PRAGATI: Journal of Indian Economy
Vol. 7(1), Jan-Jun 2020, pp. 101-120
DOI: 10.17492/pragati.v7i1.195426
www.journalpressindia.com/pjie
© 2020 Journal Press India

Income and Consumption Pattern in the Slum Area of Siliguri Municipal Corporation: A Comparative Study of Inner and Outer Slum Dwellers

Madhumita Das and Kanak Kanti Bagchi***

ABSTRACT

Slum areas are basically the urban areas which are deprived of various amenities and necessities required for the well-being of its residents. The sufferings of the inhabitants of these areas are mainly in three broad aspects - physical, social and economic. The paper portrays the economic situation of the slum dwellers of Siliguri Municipal Corporation (SMC) area of West Bengal and its impact on the living conditions of slum dwellers of this area. The income and consumption pattern of the slum households of this area is presented in the paper. In order to get a better picture of the living conditions of the slum dwellers, the total slum area of SMC has been divided into inner slum and outer slum and an attempt has been made to find out whether the inner slum dwellers or the outer slum dwellers have better living conditions.

Keywords: *Living conditions; Slum dwellers; Inner slum; Outer slum; Siliguri municipal corporation.*

1.0 Introduction

The term 'slums' give the picture of dark side of urban areas, the sufferings of the inhabitants of these areas are mainly in three broad aspects - physical, social and economic. Physically the slum households are lacking in space to accommodate the household members adequately, poor ventilation, lack of provision of proper drinking water facility, poor drainage and sanitation. Socially the slum dwellers suffer from health problems mainly due to poor habitation and poor healthcare facilities available and affordable by them, low morals, insecurity resulting from eviction as the land are mostly illegally occupied by the slum dwellers and also poor educational standard achieved.

**Research Scholar, Department of Economics, University of North Bengal, Siliguri, West Bengal, India. (Email: 1974madhu.das@gmail.com)*
***Corresponding author: Professor, Department of Economics, University of North Bengal, Siliguri, West Bengal, India. (Email: kkbagchi@hotmail.com)*

Economically the slum dwellers suffer from poor income as they are mainly engaged in the informal sector which is mostly unorganised and hence is earning a low income. The low income of the slum dwellers cause an obstacle in leading a good quality life as they are unable to feed themselves adequately, to provide for themselves good housing, to get good quality health and education facilities and also afford for themselves to avail entertainment facilities like the other urbanites. In 2002, the United Nations operationally defined slums as communities characterized by insecure residential status, poor structural quality of housing, overcrowding, and inadequate access to safe water, sanitation, and other infrastructure (United Nations Human Settlements Program, 2003). According to UN-HABITAT, 2006 the slum population in India was approximately 169 million in 2005 and it is projected to increase to 202 million by 2020 (NFHS-3, 2009).

According to Census 2011 of India the total slum population is 65,494,604 while according to Census 2001it was 52,371,589. Decadal growth of slums during 2001-2011 is 25.1per cent. In West Bengal slum population is 6,418,594 and the number of slum households is 1,391,756 whereas in India there are 13,920,191 slum households.

The Socio-Economic Census 2011 Urban Data (provisional) reveals that the majority of urban dwellers do not have any source of income; among 299.99 million urban dwellers 172.71 million (57.57per cent) persons are unemployed. Among 299.99 million urban dwellers 0.15 million (0.05 per cent) are beggars, 0.10 million (0.03 per cent) are rag pickers, 6.20 million (2.07 per cent) are domestic workers, 1.94 million (0.65 per cent) are street vendors, 18.93 million (6.31 per cent) are construction workers, 1.30 million (0.43 per cent) are sanitation workers, 7.46 million (2.49 per cent) are shop workers or assistants, 2.49 million (0.83 per cent) are electricians or mechanics or assemblers, 0.94 million (0.31 per cent) are washer-men,17.71 million (5.90 per cent) do not do any work and earning sources are pension, rent, interest etc. and remaining 70.06 million (23.36 per cent) are engaged in other jobs. It is evident that in the urban areas unemployment is high and hence do not earn any income; those engaged in jobs are also working mainly in the informal sector and thus are low-income earners.

The Global Hunger Index (GHI) 2016 reinstates India's abysmal status on malnutrition. India ranks 97 out of 118 countries on GHI 2016, indicating serious levels of nutritional deprivation among its children (Choudhary, 2017). Thus there is a serious need to look at the economic situation of the slum dwellers, those who are most vulnerable to poverty and hunger.

This paper portrays the economic situation of the slum dwellers of Siliguri Municipal Corporation (SMC) area of West Bengal. The income and consumption pattern of the slum households of this area is presented here. Income and expenditure are

the main pillars on which not only a household but the entire economy of a country is standing. The income and consumption of the slum households of SMC area gives a picture of the economic conditions of the people living in this area and thus their living conditions. Moreover, the total slum area has been divided into an inner slum and outer slum and a comparative study of the income and consumption patterns of the slum households of these two slum areas has been done and an attempt has been particularly made to find out whether the inner slum dwellers or the outer slum dwellers have better living conditions.

This paper begins with a review of related literature. A brief description of Siliguri Municipal Corporation (SMC) area is presented in Section 3.0. The methodology is outlined in Section 4.0. Section 5.0 presents and discusses the empirical findings and results, and Section 6.0 concludes the paper.

2.0 Review of Literature

Regarding the consumption pattern of the slum dwellers in India, it is found that very little is spent on education by slum dwellers in comparison to other non-food items like expenses on drinking, gambling, visiting theatres and religious matters, medical purpose and loans (Venkatarayappa, 1972). There is the 'cultural' minimum, the minimum determined by the sub-cultures of the families within the overall culture of poverty and below this minimum, there is a sense of suffering and an urge to come up to this level by occasional borrowings. More than 50 per cent of their income is spent on cereals. Among non-food items, they do not have to spend much on their shelter as a recurring cost. Education is free, but some incidental costs are always there (Majumdar and Majumdar, 1978). Most of the children suffer from malnutrition (Jha, 1986). The slum dwellers spend the entire amount they earn daily. The situation is not favourable for some kind of thrift or planning (Dhadave, 1989).

Some relevant studies regarding income pattern of slum dwellers in India reveal that the slum dwellers are essentially the members of the working class and that an overwhelming majority of them live below the poverty line. Majority of slum dwellers work in the informal sector and their occupation does not yield sufficient income. Therefore they cannot maintain a minimum standard of living and so the slum dwellers are poverty stricken. The reasons for this typical economic situation in slums are (a) lack of assured or regular income and (b) large number of dependants in the family of the earning members (Dhadave, 1989). In a majority of cities in India persistence of informal sector, urban poverty and slums are most likely to go together. Open

unemployment and informal sector employment tend to lower income per household. Average consumption expenditure per capita varies directly with household income and affects poverty negatively (Mitra, 1994). The inner-city slums have more poor population than the peripheral slums and the poorest people live in the most crowded slum since slum dwellers those who are skilled are able to live in the peripheral part of the city while slum dwellers those are underemployed depend upon the city-core because they are treated as workers, who are 'last hired and first fired' (Agnihotri,1994) The variation in the income levels of slum dwellers working in informal sector is substantial between groups and even within each of the groups (Halder, 1995). The older generation slum dwellers who had formal sector occupations earned more than the younger generation who worked in the informal sector (Roy, 1995). Slum-dwellers those working as unskilled labourers or day labourers and a great disparity is found between the labours or service they render and the remuneration in terms of wages they receive which affects the core of their livelihood pattern (Bhattacharya, 1996). The household income is contributed not only by husband of a woman but also mostly by wife herself and could also be sons, daughters, brothers, sisters or the mother-in-law (Letsch, 2001). The women slum dwellers are in a disadvantageous position also in terms of their economic status as the unemployment rate for men (15 years and above) is lower than women (Kumar and Aggarwal, 2003).

Floro and Swain (2013) in their study of slum communities in Bolivia, Ecuador, Philippines, and Thailand show that although a high proportion of men and women in urban low-income households are employed, their resources including earnings are often insufficient to deal with shocks and they develop their own strategies to deal with the problems that governments have neglected or have addressed in a haphazard or problematic fashion. In a study based on Khulna City Corporation (KCC) area of Bangladesh by Mahmood *et al.,* (2015) found that majority of children are under-nourished which can cause potential future low productivity of the children of these slums.

Pramanik (2015) in a study of Siliguri Municipal Corporation area of West Bengal found that considering the poverty line recommended by the Planning Commission for 2009-10 in terms of per capita consumption expenditure of Rs. 859.50 in urban areas, all the squatters in the inner city squatter settlements are living below the poverty line. On the other hand, all the squatters in the peripheral city are living above the poverty line. Further, comparing the monthly per capita Income (MPCI) with the international poverty line US$ 1.25/day, he finds that all the households in both the squatter settlements fall under absolute poverty.

3.0 A Brief Outline of Siliguri Municipal Corporation Area

Siliguri is a rapidly growing city in West Bengal. Geographically, Siliguri is situated at the latitude of 26.71°N and the longitude of 88.43°E (Government of West Bengal (2015), City Development Plan for Siliguri- 2041, Final Report: http://siligurismc.in/userfiles/file/siliguri-CDP-final-report-29April15.pdf). Siliguri, the gateway of North East India, is one of the most rapidly developing metropolises of the state. It acquired the status of a Sub-Divisional town in 1907. Though by thirties it had gained weightage as a town it was conferred Municipal status only in the year 1950. Situated in Darjeeling district and though it is the district's largest city, the district headquarters is located at Darjeeling. Siliguri is a unique city as 14 out of 47 wards of Siliguri Municipal Corporation (SMC) falls in the neighboring Jalpaiguri district. Siliguri Municipality gets status as a corporation in 1994. (http://www.siligurismc.in/about-us.php and http://www.siligurismc.in/history-of-siliguri.php). Siliguri Municipal Corporation has an area of 42 sq. kms. (http://www.siligurismc.in/).

As per the Census of India 2001, the total population living in Siliguri Municipal Corporation area was 4, 72,374 while the slum population was 1, 68,214. Thus slum population of this corporation area was 35 per cent of the total population of the Siliguri Municipal Corporation area. The number of slums in this area is 154. The number of persons below the poverty level in 2002 in 33 wards within Darjeeling district was 16.73 per cent and in 14 wards within Jalpaiguri district was 25.61 per cent and the average for all the 47 wards was 20.24 per cent (Siliguri Municipal Corporation, 2004).

4.0 Methodology

Primary data for the study were collected on the basis of questionnaires prepared to gather the required information. The universe of the study is SMC area. The location of the sample study is the slums of SMC area.

The following sampling procedure was adopted: First, stratified random sampling was used to segregate the total 154 slums of the SMCA area as per Census 2001, into slums of Inner and Outer city slums with slum as the sampling unit. Second, four slums from each of the two parts of the city were selected using a simple random sampling method. Third, out of four slums of inner-city, each one was selected purposively from the four corners (North-South-East-West). The same was done in the case of the outer city slum area. Thus a total of eight slums had been chosen. Fourth, 25 households were chosen using a simple random sampling method from each of the eight

slums. The unit of observation was the household and the total size of the sample was 200 households.

Based on the above methodology four selected Inner slums are: East- Chittaranjan Colony (ward-20), West- Darbhangatola (ward-6), North- Dashrathpally (ward-44) and South- Sarbahara Colony (ward-28) and four selected Outer slums are: East- Amtala Colony (ward-37), West- Kulipara Rajendranagar (ward-1), North- Amtala (ward-41) and South- D.S. Colony (ward-34). The primary survey was conducted during the period from August 2013 to March 2014.

5.0 Empirical Findings

In the slum area surveyed, the total number of slum dwellers residing in the 200 slum households is 911. The total number of males is 451 and the number of female slum dwellers is 460. Sex- ratio of the slum area surveyed is 1033. The surveyed slum area comprises of 49.5 per cent of male slum dwellers and 50.5 per cent of female slum dwellers.

In the Inner slum part of the surveyed area, the total number of slum dwellers is 434; the number of male slum dwellers is 214 while the number of female slum dwellers is 220. Sex-ratio is 1028. 49.3 per cent male slum dwellers and 50.7 per cent female slum dwellers live in the surveyed slum households of the Inner slum area.

In the Outer slum part of the surveyed area, the total number of slum dwellers is 477; the number of male slum dwellers is 237 while the number of female slum dwellers is 240. Sex-ratio is 1013. 49.7 per cent male slum dwellers and 50.3 per cent female slum dwellers live in the surveyed slum households of the Outer slum area.

The proportion of persons living in the slum households in the Western part of both the Inner slum, 30.4 per cent of 434 persons and Outer slum, 31.7 per cent of 477 persons of the surveyed slum area is highest compared to the other three parts (i.e. Eastern, Northern and Southern parts) but the Sex-ratio (965) is lowest in the Western part of both the Inner and Outer slum taken together.

5.1 Monthly household income

To find the economic condition of the slum dwellers it is necessary to get information regarding their monthly household income which is the total income per month earned by all the earning members of a slum household. None of the earners are below 14 years of age. The Table-1 below presents the monthly income of slum households.

Table 1: Monthly Income of Slum Households

Slum Type	Monthly Household Income (in Rupees)			Total
	Up to 5000	5001-10000	Above 10000	
Inner	45 (45.0) (60.0)	46 (46.0) (48.4)	9 (9.0) (30.0)	100 (100.0) (50.0)
Outer	30 (30.0) (40.0)	49 (49.0) (51.6)	21 (21.0) (70.0)	100 (100.0) (50.0)
Total	75 (37.5) (100.0)	95 (47.5) (100.0)	30 (15.0) (100.0)	200 (100.0) (100.0)

Source: Field Survey

Household income is earned mainly from jobs in the informal sector like a construction worker, a rickshaw puller, driver of truck or four-wheelers, porter, potter, sweeper, tailor, mechanic in garage, cycle and gas oven repairer, labourer in a factory, maidservant, shop assistant, small shopkeeper or businessman and hawker. From Table 1, it is noted that among 200 households the highest proportion of slum households, (47.5 per cent) have a monthly household income in the range of Rs. 5001- 10000 followed by 37.5 per cent having monthly household income within Rs. 5000 and 15.0 per cent above Rs. 10000. Thus, it is evident that the households in the slum area earn low income as 85 per cent of the households earn up to Rs. 10000. Among 30 slum households having a monthly household income above Rs.10000 the proportion is higher in Outer slum 70.0 per cent compared to their counterpart in Inner slum (30.0 per cent). Among 75 households having monthly household income within Rs. 5000, 60.0 per cent belong to Inner slum and 30.0 per cent are in the Outer slum area. Among the 95 households having monthly household income in the range of Rs. 5001- 10000 the proportion of households in Outer slum is 3.2 per cent higher than their counterpart in Inner slum. This gives a picture of the better economic condition of Outer slum compared to Inner slum.

The average monthly household income of slum households is Rs.6005.50 in Inner slum, Rs.8369.80 in Outer slum and Rs.7187.65 in both slums taken together. The variation in the monthly household income level as found out by using Standard Deviation is Rs. 3289.94 in Inner slum and Rs. 4895.75 in Outer slum and Rs.4325.87 in both the slums taken together. It thus suggests that although the average monthly household income of slum households is higher in Outer slum compared to Inner slum, the variation and hence inequality in the monthly household income of slum households is also higher in Outer slum in comparison to Inner slum.

One way ANOVA test is presented in Table 2 to find the association between the total monthly household income between Inner slum and Outer slum.

Table 2: Testing the Variation of Monthly Total Household Income of Inner and Outer Slums

Variation	Sum of squares	df	Mean Square	F-value	Sig.
Between Groups	279495724.500	1	279495724.500	16.067	p<0.001
Within Groups	3444416271.000	198	17396041.773		
Total	3723911995.500	199			

Source: Computed from field survey data

Table 2 indicates that the F-value of 16.067 is highly significant at 1 per cent level and that there is a significant variation of average monthly household income between Inner and Outer slums ($p < 0.001$).

5.2 Monthly per capita income

The monthly per capita income gives information regarding income per month in the hands of an individual slum dweller.

The mean monthly per capita income in the slum area is Rs. 1667.41 with a standard deviation of Rs. 817.18. The mean monthly per capita income in the Inner slum is Rs. 1461.15 with standard deviation Rs.633.79 and mean monthly per capita income in Outer slum is Rs. 1873.67 with a standard deviation of Rs.924.49. It suggests that inequality in monthly per capita income is higher in Outer slum compared to Inner slum.

T-test is used to find the difference in average monthly per capita income between Inner and Outer slum which is presented in Table 3.

Table 3: Testing the difference in Monthly Per Capita Income among Inner and Outer Slums

Variable	t- value	df	Sig. (2 tailed)
Monthly per capita income	3.680	198	p <0.001

Source: Computed from field survey data

It can be inferred from Table 3 that there is a highly significant difference ($p < 0.001$) of monthly per capita income between Inner and Outer slums.

5.3 Monthly food expenditure of slum households

Monthly food expenditure includes expenditure on cereals, sugar and salt, milk, tea/coffee, fruit, vegetable, oil, pulses (dal), meat, fish/egg, spices and other miscellaneous food items like biscuits, cakes, soft drinks, ice cream etc. The average monthly food expenditure in Outer slum is Rs. 3815.00 with a standard deviation of Rs. 1097.32 and the average monthly food expenditure in Inner slum are Rs. 3230.87 with a standard deviation of Rs. 1022.68. The average monthly food expenditure in the total slum area (Inner and Outer slums) is Rs. 3522.93 with standard deviation Rs.1097.76. This shows that the average monthly food expenditure in households of Outer slum is higher than that in the Inner slum.

Major part of the food expenditure is incurred on cereals and the average monthly expenditure on cereals is Rs. 1898.02 in (Inner and Outer slum combined), Rs. 1777.05 in Inner slum and Rs. 2019.00 in Outer slum, followed by average monthly expenditure on pulses (dal) (Inner and Outer slums combined: Rs. 367.40, Inner slum: Rs. 323.80 and Outer slum: Rs. 411.00)

Thus it is evident that compared to the slum households in Inner slum, the slum households in Outer slum are able to spend more on food items and the reason may be that higher proportion of slum households in Outer slum earn higher monthly household income in comparison to Inner slum.

5.4 Relation between monthly food expenditure and monthly household income

Table 4 presents the relationship between monthly expenditure on food items and monthly household income

It is noticed that among the 200 households the highest proportion of 43.5 per cent households spend on food items in the range Rs.2501- Rs. 3500 followed by 35.0 per cent in the range of Rs. 3501- Rs. 5000, 13.0 per cent households spend up to Rs. 2500 and 8.5 per cent spend above Rs. 5000 on food items. Majority (78.5 per cent) spend in the range of Rs. 2501- Rs. 5000 on food items.

Among 75 households earning monthly income within Rs. 5000, 93.3 per cent spend up to Rs. 3500 on food items. Among 30 slum households earning monthly income above Rs. 10000, 53.3 per cent spend within Rs. 3501- Rs. 5000 and the remaining 46.7 per cent spend above Rs. 5000. Among 95 slum households earning monthly income Rs.5001- Rs.10000, 93.7 per cent households spend Rs.2501- Rs. 5000 on food items.

Table 4: Relation between Monthly Food Expenditure and Monthly Household Income

Slum Type	Household Monthly Income (in Rupees)	Food expenditure (in Rupees)				Total
		Up to 2500	2501-3500	3501-5000	Above 5000	
Inner	Up to 5000	21 (46.7) (87.5)	22 (48.9) (55.0)	2 (4.4) (6.9)	0 (0.0) (0.0)	45 (100.0) (45.0)
	5001-10000	3 (6.5) (12.5)	18 (39.1) (45.0)	23 (50.0) (79.3)	2 (4.3) (28.6)	46 (100.0) (46.0)
	Above 10000	0 (0.0) (0.0)	0 (0.0) (0.0)	4 (44.4) (13.8)	5 (55.6) (71.4)	9 (100.0) (9.0)
	Total	24 (24.0) (100.0)	40 (40.0) (100.0)	29 (29.0) (100.0)	7 (7.0) (100.0)	100(100.0) (100.0)
Outer	Up to 5000	2 (6.7) (100.0)	25 (83.3) (53.2)	3 (10.0) (7.3)	0 (0.0) (0.0)	30 (100.0) (30.0)
	5001-10000	0 (0.0) (0.0)	22 (44.9) (46.8)	26 (53.1) (63.4)	1 (2.0) (10.0)	49 (100.0) (49.0)
	Above 10000	0 (0.0) (0.0)	0 (0.0) (0.0)	12 (57.1) (29.3)	9 (42.9) (90.0)	21 (100.0) (21.0)
	Total	2 (2.0) (100.0)	47 (47.0) (100.0)	41 (41.0) (100.0)	10(10.0) (100.0)	100(100.0) (100.0)
Total	Up to 5000	23 (30.7) (88.5)	47 (62.7) (54.0)	5 (6.7) (7.1)	0 (0.0) (0.0)	75 (100.0) (37.5)
	5001-10000	3 (3.2) (11.5)	40 (42.1) (46.0)	49 (51.6) (70.0)	3 (3.2) (17.6)	95 (100.0) (47.5)
	Above 10000	0 (0.0) (0.0)	0 (0.0) (0.0)	16 (53.3) (22.9)	14(46.7) (82.4)	30 (100.0) (15.0)
	Total	26 (13.0) (100.0)	87 (43.5) (100.0)	70 (35.0) (100.0)	17 (8.5) (100.0)	200(100.0) (100.0)

Source: Field survey

It is thus evident that there is a direct relationship between monthly household income and food-expenditure in the slum area (Inner and Outer slums combined). This type of relationship between monthly household income and monthly food expenditure is noticed in both the Inner and Outer slums taking each type of slum separately into consideration. The reason for the direct relationship between monthly food expenditure and monthly household income in the slum area is that the slum households earn less

monthly household income and with this low income they can afford to spend major part of their income on food items. So, with the increase in monthly household income increase in monthly food expenditure is noticed.

Table 5 represents the Chi-square test for the association between monthly food expenditure and monthly household income

Table 5: Testing the Relationship between Monthly Food Expenditure and Monthly Household Income of the Households

Slum Type	Chi-Square Value	df	Asymp. Sig. (2-sided)
Inner	73.163	6	p<0.001
Outer	61.890	6	p<0.001
Total	136.933	6	p<0.001

Source: Computed from field survey data

It can be inferred from Table 5 that there is significant relationship (p<0.001) between monthly household income and food expenditure in Inner slum as well as Outer slum and also taking together both the slums. This expenditure behaviour of the slum households as far as their spending on food items is concerned reveals that majority of them are Below Poverty Line.

5.5 Monthly non-food expenditure of slum households

Monthly non-food expenditure includes expenditure on clothing, housing, transportation, medical expenses, soap/detergent, festivals, kerosene/gas/electricity/ firewood, education, films, loan repayment and miscellaneous items like mobile bill, television service charges etc. The average monthly non-food expenditure is Rs. 1774.73 with standard deviation (S.D.) of Rs.1285.00 in both the Inner and Outer slums taken together, the average monthly non-food expenditure is Rs. 1906.41 with S.D. of Rs. 1184.92 in the Outer slum area and the average monthly non-food expenditure is Rs. 1643.05 with S.D. of Rs.1371.16 in Inner slum.

Major part of the non-food expenditure is incurred on energy consumption (kerosene/gas/electricity/firewood) and the average monthly expenditure is Rs. 468.84 in (Inner and Outer slum combined), Rs. 415.80 in Inner slum and Rs. 521.87 in Outer slum, followed by average monthly expenditure on loan repayment (Inner and Outer slums combined: Rs. 373.99, Inner slum: Rs. 327.30 and Outer slum: Rs. 420.68)

This suggests that the financial condition in Outer slum is better than that of Inner slum area as the slum dwellers of Outer slum area are able to spend more on non-food items compared to those of Inner slum area.

Table 6 presents the relationship between monthly expenditure on non-food items and monthly household income

Table 6: Relation between Non-Food Expenditure and Monthly Household Income

Slum Type	Monthly Household Income (in Rupees)	Monthly Non-food expenditure (in Rupees)				Total
		Up to 1000	1001-2000	2001-3000	Above 3000	
Inner	Up to 5000	28 (62.2) (82.4)	17 (37.8) (40.5)	0 (0.0) (0.0)	0 (0.0) (0.0)	45 (100.0) (45.0)
	5001-10000	6 (13.0) (17.6)	22 (47.8) (52.4)	12 (26.1) (92.3)	6 (13.0) (54.5)	46 (100.0) (46.0)
	Above 10000	0 (0.0) (0.0)	3 (33.3) (7.1)	1 (11.1) (7.7)	5 (55.6) (45.5)	9 (100.0) (9.0)
	Total	34 (34.0) (100.0)	42 (42.0) (100.0)	13 (13.0) (100.0)	11 (11.0) (100.0)	100 (100.0) (100.0)
Outer	Up to 5000	17 (56.7) (77.3)	10 (33.3) (23.8)	3 (10.0) (14.3)	0 (0.0) (0.0)	30 (100.0) (30.0)
	5001-10000	5 (10.2) (22.7)	23 (46.9) (54.8)	13 (26.5) (61.9)	8 (16.3) (53.3)	49 (100.0) (49.0)
	Above 10000	0 (0.0) (0.0)	9 (42.9) (21.4)	5 (23.8) (23.8)	7 (33.3) (46.7)	21 (100.0) (21.0)
	Total	22 (22.0) (100.0)	42 (42.0) (100.0)	21(21.0) (100.0)	15 (15.0) (100.0)	100 (100.0) (100.0)
Total	Up to 5000	45 (60.0) (80.4)	27 (36.0) (32.1)	3 (4.0) (8.8)	0 (0.0) (0.0)	75 (100.0) (37.5)
	5001-10000	11 (11.6) (19.6)	45 (47.4) (53.6)	25 (26.3) (73.5)	14 (14.7) (53.8)	95 (100.0) (47.5)
	Above 10000	0 (0.0) (0.0)	12 (40.0) (14.3)	6 (20.0) (17.6)	12 (40.0) (46.2)	30 (100.0) (15.0)
	Total	56 (28.0) (100.0)	84 (42.0) (100.0)	34 (17.0) (100.0)	26 (13.0) (100.0)	200 (100.0) (100.0)

Source: Field survey

From Table 6, it can be interpreted that among the 200 households 28.0 per cent spend up to Rs. 1000 on non-food items, 42.0 per cent slum households spend in the range of Rs. 1001-2000, 17.0 per cent spend within Rs. 2001- Rs. 3000 and 13.0 per cent

spend above Rs. 3000. Thus the highest proportion of 42.0 per cent spend Rs. 1001- Rs. 2000 on non- food items in the slum area surveyed. In Inner slum and also in Outer slum the same situation is noticed as in both the slums the highest proportion of slum households 42.0 per cent spend within Rs. 1001- Rs. 2000 on non-food items. Among 75 households that earn monthly household income up to Rs. 5000, 60.0 per cent spend up to Rs. 1000 on non-food expenditure followed by 36.0 per cent those spend Rs.1001- Rs. 2000, 4.0 per cent households spend Rs. 2001- Rs.3000 and none spend above Rs. 3000. Among 95 households which earn a monthly household income of Rs. 5001- Rs. 10000, the highest proportion of households 47.4 per cent spend Rs. 1001- Rs. 2000 followed by 26.3 per cent households that spend Rs. 2001- Rs. 3000, 14.7 per cent households spend above Rs. 3000 and 11.6 per cent households spend up to Rs. 1000. Among 30 households that earn monthly household income above Rs. 10000, 40.0 per cent households spend above Rs. 3000 on non-food items, 40.0 per cent households spend Rs. 1001- Rs. 2000 and 20.0 per cent households spend Rs. 2001- Rs. 3000. It is evident that households belonging to the lowest income earning group (earning up to Rs. 5000) do not spend above Rs. 3000 monthly on non-food items and those in the highest income group (earning above Rs. 10000) do not spend below Rs. 1001 monthly on non-food items and hence the situation is the same in both the Inner as well as Outer slums. In both the Inner and Outer slums households earning monthly income between Rs. 5001- Rs.10000 the highest proportion of households spend Rs. 1001- Rs. 2000 on non-food items. But 4 per cent households earning up to Rs. 5000 in Outer slum are able to spend above Rs. 2000 on non-food items while none of the households in the inner slum are able to do so. The Outer slum households are spendthrift compared to Inner slum dwellers.

Table 7 represents the Chi-square test for the association between monthly non-food expenditure and monthly household income.

Table 7: Testing the Relationship between Monthly Non-Food Expenditure and Monthly Household Income of the Households

Slum Type	Chi-square Value	df	Asymp. Sig. (2-sided)
Inner	53.569	6	p<0.001
Outer	36.716	6	p<0.001
Total	85.559	6	p<0.001

Source: Computed from field survey data

It can be inferred from the Table 10 that there is significant relationship ($p<0.001$) between monthly household income and non-food expenditure in Inner slum as well as Outer slum and also taking together both the slums.

5.6 Total monthly household expenditure

The average total monthly household expenditure which includes monthly household food expenditure, monthly household non-food expenditure and monthly household expenditure on intoxicants is Rs. 5415.42 in both Inner and Outer slums taken together. The average total monthly expenditure is higher in Outer slum (Rs. 5872.31) than average total monthly expenditure in Inner slum (Rs. 4958.52) and also average monthly total expenditure in both Inner and Outer slums taken together. Variation in monthly total expenditure in Outer slum (S.D. = Rs.1968.00) is lower than that in Inner slum (S.D. = Rs. 2017.257) and also that of both Inner and Outer slums taken together (S.D. = Rs. 2039.86). It is thus evident that slum dwellers of the Outer slum area are able to spend more as a higher proportion of slum households in the Outer slum area earn higher monthly household income in comparison to the Inner slum dwellers and also there is more equality in spending than their counterpart in Inner slum.

One way ANOVA test is done to find the association between the total monthly household expenditure between Inner slum and Outer slum in Table 8.

Table 8: Testing the Variation of Average Monthly Total Household Expenditure of Inner and Outer Slums

Variation	Sum of squares	df	Mean Square	F-value	Sig.
Between Groups	41750608.205	1	41750608.205	10.513	p= 0.001
Within Groups	786290992.350	198	3971166.628		
Total	828041600.555	199			

Source: Computed from field survey data

Table 8 indicates that the F-value of 10.513 is significant at 1 per cent level and there is significant variation of average total monthly household expenditure between Inner and Outer slums (p= 0.001).

5.7 Expenditure on education and monthly income of households

Table 9 presents the relationship between monthly expenditure on education and monthly income of households

Table 9: Monthly Expenditure on Education and Monthly Income of Households

Slum Type	Household Income (in Rupees)	Expenditure on Education (in Rupees)				Total
		0-250	251- 500	501-1000	>1000	
Inner	Up to 5000	32 (71.1) (58.2)	11(24.4) (44.0)	2 (4.4) (18.2)	0 (0.0) (0.0)	45(100.0) (45.0)
	5001-10000	18 (39.1) (32.7)	13 (28.3) (52.0)	7 (15.2) (63.6)	8 (17.4) (88.9)	46 (100.0) (46.0)
	Above 10000	5 (55.6) (9.1)	1 (11.1) (4.0)	2 (22.2) (18.2)	1 (11.1) (11.1)	9 (100.0) (9.0)
	Total	55 (55.0) (100.0)	25 (25.0) (100.0)	11(11.0) (100.0)	9 (9.0) (100.0)	100 (100.0) (100.0)
Outer	Up to 5000	23 (76.7) (40.4)	5 (16.7) (20.0)	1 (3.3) (9.1)	1 (3.3) (14.3)	30 (100.0) (30.0)
	5001-10000	26 (53.1) (45.6)	15 (30.6) (60.0)	4 (8.2) (36.4)	4 (8.2) (57.1)	49 (100.0) (49.0)
	Above 10000	8 (38.1) (14.0)	5 (23.8) (20.0)	6 (28.6) (54.5)	2 (9.5) (28.6)	21 (100.0) (21.0)
	Total	57 (57.0) (100.0)	25 (25.0) (100.0)	11(11.0) (100.0)	7 (7.0) (100.0)	100 (100.0) (100.0)
Total	Up to 5000	55 (73.3) (49.1)	16 (21.3) (32.0)	3 (4.0) (13.6)	1 (1.3) (6.3)	75 (100.0) (37.5)
	5001-10000	44 (46.3) (39.3)	28 (29.5) (56.0)	11(11.6) (50.0)	12 (12.6) (75.0)	95 (100.0) (47.5)
	Above 10000	13 (43.3) (11.6)	6 (20.0) (12.0)	8 (26.7) (36.4)	3 (10.0) (18.8)	30 (100.0) (15.0)
	Total	112 (56.0) (100.0)	50 (25.0) (100.0)	22(11.0) (100.0)	16 (8.0) (100.0)	200 (100.0) (100.0)

Source: Field survey

From Table 9, it is noticed that among 200 households the highest proportion (56 per cent) of households spend up to Rs. 250 per month on education, 25 per cent spend Rs. 251- Rs. 500 on education, 11 per cent spend Rs. 501- Rs. 1000 on education and 8 per cent spend above Rs. 1000 on education. Among 112 households that spend up to Rs. 250 on education the highest proportion (49.1 per cent) of households earn monthly household income up to Rs. 5000, 39.3 per cent earn Rs. 5001- Rs. 10000, 11.6 per cent earn above Rs. 10000. Among 50 households that spend in the range of Rs. 251- Rs. 500 on education the highest proportion (56 per cent) of households earn

monthly household income within Rs. 5001- Rs. 10000, followed by 32 per cent earning up to Rs. 5000, and 12 per cent earn above Rs. 10000. Among 22 households that spend in the range of Rs. 501- Rs. 1000 on education the highest proportion (50 per cent) of households earn monthly household income within Rs. 5001- Rs. 10000, followed by 36.4 per cent earn above Rs. 10000 and 13.6 per cent earn up to Rs. 5000. Among 16 slum households that spend above Rs. 1000 on education per month, the highest proportion 75 per cent households earn a monthly household income within Rs. 5001- Rs. 10000, followed by 18.8 per cent earning above Rs. 10000, and 6.3 per cent earning up to Rs. 5000. It is thus evident that the slum dwellers spend less proportion of their income on education, even among the 30 slum households earning above Rs. 10000 monthly, the highest proportion (43.3 per cent) of households spend only up to Rs. 250 monthly on education. Expenditure on education by slum dwellers is low.

There is a positive relationship between monthly expenditure on education and monthly household income in the slum area; households having higher monthly household income spend more on education and vice versa. In both types of slums, similar situation is noticed but it is noticed that slum dwellers in Outer slum spend less on education compared to their counterpart in Inner slum as 55 percent in Inner slum and 57 per cent slum dwellers in Outer slum spend up to Rs. 250 monthly on education and 9 per cent in Inner slum and 7 per cent in Outer slum spend above Rs. 1000 per month on education and the reason is the outlook of the people of the two slum areas as the Inner slum-dwellers being closer to the core of the city are more aware of the importance of education in life and are also more influenced by the elite urbanites in comparison to their counterpart in Outer slum area.

Table 10 below represents the Chi-square test for the association between monthly expenditure on education and monthly household income.

Table 10: Testing the Relationship between Monthly Expenditure on Education and Monthly Household Income of the Households

Slum Type	Chi-square Value	df	Asymp. Sig. (2-sided)
Inner	16.352	6	p=0.012
Outer	13.666	6	p=0.034
Total	24.866	6	P<0.001

Source: Computed from Field Survey Data

It can be inferred from Table 10 that there is significant relationship between monthly household income and monthly household expenditure on education in Inner

slum (p=0.012) as well as Outer slum (p=0.034) and also taking together both the slums (p<0.001). This implies that monthly expenditure on education increases with the increase in the monthly household income in Inner, Outer and total (Inner plus Outer) slum area.

6.0 Conclusion

The analysis of the slum area of Siliguri Municipal Corporation is done by dividing the slum area into Inner and Outer slums and also taking the total slum area (Inner and Outer slums combined). It is evident that all slum dwellers are living below the poverty line and hence are in poverty. The monthly household income taken into account is the average monthly household income as the majority of the slum dwellers work in informal sector and do not get regular income. Though the income level is low in both the slums but the slum dwellers in Outer slum has higher monthly household income than their counterpart in Inner slum. The monthly per capita income is higher in Outer slum compared to Inner slum. It is found by using the Lorenz curve that inequality in monthly household income is slightly higher in Outer slum compared to Inner slum and thus the income is more unequally distributed in Outer slum compared to Inner slum. Religion-wise it is found that the proportion of Hindu households earning higher monthly household income is higher compared to the Muslim households in the slum area as it is noticed that in majority of Muslim households the male member is the sole earner while in the Hindu households the women also support the family along with their male counterpart but both Hindus and Muslims have higher monthly household income in Outer slum compared to their counterpart in Inner slum.

The poor earnings of the slum households have their impact on the number of rooms possessed by these households as a major proportion (55 per cent) of households have only one room to live in. The condition of Outer slum is better in comparison to Inner slum in this regard as the proportion of households having three rooms is higher in Outer slum and also proportion of households having one room in Outer slum is lower in comparison to households in Inner slum. The reasons for better housing in Outer slum in comparison to Inner slum is that the Inner slums lack in space and are congested or overcrowded compared to Outer slums and slum dwellers of Outer slum are richer compared to those living in Inner slums. A direct relationship is noticed between numbers of rooms in households and monthly household income in the slum area.

Major proportion of food expenditure is incurred on cereals and major proportion of non-food expenditure is incurred on electricity and consumption of fuel. A

direct relationship between monthly household income and expenditure on food items, non-food items, total expenditure (include food expenditure, non- food expenditure and expenditure on intoxicants) exists in the slum area. In the slum area with the increase in monthly household income, there is an increase in monthly household total expenditure. It is also found that the slum dwellers of Outer slum spend comparatively more than those in Inner slum on food items, and non-food items. Evidence regarding expenditure on the two important areas (health and education) on which human development is a dependent show that spending on these two areas is very less in the slum area. Expenditure on health as well as education by households is lower in Outer slum compared to Inner slum. The health condition of the slum dwellers of the Outer slum area is comparatively better than the Inner slum dwellers. The slum dwellers of the Inner slum being more close to the heart of the city are more aware of the importance of education and health in life and are also more influenced by the elite urbanites in comparison to their counterparts in Outer slum area.

Thus it can be concluded that overall the slum area of Siliguri Municipal Corporation depicts a gloomy picture where the slum dwellers are having a low standard of living as portrayed by the income and consumption pattern of the slum dwellers. Level of human development is also low in this area as revealed by the expenditure pattern on healthcare and education by the slum dwellers. The living condition of Inner slum dwellers is poorer in comparison to Outer slum dwellers.

Slum-dwellers are to be informed of the various skill developments and job oriented programmes by the government and government should try to introduce more of such programmes of skill development so that the slum dwellers are able to earn better income. Since the poor slum dwellers cannot afford to spend much time and money on formal education as they have to start earning as early as possible to support the family and add to the family's meagre income, vocational education and job-oriented educational programmes will be of much help to them.

References

Agnihotri, P. (1994). *Poverty amidst prosperity - survey of slums.* New Delhi: M. D. Publications Pvt. Ltd.

Bhattacharya, B. (1996). *Slums and pavement dwellers of Calcutta metropolis*. Calcutta, West Bengal: Aparna Book Distributors.

Choudhary, N. (2017). India's slip on global hunger index. *Economic and Political Weekly, 52*(34), 23-25.

Dhadave, M. S. (1989). *Sociology of slum*. New Delhi: Archives Books.

Floro, M. S. & Swain, R. B. (2013). Food security, gender, and occupational choice among urban low-income households. *World Development, 42*(C), 89–99.

Government of West Bengal (2015). City development plan for Siliguri- 2041. Final Report, Ministry of Urban Development, April 2015. Retrieved from http://siligurismc.in/userfiles/file/siliguri-CDP-final-report-29April15.pdf accessed on 06.04.2018.

Halder, A. (1995). Slum dwellers and rural-urban linkages - a case study of Calcutta. In P. Roy and S. D. Gupta (Ed.), *Urbanization and slums*. New Delhi: Har-Anand Publications.

Jha, S. S. (1986). *Structure of urban poverty*. Bombay, Maharashtra: Popular Prakashan.

Kumar, N. & Aggarwal, S. C. (2003). Patterns of consumption and poverty in Delhi slums. *Economic and Political Weekly, 38*(50), 5294-5300.

Letsch, M. (2001). Poor women in a Bangalore slum habitat: a perspective. In Schenk M., Prasanta, S. & Majumdar, I. (Ed.), *Rural migrants in an urban setting (a study of two shanty colonies in the capital city of India)*. Delhi: Hindustan Publishing Corporation.

Mahmood, R., Essa, S. M. & Jahan, T. (2015). Mothers' breastfeeding practices and nutritional status in the slums of Bangladesh: A study based on Khulna city. *SK International Journal of Multidisciplinary Research Hub, 2*(4), 7-18.

Majumdar, P. S. & Majumdar, I. (1978). *Rural migrants in an urban setting, (A study of two shanty colonies in the capital city of India)*. Delhi: Hindustan Publishing Corporation.

Mitra, A. (1994). *Urbanisation, slums, informal sector, employment and poverty*. Delhi: B. R. Publishing Corporation.

NFHS-3, (2009). Health and living conditions in eight Indian cities, ministry of health and family welfare, Govt. of India. International Institute for Population Sciences, Deonar, Mumbai, India.

Pramanik, A. (2015). Strategies, opportunities and living outcome of the urban poor: a study of the squatter settlements in Siliguri municipal corporation area (SMCA) of West Bengal in India. Retrieved from http://nordicsouthasianet.eu/sites/default/files/pramanik_full_paper_for_sasnet_conference_at_lund_university_to_be_held_on_20-22nd_may_sweden.pdf accessed on 15.03.2017.

Roy, S. K. (1995). Life in Calcutta slums. In R. Prodipto & D. Gupta, *Shangon, Urbanization and Slums*. New Delhi: Har-Anand Publications.

Siliguri Municipal Corporation. (2004). *Siliguri Municipal Corporation – Development, Endeavour & Prospects: 1999 – 2003*, Siliguri.

United Nations Human Settlements Programme (UN-HABITAT) (2003). Slums of the World: The face of urban poverty in the new millennium? Working Paper, Global Urban Observatory. Retrieved from https://unhabitat.org/slums-of-the-world-the-face-of-urban-poverty-in-the-new-millennium.

Venkatarayappa, K. N (1972). *Slums - a study in urban problem*. New Delhi and Jullundur: Sterling Publishers (P) Ltd.