



Socio-Economic Characteristics of Slums in Srinagar City J&K India

Sameer Fayaz, Zoya Kulsum Naqshbandi, Hakim Farooq*, G.M Rather and M. Sultan Bhat

Department of Geography and Regional Development University of Kashmir, Srinagar India-190006.

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ABSTRACT

Slums are the expression of poverty, group inequality and social exclusion (Slums of the World-2003). Slums are distributed throughout the Srinagar city. Clustering was done to study the socio-economic attributes of slums in Srinagar city. These clusters show inequality in social and economic conditions due to marginalized location. The present paper attempts to examine the socio-economic setting of slums in Srinagar city.

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Introduction

Slums play an essential role in a city life. As a place of residence for low-cost labour, they keep the wheels of the city moving in many different ways. As a first stopping point for immigrants, they provide the affordable housing that enables them to save for their future absorption. Slums play a significant role in producing the services and commercial activities that the formal sector fails to provide through the mobilization of local enterprises and industry (Slum of the World, 2003). Many governments around the world have attempted to solve the problems of slums by clearing away old decrepit housing and replacing it with modern housing with much better sanitation (Mandal, 1998). Rapid growth of slum population in urban areas has resulted in many socio-economic and environmental problems. Slums are mostly inhabited by people who cannot afford decent housing. Poor economic status also has implications on social characteristics of slums population. Due to poor living environment slum dwellers lack educational development. Many writers on slum emphasize the presence of anti social problems as the necessary concomitant of slums. Slums are generally associated with social problems such as crime, delinquency, prostitution and gambling. Hence they are commonly considered as areas lacking in community organization and even promoting disorganization (Rao and Rao, 1984).

Study Area

The present study has been carried out in the Srinagar city. Latitudinal extent of the city is 33°53'49" - 34°17'14"N latitudes and 74°36'16" - 75°01'26"E longitudes and encompasses an area of 278.1 km². Srinagar has had a glorious history. The name of the city of great antiquity is first found in Kalhan's Rajatarangini. Throughout the ages Srinagar has remained an active growth pole. Srinagar is the summer capital of J & K state and its population is above 12 lacs which makes it the largest urban centre in Jammu and Kashmir. Srinagar city is situated around the banks of Dal Lake and Jhelum River. It experiences moderate climate during summer and severe cold in winter.

Tele:

E-mail addresses: hakimfarooq.geo@gmail.com

Study area

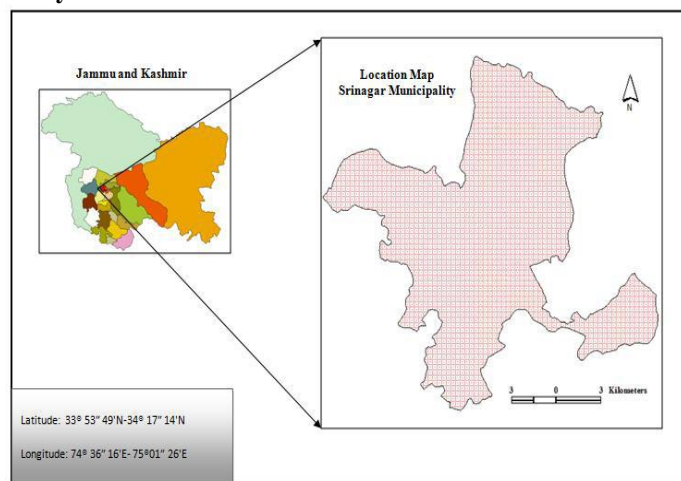


Fig 1.1

Significance of the Study

The socio-economic conditions of slum population and their overall habitat have not been addressed in a detailed and comprehensive manner in the earlier studies. An attempt is made in the present study to analyze the geographical concentration and socio-economic status of the slum dwellers in Srinagar city. The study of slums is important to understand the physical, social and economic factors which are responsible for the growth of slums.

Objectives of the study

The study focused to achieve the following objectives;

1. To analyze the Socio-economic characteristics of Slum areas.
2. To suggest the suitable measures for improvement of Socio-Economic well being of slum dwellers in the city.

Data Base and Methodology

Data sets used

The data was collected and generated from the following sources.

Survey of India Toposheets

The Survey of India toposheets (1971) on scale 1:50000 (J/12, J/16 and K/13) were used in the present study to generate various data layers. These toposheets were also used to delineate the study area. This study relied more on primary sources of data and partly on secondary data. Primary data has been generated through sample survey with the help of structured questionnaires/ schedules, interviews, observations etc.

The data pertaining to various socio-economic and demographic variables of slum areas have been collected from various departments.

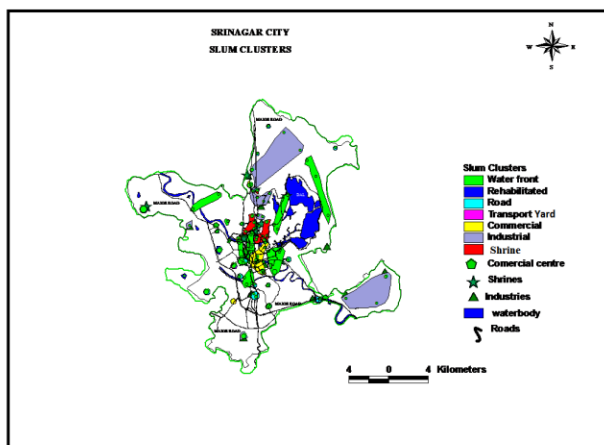
Methodology

Delineation of Study area

The SOI toposheets (1971) on scale 1:50000 (J/12, J/16 and K/13) were geometrically registered through polyconic projection technique in compatible format for subsequent analysis in ERDAS 9.0. Further, the satellite image of the study area was registered and rectified with reference to already geo-referenced 1:50000 scale topographic maps of the same area. Further, the area of interest from the already geo-referenced SOI topographic maps was clipped out by the technique of Subset to facilitate a perfect mosaic in GIS. Subsequently, the data regarding slums of the study area was processed in ArcView 3.2a for the preparation of various thematic maps.

Identification and Clustering of slums

Though the slum population of the city is distributed among the different wards, their spatial distribution pattern is the outcome of geographical and economic factors. The identification of slums was done on the basis of parameters used by Srinagar Municipal Corporation and Town Planning Organization of Kashmir. The slums have been classified in the following clusters based on geographical and economic factors (Table 1.1 and Fig. 1.1) 1. Water Front Cluster 2. Rehabilitated Cluster 3. Road Cluster 4. Transport Yard Cluster 5. Commercial Cluster 6. Industrial Cluster 7. Shrine Cluster.



Source: - Based on SMC data, 2011

Fig.1.2

Framing and designing of Questionnaire / Schedule.

A well structured questionnaire/schedule was framed after consulting the literature that was available in libraries and on internet.

Sample Survey / Field Survey

Random sample survey was used for data collection and the questionnaire/schedule was the main tool. A sample size of 2 percent of the households was selected for the sample survey. Household survey of 374 sample households was carried out to study the socio-economic characteristics of different slums in Srinagar city. Pilot survey / personal observation and personal interview were the techniques of data collection.

Statistical analysis and Map Work

Statistical techniques like correlation and chi-square test were employed to explore the relationship and association between socio-economic parameters.

The socio-economic characteristics of slums of Srinagar city can be analyzed under the following headings;

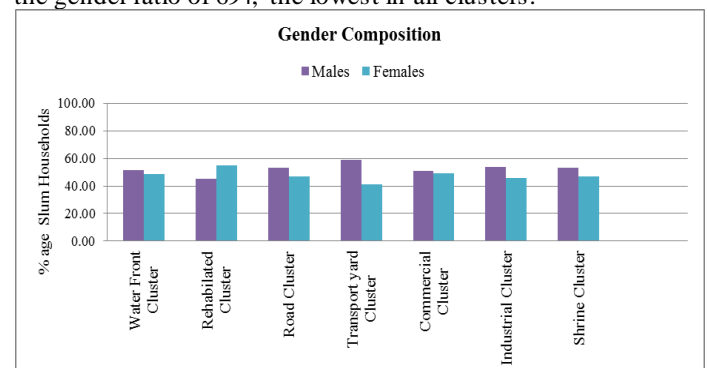
Household Size

The size of household plays an important role in maintaining the health condition. In Srinagar city the average size of slum household is 5.5 persons. Analysis of the table 1.3 reveals that the household size varies from cluster to cluster. The water front cluster and rehabilitated cluster have the highest number of persons in the household (5.8 persons each). The lowest number of persons in the household is found in commercial cluster (4.7) and Shrine cluster (4.8).

Distribution of Population and Gender Composition

The distribution of slum population in Srinagar city is quite uneven. In Srinagar city out of total slum population of 2016, 1053 are males and 963 are females. Out of seven clusters the water front cluster has the largest share of slum population (30.65%) followed by road cluster (21.08%), commercial cluster (16.72%), industrial cluster (14.98%), Shrine cluster (9.82%), rehabilitated cluster (3.72%) and transport yard cluster (3.03%) (Table 1.4)

The gender composition is defined as the number of females per 1000 males. From the table 1.4 it is clear that the gender composition is mostly dominated by males in all the clusters except rehabilitated cluster. The higher gender ratio in rehabilitated cluster is because of delay in female marriage because of dowry and most common live-in son-in-law of males. The rehabilitated cluster has the highest gender ratio of 1206. In water front cluster the gender ratio is 950. Commercial cluster records gender ratio of 948. In road cluster it was found to be 872. In Industrial cluster it was found to be 864 and in Shrine cluster it was found to be 904. Transport yard cluster has the gender ratio of 694, the lowest in all clusters.



Source: - Based on data obtained from Sample survey- 2013

Fig.1.3

Age Composition

Age composition is one of the important demographic characteristics. Analysis of age structure is important because it works as a proxy indicator for other demographic characteristics. Age structure of population also helps in the analysis of child population, population in working age group and the proportion of dependent population. From the table 1.5 it is clear that in slums of Srinagar city out of 2016 sample population surveyed, 615 persons are under 0-14 years, 1241 persons are in between the age of 15-59 years and 160 persons comprises the age of above 60 years. The age composition of slums in Srinagar city shows considerable variation from one slum cluster to other. It can be discerned from the table that the proportion of 15-59 age group is the highest in all clusters. This indicates that working age group is predominant in all clusters.

Table 1.1. Slum Clusters in Srinagar City based on population Size - 2011

Slum Clusters	Slum Locations	Ward	Slum Clusters	Slum Locations	Ward
Water Front Cluster	Drugjan	DALGATE	Road Cluster	Ahmad nagar	AHMAD NAGAR
	Kursoo	RAJ BAGH		Bonamsar	DALGATE
	Buchwara	DALGATE		Barthana	PARIMPORA
	Rambagh	MEHJOOR NAGAR		Chanapora	CHANAPORA
	Baghat	BAGHAT-I-BARZULLA		Narakura	KHUMANICHOWK
	Maloor	MALROO		Mehjoor nagar	MEHJOOR NAGAR
	Sangam	PALPORA		Natipora	NATIPORA
	Lachmanpora	ALLOCHI BAGH		Tarabal	TARABAL
	Qamarwari	QAMARWARI		Suzat	LAWAYPORA
	Nawabazar	NAWAB BAZAR		Saidapora	ALESTENG
	Hassanabad	HASSANABAD		Basurbagh	NEW THEED
	Jogi lanker	JOGILANKER		Rambagh	RAWALPORA
	Nundresh colony	NUNDRESHI COLONY	Commercial Cluster	Mahrajpora	S. D COLONY
	Guzarbal	CHATTABAL		Iddgah	IDDGAH
	Karfali Mohalla	SYED ALI AKBAR		Sweeper colony	MEHJOOR NAGAR
	Sutra shah	SHAHEED GUNJ		Batamallo	BATAMALLO
	Achan	PALPORA		Gowkadal	LAL CHOWK
	Chunt kul	BARBARSHAH		Amira Kadal	LAL CHOWK
	Hazratbal	HAZRATBAL		Ganpatyar	GANPATYAR
	Manzgam	NISHAT		Shaheed gung	SHAHEED GUNJ
	Bongam	HARWAN		Sutra shah	KARAN NAGAR
	Tailbal	TAILBAL		Anchar	SOURA
Industrial Cluster	Jamal Atta	AALI KADAL	Shrine Cluster	Solina	JAWAHARNAGAR
	Iqra colony	ALLOCHI BAGH		Safa Kadal	SAFA KADAL
	Baranpather	MAGARMAL BAGH		Barbarshah	BARBAR SHAH
	Qalamdan Pora	ISLAMYARBAL		Bhagwanpora	BARBAR SHAH
	Khonmoh	KHONMOH		Gonikhan	WAZIR BAGH
	Zainakoot	ZAINAKOOT		Arm masid	KHAWJA BAZAAR
	Zewen	PANTHACHOWK		Sazgaripora	KAWADARA
	Rangreth	HUMHAMA		Jamia Masjid	JAMIA MASJID
	Bota Kadal	MADEEN SAHIB		Mahraj gunj	MAHRAJ GUNJ
	Tibetan colony	MAKDOOM SAHIB		Zindshah Sahab	ZIND SHAH SAHIB
	Old Buchpora	BUCHPORA	Transport Yard Cluster	Vichernag	NOWSHERA.
	Botshah Mohalla	LAL BAZAR		Malik Angan	BANA MOHALLA
	Mandibal	NOWSHERA		Khan kai Mohalla	KHAN KAIMOHALLA
	Mughal Mohalla	UMER COLONY		Akilmir	AKILMIR
	Goosoo	ALESTENG		Makdoom Sahab	MAKDOOM SAHIB
	Bakur	ALESTENG		Alamgari bazar	ZADIBAL
	Zoonimar	ZOONIMAR		Dobi Mohalla	BATAMALLO
	Balahama	KHONMOH		Panthachowk	PANTHA CHOWK
			Rehabilitated Cluster	Boat man colony	BEMINA
				Dal colony	BEMINA
				Samurbugh	PANTHA CHOWK

Source: - Based on data obtained from SMC-2011

Table 1.2. Sample Frame

S.No	Name of the Cluster	No. of Slum Locations	Population (Persons)	No. of House holds	No. of Sample Household
1.	WATER FRONT CLUSTER	26	45240	5376	107
2.	REHABILITATED CLUSTER	03	5873	633	13
3.	ROAD CLUSTER	15	32817	3790	76
4.	TRANSPORT YARD CLUSTER	02	5326	591	12
5.	COMMERCIAL CLUSTER	12	31318	3560	71
6.	INDUSTRIAL CLUSTER	14	22088	2681	54
7.	SHRINE CLUSTER	11	16476	2030	41
	TOTAL	83	159138	18661	374

Source: - Based on data obtained from SMC-2011

Table 1.3. Average Household Size

Slum Cluster	No. of Sample households	Total No. of Persons	Average size of H.Holds
Water front cluster	107	618	5.8
Rehabilitated Cluster	13	75	5.8
Road Cluster	76	425	5.5
Transport yard Cluster	12	61	5.1
Commercial Cluster	71	337	4.7
Transport yard Cluster	54	302	5.5
Shrine Cluster	41	198	4.8
	374	2016	5.5

Source: - Sample survey- 2013

Table 1.4. Distribution of Population and Gender Composition

Slum Cluster	No. of Sample Household	No. of Sample persons			
		Sample Population (persons)	Percentage to Total	Males	Females
Water front cluster	107	618	30.65	317 (51.29)	301 (48.71)
Rehabilitated Cluster	13	75	3.72	34 (45.34)	41 (54.66)
Road Cluster	76	425	21.08	227 (53.00)	198 (47.00)
Transport yard Cluster	12	61	3.03	36 (59.00)	25 (41.00)
Commercial Cluster	71	337	16.72	173 (51.00)	164 (49.00)
Industrial Cluster	54	302	14.98	162 (54.00)	140 (46.00)
Shrine Cluster	41	198	9.82	104 (53.00)	94 (47.00)
Total	374	2016	100.00	1053 (52.23)	963(47.77)

Source: - Sample survey 2013

Note: - Figures in parenthesis represent percentage to total

Table 1.5. Age Composition

Slum Cluster	Sample population (Persons)	No. of Sample persons with Age Composition		
		0 -14 yrs	15 - 59 yrs	Above 60 yrs
Water front cluster	618	161 (27.00)	399 (65.00)	58 (8.00)
Rehabilitated Cluster	75	18 (24.00)	46 (61.00)	11 (15.00)
Road Cluster	425	173 (41.00)	229 (54.00)	23 (5.00)
Transport yard cluster	61	11(18.00)	44 (72.00)	6 (10.00)
Commercial Cluster	337	81(24.00)	226 (67.00)	30 (9.00)
Industrial Cluster	302	123 (41.00)	163 (54.00)	16(5.00)
Shrine Cluster	198	48 (24.00)	134 (68.00)	16(8.00)
Total	2016	615 (30.50)	1241(61.55)	160(7.95)

Source: - Sample survey 2013

Note: - Figures in parenthesis represent percentage to total

Table 1.6. Occupational Structure

Slum Cluster	No. of Sample Household	No. of Sample Households with Occupation	
		Formal	Informal
Water front cluster	107	34 (32.00)	73 (68.00)
Rehabilitated Cluster	13	1 (8.00)	12 (92.00)
Road Cluster	76	34 (45.00)	42 (55.00)
Transport yard Cluster	12	4 (33.00)	8 (67.00)
Commercial Cluster	71	38 (54.00)	33 (46.00)
Industrial Cluster	54	16 (30.00)	38 (70.00)
Shrine Cluster	41	17 (41.00)	24 (59.00)
Total	374	144 (38.50)	230 (61.50)

Source: - Sample survey 2013

Note: - Figures in parenthesis represent percentage to total

Table 1.7. Levels of Education

Slum Cluster	Sample population (Persons)	No. of Sample persons with Levels of Education					Total %
		Illiterate	Primary	Middle	Secondary	Higher	
Water front cluster	618	229 (37.00)	148 (24.00)	122 (20.00)	91 (15.00)	28 (4.00)	100
Rehabilitated Cluster	75	56 (75.00)	11 (15.00)	4 (5.00)	4 (5.00)	0 (0.00)	100
Road Cluster	425	198 (47.00)	103 (24.00)	61 (14.00)	35 (8.00)	28 (7.00)	100
Transport yard Cluster	61	28 (46.00)	8 (13.00)	5 (8.00)	12 (20.00)	8 (13.00)	100
Commercial Cluster	337	137 (41.00)	47 (14.00)	38 (11.00)	70 (21.00)	45 (13.00)	100
Industrial Cluster	302	141 (47.00)	93 (31.00)	43 (14.00)	18 (6.00)	7 (4.00)	100
Shrine Cluster	198	93 (47.00)	27 (14.00)	34 (17.00)	34 (17.00)	10 (5.00)	100
Total	2016	882 (43.75)	437 (21.67)	307 (15.22)	264 (13.09)	126 (6.27)	100

Source: - Sample survey 2013

Note: - Figures in parenthesis represent percentage to total

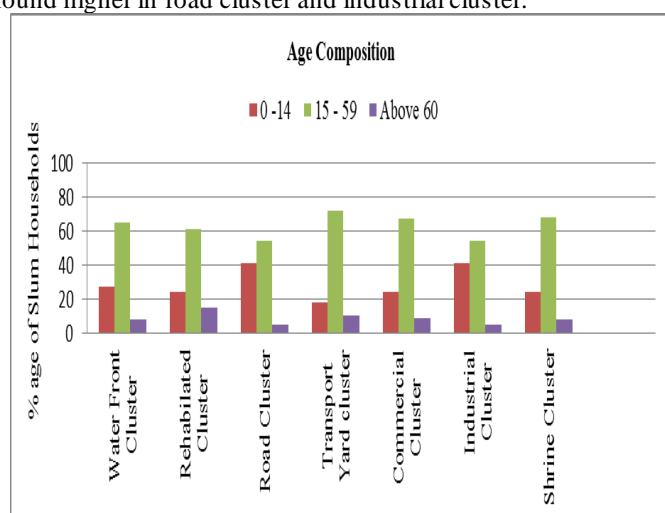
Table 1.8. Levels of Income (Per Month) in Rs.

Slum Cluster	No. of Sample Household	No. of Sample Households with Levels of Income		
		to 6000	6000- 12000	> 12000
Water front cluster	107	61 (57.00)	32 (30.00)	14 (3.00)
Rehabilitated Cluster	13	10 (77.00)	3 (23.00)	0 (0.00)
Road Cluster	76	34 (45.00)	28 (37.00)	14 (8.00)
Transport yard Cluster	12	3 (25.00)	5 (42.00)	4 (33.00)
Commercial Cluster	71	16 (23.00)	35 (49.00)	20 (28.00)
Industrial Cluster	54	24 (44.00)	25 (46.00)	5 (10.00)
Shrine Cluster	41	23 (56.00)	8 (20.00)	10 (24.00)
Total	374	171 (45.75)	136 (36.34)	67 (17.91)

Source: - Sample survey 2013

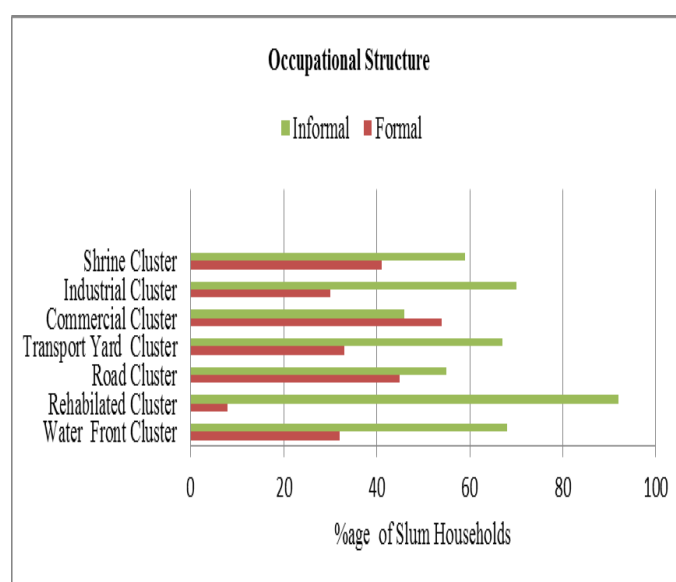
Note: - Figures in parenthesis represent percentage to total population.

The dependent population (above 60) is found higher in rehabilitated cluster (15%). The proportion of 0-14 age group is found higher in road cluster and industrial cluster.



Source: - Based on data obtained from Sample survey - 2013

Fig 1.4



Source: - Based on data obtained from Sample survey - 2013.

Fig 1.5

Occupational Structure

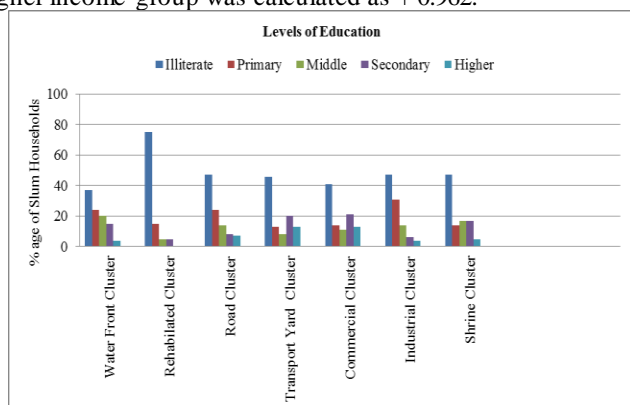
The economic activities of slums in Srinagar city are highly diversified. From the fig. 1.5 it is evident that out of 374 households 144 households are involved in formal activity and 230 households are involved in informal activity. Analysis of

table 1.6 it is clear that out of seven clusters rehabilitated cluster has the highest proportion of informal economic activity. 54 percent are involved in formal occupation in commercial cluster. 45 percent in road cluster and 41 percent in Shrine cluster (Table 1.6). There exists a positive correlation between occupation and income groups. The correlation between informal occupation and low income group was found to be +0.964. The relationship between formal and high income group was also found positive i.e. +0.953.

Levels of Education

Education is an important social indicator which is directly or indirectly linked with economic development. Human resources development is a pre-requisite for social and economic development. Since independence, Government of India has also launched various policies and programmes to provide basic education to all sections of population. Right to education has been confirmed by the act of parliament in 2010. Sarva Shiksha Abhiyan was started in 2000 provides eight years of compulsory schooling to all children in a mission mode with community participation. It was also made compulsory to provide a primary school within a distance of one kilometre. From the comparative analysis of different clusters of slum in Srinagar city that none of the educational centre is the vicinity to rehabilitated cluster. The children's in rehabilitated cluster are mostly illiterate because the environment for education is also not conducive in these slums because of the poor condition of housing and other basic amenities. Child labour is found in rehabilitated cluster.

Out of 2016 persons 882 persons are illiterate, 437 have primary education, 307 have middle, 264 are having secondary education and 126 persons have attained higher qualifications. 43.75 percent slums are illiterate, 21.67 percent are literates up to primary level, 15.22 percent are up to middle level, 13.09 percent are up to secondary level and only 6.27 percent are well qualified (Fig 1.6). There is quite inter-variation among slum clusters in the levels of education (Table 1.7). Rehabilitated cluster has 75 percent illiteracy. Commercial cluster and transport yard cluster shows good percentage of secondary and higher education (34 percent and 33 percent). Accessibility to educational institution, money and involvement of adults in money making process plays an important role in higher education. There exists positive relationship between educational groups and income groups. The correlation between illiterates and low income group was found to be + 0.906. The correlation between secondary and middle income group was + 0.770 and the correlation between higher education group and higher income group was calculated as +0.962.



Source: - Based on data obtained from Sample survey- 2013

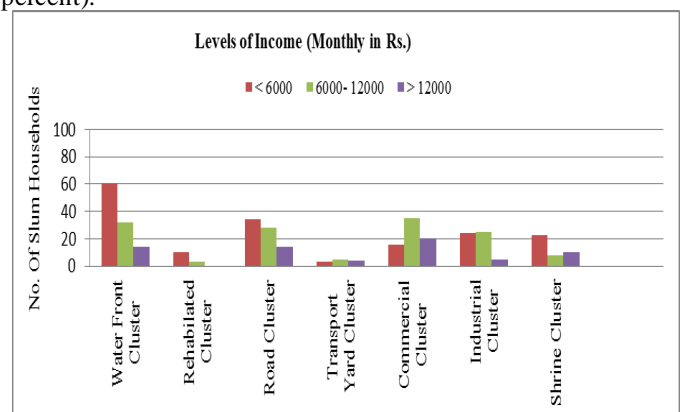
Fig 1.6

Levels of Income

Household income is an important parameter to ascertain the level of living and state well being of population. Magnitude and its distribution of absolute monthly income is also useful

device in making provision for housing. It also helps in determining the urban poverty. Not only this, the main objective of the income distribution has been to examine income inequalities among households of different clusters. In Srinagar city poverty can be identified with people who are unemployed or under employed in various low productivity occupations such as postage, street peddling etc, or employed in jobs with insecure or seasonal employment with very low real wages. The income of households remains low due because of informal nature of work. Underemployment and fluctuations in income are problems among migrants living in slums. Those engaged as wage labourers and petty street vendors face more fluctuations in income. In search of employment opportunity they generally opt for informal sector work because it has no restrictions and easy to start.

In Srinagar city out of 374 households surveyed 171 persons are having the income up to Rs 6000 per month. 136 persons are having the monthly income from Rs 6000-12000 and 67 households are having income above Rs 12000 per month (Table 1.8). From the Fig 1.7 it is revealed that rehabilitated cluster comprises the lowest income group as they have been shifted to another place and their main occupation has been lost. Water front cluster and Shrine cluster has 77 percent and 56 percent in low income group (up to 6000). Among the medium income group (6000-12000), 49 percent are in commercial cluster, 32 percent are in water front cluster and 28 percent are in road cluster. Among the high income group (above 12000) transport yard cluster has the proportion of 33 percent followed by commercial cluster (28 percent) and shrine cluster (24 percent).



Source: - Based on data obtained from Sample survey- 2013

Fig 1.7

To study whether the distribution of income in different clusters is even or uneven, chi- square test was used to study the association of Levels of income among different clusters. The computed value is much higher than the tabulated value and hence, it is statistically significant. Thus the levels of income are unevenly distributed.

Main Findings

❖ The sex ratio in slums of Srinagar city was found to be 915 per 1000 males which is more than the sex ratio of Srinagar city (888 per 1000 males). The reason could be delay in the marriage of females and live-in-son-in-law.

❖ About 56% slum population is literate in Srinagar city, whereas the average literacy of Srinagar city is 71%. Water cluster has highest literacy (63%) among all clusters.

❖ About 77% slums of rehabilitated cluster have income of Rs. 6000. The highest income of above Rs.12000 was found in Transport yard cluster (33%) followed by commercial cluster (28%).

In Rehabilitated cluster about 92% slums have informal occupation. They have lost their Dal habitat as they were more or less associated with tourism. This could be the reason for informal occupation. Commercial cluster has highest percentage of formal occupation (54%).

Conclusion

The present research was carried out in the Srinagar city with the main objective of analyzing the socio-economic characteristics slums in Srinagar city. In Srinagar city the average size of slum household is 5.5 persons. The distribution of slum population in Srinagar city is quite uneven. In Srinagar city out of total slum population of 2016, 1053 are males and 963 are females. Sex composition is mostly dominated by males in all the clusters except rehabilitated cluster. The proportion of 15-59 age group is the highest in all clusters. This indicates that working age group is predominant in all clusters. The dependent population (above 60) is found higher in rehabilitated cluster (15%). The proportion of 0-14 age group is found higher in road cluster and industrial cluster. 38.50 percent households have formal occupation and 61.50 percent households have informal occupation. There is a clear variation among slum clusters in the levels of education. Rehabilitated cluster has 75 percent illiteracy. Commercial cluster and transport yard cluster shows good percentage of secondary and higher education (34 percent and 33 percent). Among 374 households 171 persons are having the income up to Rs 6000 per month. 136 persons are having the monthly income from Rs 6000-12000 and 67 households are having income above Rs 12000 per month.

Suggestions

Slum upgrading consists of physical, social, economic, organizational and environmental improvements undertaken cooperatively and locally among citizens, community groups, businesses and local authorities. Actions include:

1. Improving access to health care and education, as well as to social support programmes in order to address issues of security, violence, substance abuse, etc in industrial, road, water front and rehabilitated cluster.

2. Enhancing income-earning opportunities through training and self employment schemes in rehabilitated and water front clusters. Technological improvements in factories/ industries of industrial cluster.

3. Most of the clusters are not well qualified in education. The commercial and water front clusters have good education facilities while as the rest of clusters have low education facilities. The planning measure is to facilitate education system in rehabilitated, industrial and road clusters.

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