of-view and density of population in rural area of Murshidabad district is important one. In this present study random sampling method has been applied, with structured schedule, for the survey and some particular components like age-sex composition, sex ratio, fertility, mortality, educational status, occupational composition, worker and non-worker, work participation ratio and their correlation are analyzed. The field survey was conducted during the year 2008-2009. The final outcome of this study is the sex ratio is high, crude birth rate is higher than crude death rate and the probable important factor of population growth. In the age-sex ratio, the numbers of children are also high, dependency ratio is high and female work participation ratio is lower than male participation ratio. There is negative relationship between specific demographic component and work force. So there is an urgent need to implement integrated programmes for overall development of densely populated rural area and betterment of quality of life of rural people.

Key Words: *Demography, sex ratio, crude birth rate (CBR), crude death rate (CDR), work participation ratio (WPR); working force; quality of life (QOL).*

INTRODUCTION

Development of rural areas is a complex socio-economic process which must take place over an extended; rural development must aim at helping the entire population, not merely agricultural producers, and the integration processes focus on a minimum number of factors in order to meet major needs (Mandal, 2001). The rural economy is an integrated part of the overall Indian economy. Any talk of overall development without rural development, particularly in a country where three-quarters of people below the poverty line reside in rural areas, is flawed (Rajani, 2011). In almost all developing countries, among numerous problems, in terms of personal consumption and access, education, health care, potable water and sanitation, housing, transport, and communications are generally faced by the rural people. Persistently high levels of rural poverty, with or without overall economic growth, have contributed to rapid population growth and rural to urban migration. In fact, much urban poverty is created by the rural poor's efforts to get out of poverty by moving to cities. Distorted government policies, such as penalizing the agriculture sector and neglecting rural (social and physical) infrastructure, have been major contributors for backwardness of rural areas (Khan, 2001). For overall development of rural areas and rural dwellers intensive policy making, strategy reform, and proper planning is very needful and all these activities are people and community oriented. So there is an urgent need to know about the demographic profile and labour force of rural area, especially in densely populated region. The term 'demography' is derived from two Greek words 'Demas', the people and 'Grapho', to draw and write. Thus its meaning is to draw and write about people (Sinha and Zacharia, 1984). According to Cox "Demography is the study of statistical methods of human population involving primarily the measurements of the size, growth and diminution of the members of the people, the proportions of living being born or dying within the same area or region and the related functions of fertility, mortality and marriage (Cox,1970).

Materials and Methods

This present study seeks to find out the demographic profile of rural area of Murshidabad district. Secondly, this study seeks to compare various parameters of demography with state, district and community level. Thirdly, this study seeks to find out the specific relationship between demography and working force of rural areas. The present demographic study is carried on Murshidabad district, West Bengal which is situated eastern river bank of Ganga and extends from 24°50'20" N to 23°43'30" N and 88°46' E to 87°49'17" E covering an area about 5324 sq. km. (District Census Handbook, 2001). The district has 26 blocks or tahsils among them merely four marginalized tahsils (Samsorganj, Hariharpara, Khargram, Jalangi) were selected for survey (Figure 1). It took more than one year for completion of survey. The main data source of this study is field or primary data and the other sources of secondary data are District Census Handbook from Census of India, 2001, C.M.O.H. Office, Murshidabad and the Office of the Director, Bureau of Applied Economics and Statistics, Govt. of West Bengal, various books, articles etc. The data, for the present study, was collected by interviewing ever-married aged men and women, who are the head of the household, comprising of 32,400 individuals. Pilot survey was followed by the field work and the field study was based on random sample survey keeping in view the specific objectives, a detailed interview schedule was framed on the basis of comprehensive study of the concerned literatures. It includes both closed and open ended questions. The household schedule consisted questions on household

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identification, residence characteristics, economic status, queries related to each household member i.e. age, sex, marital status, education, occupation and relationship to the head of the household. Cross-questions were also included so as to elicit the required information accurately. To supplement the information collected through interviews, indirect and informal discussions were also carried out with the respondent and other members of the family. The information obtained from each respondent was also spot-checked to verify the accuracy so as to minimize the response errors. The data collected was statistically treated, using MS Excel and statistical software SPSS 10.0 following descriptive statistics and various cartographical representations.

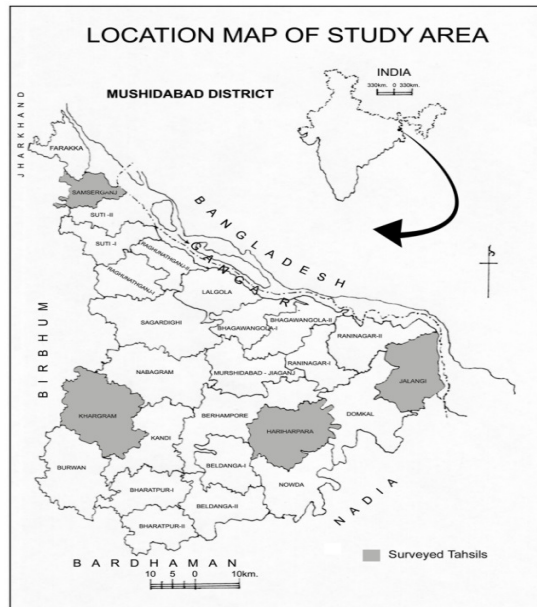


Figure 1 Location map of study area and surveyed tahsil

RESULT AND DISCUSSION

In census year 2011 the total rural population of India is 833,087,662, which consist 68.84 percent of the total population of the nation. The proportion of rural population declined from 72.19 to 68.84 in 2011 and the growth rate of population of rural areas is (2001-2011) +12.2. In case of rural population West Bengal stands in third position having 62.21 million people (Census of India, 2011). District Murshidabad having a population of 7,102,430 stands in 4th position among the state (W.B.) and having a share of 7.78 percent of the state’s total population. The decadal population growth rate of Murshidabad district is surprisingly high, i.e. +21.06 (Census of India, 2001-2011). And the percentage of rural population in this district is higher (87.51) than the state (72 percent, Census of India, 2001). From the Table 6 it is observed that out of 1,82,249 (sample population) people in 32,400 households, which were studied, about 56 percent live in nuclear families, and some others living in joint families, i.e., 42 percent. A very few are living in extended families (2 percent).

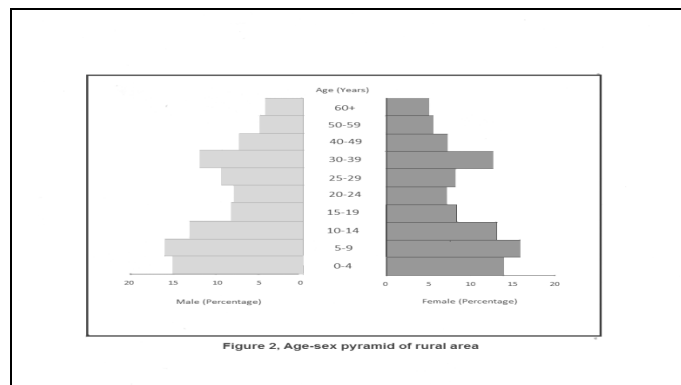


Figure 2, Age-sex pyramid of rural area

Table 1: Age-Sex Composition in Rural Areas of Murshidabad district

Age	Male		Female		Total		Sex Ratio (Rural)	Sex Ratio (District)*
	No.	(%)	No.	(%)	No.	(%)		
0-4	14305	15.24	13164	14.89	27469	15.09	920	976
5-9	15181	16.18	14181	16.04	29362	16.14	934	963
10-14	12778	13.61	11679	13.21	24457	13.43	913	939
15-19	7870	8.39	7868	8.90	15738	8.64	999	827
20-24	7413	7.90	6401	7.24	13814	7.56	863	1010
25-29	8345	8.89	7559	8.55	15904	8.17	1019	1068
30-39	11269	12.01	11263	12.74	22532	12.38	999	945
40-49	7264	7.74	6560	7.42	13824	7.57	903	840
50-59	4945	5.28	5287	5.98	10232	5.60	1069	926
60+	4470	4.76	4447	5.03	8917	4.88	994	1132
Total	93840	100.00	88409	100.00	182249	100.00	924	952

Source: Field Survey, 2008-2009 * Census of India, 2001 (Computed by author)

AGE AND SEX COMPOSITION

Age and gender are the important factor for the study of population structure on the basis of which other type of demographic data, such as population count, educational level, working force, etc., is cross-classified and analyzed. Age and sex composition of rural area suggests that more than one third of the population is below 15 years of age and a marginal proportion is 60 years and above (Table 1, Figure 2). The age distribution of rural areas of Murshidabad district is typical of population that has recently experienced slow fertility decline. The age sex pyramid also indicates higher old age mortality and lower life expectancy. Dependency ratio among rural people is approximately 199 dependents for every 100 working individuals. The sex ratio in rural areas (924) is lower than the district population (952, Census of India, 2001). The sex ratio by age does not show any particular trend (Table 1). On the basis of births and deaths occurred since last year preceding the survey, vital rates for the population has been computed. As evident from the Table 6, in the sample rural areas of Murshidabad district, the crude birth rate (46.16) and crude death rate (28.56) are slightly higher than West Bengal (crude birth rate 20.6 and crude death rate 6.6: SRS, India, Registrar General, 1999 & 2001). Thus the population growth rate of among rural people has been higher than state. The infant mortality rate among the rural people is 101.4. On the other hand general fertility rate of the villagers is 56.73.

MARITAL STATUS

All the rural dwellers of Murshidabad district practice clan exogamy whereas village endogamy is practiced by 29 percent household and the rest 71 percent household practice village exogamy. They frequently marry within their relatives, i.e. cross cousin marriage (38 percent), and also marry out of blood relations (71 percent). A look at the marital status of rural population suggests that by age of 25 years, all the females and by age of 30 years, all the males have ever been married (Table 2 and Table 3).

Table 2 : Marital Status of Male Population in Rural Areas of Murshidabad district

Age	Unmarried	Married	Widower	Divorced/Separation	Percentage	Number
10-14	100.00	---	---	---	100.00	12778
15-19	87.50	12.50	---	---	100.00	7870
20-24	3.99	96.00	---	---	100.00	7413
25-29	2.11	97.89	---	---	100.00	8345
30-39	---	99.36	0.11	0.03	100.00	11269
40-49	---	98.28	1.72	---	100.00	7264
50-59	---	93.59	6.41	---	100.00	4945
60+	---	87.52	12.48	---	100.00	64354
Percentage	31.29	67.13	1.57	0.00	100.00	
Number	20136	43202	1013	3		64354

Source: Field Survey, 2008-2009

Table 3: Marital Status of Female Population in Rural Areas of Murshidabad district

Age	Unmarried	Married	Widow	Divorced/Separation	Percentage	Number
10-14	95.74	4.26	---	---	100.00	11679
15-19	1.47	98.53	---	---	100.00	7868
20-24	0.11	99.89	---	---	100.00	6401
25-29	---	99.66	0.32	0.03	100.00	7559
30-39	---	98.16	1.81	0.03	100.00	11263
40-49	---	81.46	18.54	---	100.00	6560
50-59	---	76.55	23.45	---	100.00	5287
60+	---	71.06	28.94	---	100.00	4447
Percentage	18.51	74.98	6.50	0.00	100.00	
Number	11305	45783	3971	5		61064

Source: Field Survey, 2008-2009

Overall, rural women marry at very younger ages than men, which is a common practice in Indian society. About three-fourth of males and higher proportion of females are married. In the sample population, there is divorce or separated individuals, although the percentage is very negligible, indicating lower level of marital accord. The impact of widowhood is limited until older ages. Among sample population of rural areas of Murshidabad district, the males have lower life expectancy than females as indicated by the proportion of widows who are 50+. There is no case of remarriage traced among the sampled rural population. Among persons aged 15-19 years, ever married females are substantially higher.

EDUCATIONAL ATTAINMENT

Education is an essential pre-requisite of all-round development of individuals towards better quality of life. In the rural areas, the literacy rate is comparatively lower (51.67 percent) than district literacy rate (54.30 percent, Census of India, 2001), while it is 58 percent for males and 45 percent for females. Generally, a higher percentage of males than females have completed each level of education. So it is evident that in India, especially in rural areas, in spite of positive policy initiatives gender gap in education prevails. Probable reasons for this are very early marriage of women and domestic work load. The percentage of higher educated individuals is less in rural areas of Murshidabad district. There has been a progress in the level of literacy, over time (Figure 3), as indicated by marked improvement in the proportion of literates in younger age group.

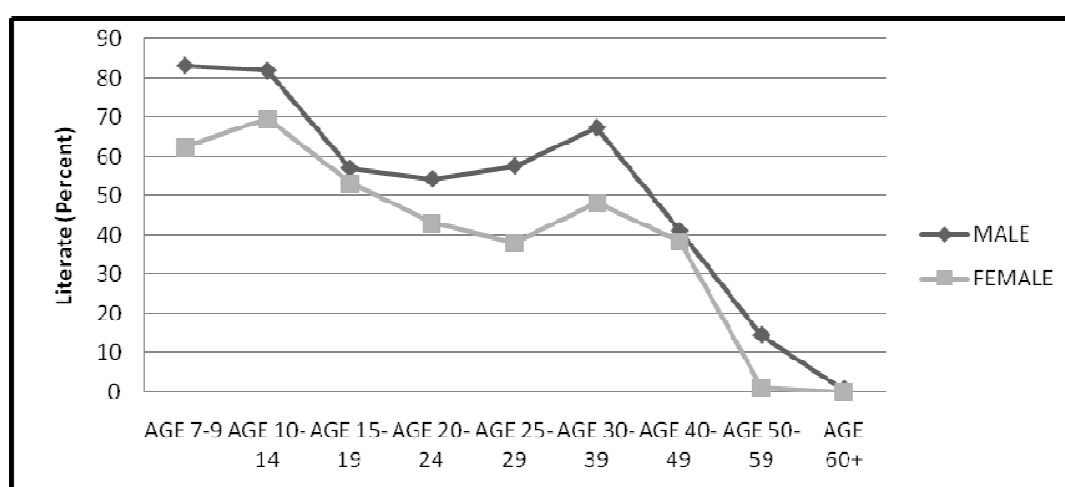


Figure 3: Level of literacy, by age and gender

OCCUPATIONAL COMPOSITION

The occupational composition of a region is an index of its economic profile. Livelihood among rural population is observed to be primarily a male’s responsibility, although recently it is of females. More than one-third of the rural males are engaged in agricultural activity (Table 4).

Table 4: Occupational Composition of Rural Areas of Murshidabad district

Occupation	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Cultivator	9435	23.58	---	---	9435	14.42
Agri. Labour	15327	38.30	6122	24.07	21449	32.77
Fisherman	50	0.13	---	---	50	0.08
Household Worker	5835	14.58	11404	44.84	17239	26.34
Businessman	6104	15.25	2869	11.28	8973	13.71
Govt. Service	792	1.98	112	0.44	904	1.38
Self Employed	5	0.01	---	---	5	0.00
Others	2469	6.17	4925	19.37	7394	11.30
Total	40017	100.00	25432	100.00	65449	100.00

Source: Field Survey, 2008-2009

Among non-agricultural activity, household industrial activity, business constitute the major categories. Among total sampled working population 14.58 and 15.25 percent males are household worker and businessman respectively, 1.98 percent are Govt. employee and very negligible percentage are self employed. On the whole,

42.64 percent of the males are economically active and the rests are non-workers. Female employment among rural population is lower than males (28.77 percent). Among the sampled rural population 44.84 and 11.28 percent female are household worker and businessman respectively and 24.07 percent are agricultural labour, although there are Govt. employee but their proportion are very negligible (0.44 percent). The non-worker categories among rural areas include housewives, students, infants, retired and unemployed in varying frequencies. The work participation rate (WPR) of the rural areas is (35.91), which is slightly higher than district (34.17: Census of India, 2001). The gender work participation rate is as follows- the male and female work participation rate are 42.64 and 28.77 respectively in rural areas and in district level it is 51.13 and 16.37 respectively. In short, male work participation rate in rural areas is

Table 5: Percentage of Worker Non-worker in Rural Areas of Murshidabad district

Age	Worker			Non-Worker		
	Male	Female	Total	Male	Female	Total
0-4	---	---	---	21.24	20.90	21.07
5-9	1.60	---	0.98	41.68	22.52	32.42
10-14	2.52	0.80	1.85	17.47	18.22	17.83
15-19	6.08	7.17	6.51	8.07	9.60	8.81
20-24	17.91	11.69	15.49	0.37	5.44	2.82
25-29	16.69	18.86	17.47	2.53	4.39	3.43
30-39	24.51	25.88	25.04	2.17	7.43	4.71
40-49	16.75	15.72	16.35	0.84	4.07	2.40
50-59	10.33	17.30	13.04	1.20	1.41	1.30
60+	3.71	2.58	3.27	4.43	6.02	5.20
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Field Survey, 2008-2009

quite lower than the district but female work participation rate in rural areas is quite higher than the district, although major portion of female worker are engaged in agricultural and household industrial activity. Table 5 shows age-wise worker and non-worker in details. In the Figure 4, 5 and 6 Bivariate linear regression analysis have been shown between total

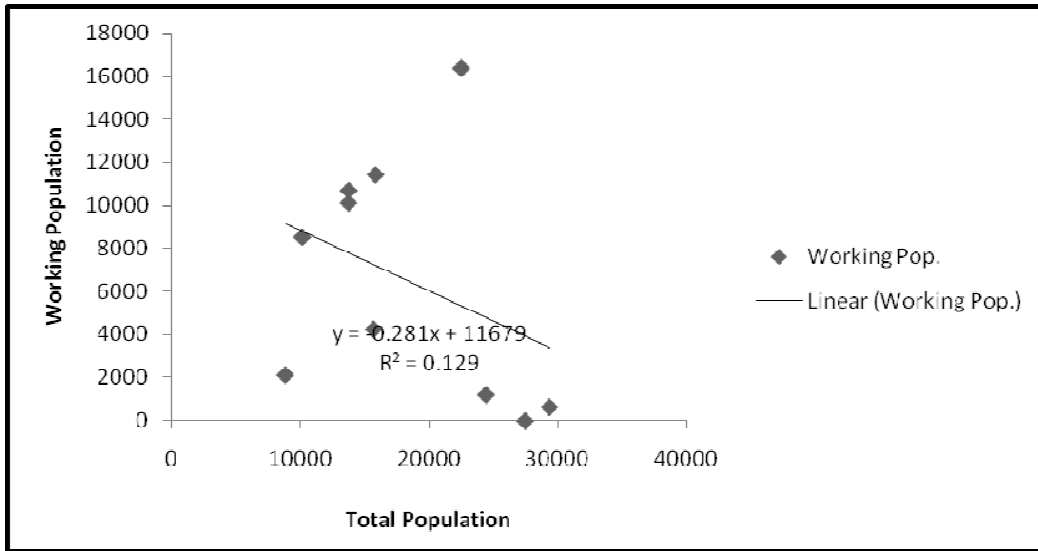


Figure 4: Bivariate linear regression (Total Population vs. Working Population)

population and working population, male population (MP) and male working population (MWP), female population (FP) and female working population (FWP) respectively. It is evident from the Pearson’s correlation that there is negative co-relation between total population and working population (-0.270), MP and MWP (-0.338), FP and FWP (-0.361). And it is also worthwhile to mention that all the correlations are not significant at the 0.01 level.

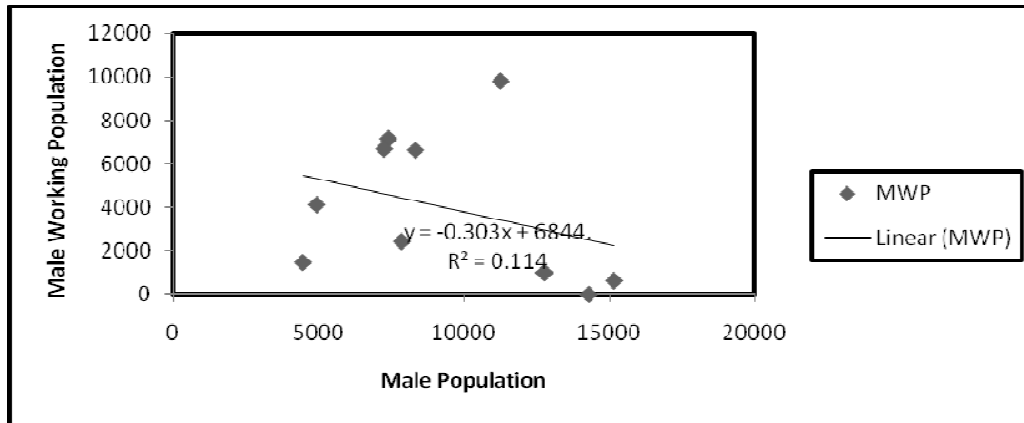


Figure 5: Bivariate linear regression (Male Population vs. Male Working Population/MWP)

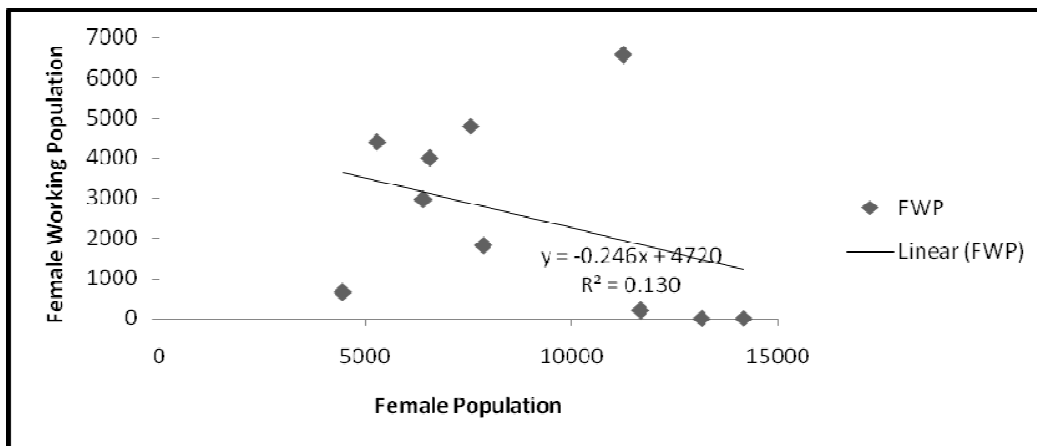


Figure 6: Bivariate linear regression (Female Population vs. Female Working Population/FWP)

CONCLUSION

From the foregoing discussion, it may be concluded that, most of the rural people are illiterate and poor. More than half of the population lives in nuclear families, exceptions being there. Consanguineous marriage is seen among many of them, females are getting marriage at very younger age in comparison to males. In rural areas, birth rate is higher than death rate and perceived as significant cause of population growth. Infant mortality rate (101.4) in surveyed rural areas also signifies lack of awareness about nutrition, hygiene, medical care etc. The acceptance of family planning devices is very poor, which is not correct as it contributes significantly population increase and crisis in available resource. Under all these circumstances, it is highly desirable to take steps for reducing infant mortality and fertility rate, by providing more health and family welfare services, increasing awareness for utilization of these family welfare services as well as regarding antenatal care and delivery health practices, and by increasing acceptance of spacing methods of family planning. Insignificant correlation between total population and total working population is observed. As in rural areas higher education level is not good, most of the workers are engaged in primary sector. At last, it may be suggested that Government should promote policies or schemes or programmes at grass root level, intensively extensive way, to increase awareness about education, health, hygiene, family planning, antenatal care, and also about work participation which will uplift their socio-economic status as well as quality of life (QOL).

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REFERENCE

- Cox, P. R. (1970). *Demography*. Cambridge: University Press.
 Census of India. (2001). Census Abstract, New Delhi, Registrar General & Census Commissioner.
 Census of India. (1971). Indian Census Perspective, New Delhi, Office of the Registrar General, Govt. of India.

Census of India. (2001). District Census Hand Book: Murshidabad, New Delhi, Registrar General & Census Commissioner.

Census of India. (2011). Provisional Population Total, New Delhi, Registrar General & Census Commissioner. From <http://www.censusindia.gov.in>.

Khan, M. H. (2001). *Rural Poverty in Developing Countries: Implications for Public Policy*, *International Monetary Fund (IMF)*, 26, Retrieved from www.imf.org.

Mandal, R. B. (2001). *Introduction to Rural Settlement*. New Delhi : Concept Publication Company.

Rajani, K. (2011). *Strategies and Programmes undertaken for the Purpose of Rural Development in India*. Retrieved from <http://ravi.lums.edu.pk/rwes/india.html>.

Sinha, V. C., Zacharia, E. (1984). *Elements of Demography*. New Delhi : Allied Publishers Private Ltd.