

CHAPTER 6:

RURAL-URBAN INTERACTION IN THE STUDY AREA

6.1 Introduction

Rural-urban interaction is an obvious process associated with rapid urbanization. With the growth of any large urban centre the demand for primary goods increase which is usually supplied by the surrounding rural areas. Moreover, as an urban centre grows, its importance increase which is associated with improvement in various facilities related to education, health, infrastructure, recreation, trade and commerce and employment opportunities. This in a way attract the rural population from the surrounding area to take benefits of these improved facilities by interacting with the urban centre. Any serious study on rural-urban interaction has tried to measure the volume of interaction using some quantitative techniques. Ellefsen (1962) studying the rural-urban interaction for Delhi, Madras, Hyderabad, Bombay, and Baroda used demographic, socioeconomic, and geographic characteristics to highlight the intricacy of the structure of the metropolitan region and relationships between cities and their surrounding areas. R.L. Singh (1964) used bus services and newspaper circulation along with the supply of milk, cereals and vegetables in his study on the "umland" of Banaras. M. Alam (1965) in his study on Hyderabad defined the boundary of its metropolitan district based on 'primary' and 'reflective' features which include some urban services offered to rural people and the socio-economic characteristics of the rural area. V.L.S.P. Rao & V.K. Tewari (1974) in their study on Bangalore used population variables, landuse characteristics and regularity of bus services to identify the hinterland of Bangalore. S. Nangia (1976) in her study on the Delhi Metropolitan Area used settlement pattern and population density to identify the zones of interaction for Delhi. R. Kaur (1995) used percentage of rural non-agricultural workers, percentage of villages connected by pucca roads, productivity of agriculture per worker, density of towns per 10,000 sq. km. and the proportion of intra-district migrants to analyze the pattern of rural-urban interaction.

The most common technique to quantify the rural-urban interaction has been by analyzing the frequency of visit to urban areas. The major objective of this chapter will be to study the pattern of rural-urban interaction and also to quantify the volume of interaction. Since rural-urban interaction takes place for various purpose so in this section, rural-urban interaction will be measured based on each theme of interaction which are as follows: economic interaction, agricultural interaction, educational interaction, health interaction, interaction for entertainment and administration or organizational interaction.

6.2 Rural-Urban interaction in the study area

For analyzing the level of interaction, frequency of visit to Siliguri Municipal Corporation for various purposes listed above will be measured. As mentioned earlier, for measuring the level of interaction between the villages of Siliguri sub-division with Siliguri Municipal Corporation, three villages were randomly selected from each size-class category of each zone (zones were delineated on the basis of distance from the outer boundary of Siliguri Municipal Corporation). By this process total 55 villages were selected to measure the rural-urban interaction in the study area. Out of these 55 villages, 18 villages were from Zone I, 18 villages were from Zone II and 19 villages were from Zone III respectively. 10 percent households from each of these 55 villages were randomly selected for analyzing the level of interaction. However, for villages from smaller size-class category where the total number of households were very less this percentage went up to 60 to 70 percent of the total number of households in the village. In this way a total of 2586 households were surveyed from the selected 55 villages. The households of each village were classified on the basis of their frequency of visit to Siliguri Municipal Corporation. The households were classified based on their percentage as follows:

1. Visits Siliguri Municipal Corporation daily.
2. Visits Siliguri Municipal Corporation 3-4 times per week.
3. Visits Siliguri Municipal Corporation 1-2 times per week.
4. Visits Siliguri Municipal Corporation 1-2 times per month.
5. Visits Siliguri Municipal Corporation 1-2 times per six months.
6. Visits Siliguri Municipal Corporation 1-2 times per year.
7. Never visit Siliguri Municipal Corporation.

Since, the households which visits Siliguri daily have higher interaction compared to the rest of the categories. Therefore, maximum weightage will be given to them and weightage will decrease subsequently with decline in the frequency of visit to Siliguri. Accordingly, the weightage for calculating the composite index of interaction will be as follows:

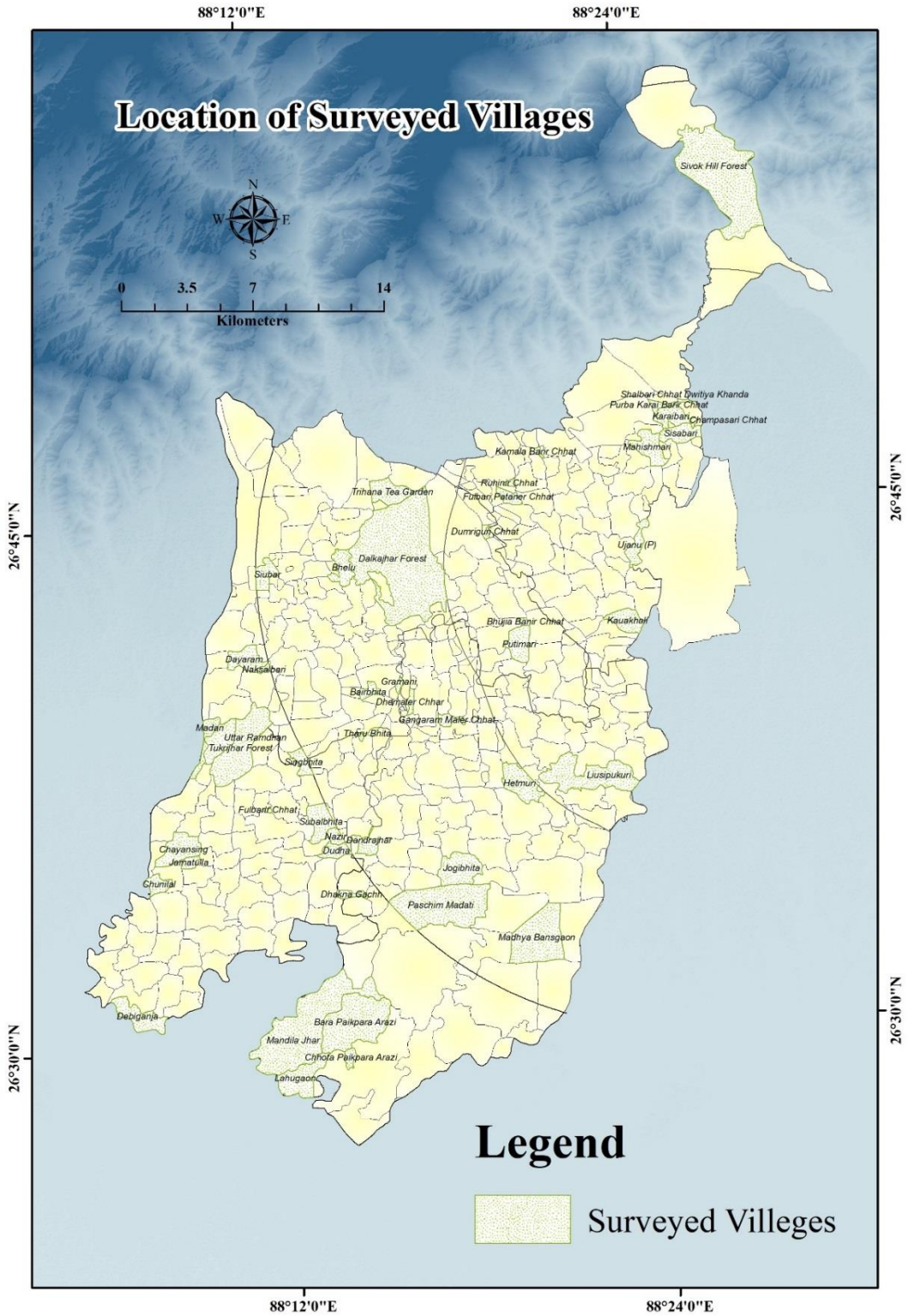
Table No. 6.1 Frequency of visit to Siliguri Municipal Corporation	
Frequency of visit to Siliguri Municipal Corporation	Weightage
Visits Siliguri Municipal Corporation daily.	7
Visits Siliguri Municipal Corporation 3-4 times per week.	6
Visits Siliguri Municipal Corporation 1-2 times per week.	5
Visits Siliguri Municipal Corporation 1-2 times per month.	4
Visits Siliguri Municipal Corporation 1-2 times per six months.	3
Visits Siliguri Municipal Corporation 1-2 times per year.	2
Never visit Siliguri Municipal Corporation.	1

The composite index of interaction for a village will be calculated by multiplying the percentage of household in each category (based on frequency of visit) with their respective weightage and finally summing them up. For example,

The composite index of economic interaction for Champasari Chhat = $80*7 + 20*6 + 0*5 + 0*4 + 0*3 + 0*2 + 0*1 = 680$.

In this way the composite index of interaction for the designated purposes has been calculated for the selected villages under each zone with Siliguri Municipal Corporation.

Map No. 6.1 Location of the surveyed villages



Source: Prepared by the Researcher.

Zone	Name of the Villages	Road Distance form SMC	Percentage of household							Composite Index of Interaction
			Daily	3- 4 times per week	1-2 times per week	1-2 times per month	1-2 times per six month	1-2 times per year	Never Visited	
I	Champasari Chhat	11.5	80.00	20.00	0.00	0.00	0.00	0.00	0.00	680.00
	Ruhini Chhat	14.3	70.00	20.00	10.00	0.00	0.00	0.00	0.00	660.00
	Salbari Chhat Pratham Khanda	8	70.00	30.00	0.00	0.00	0.00	0.00	0.00	670.00
	Fulbari Pataner Chhat	15.2	70.00	30.00	0.00	0.00	0.00	0.00	0.00	670.00
	Kamala barir Chhat	12.7	60.00	40.00	0.00	0.00	0.00	0.00	0.00	660.00
	Purba Karai Barir chhat	10.9	60.00	30.00	10.00	0.00	0.00	0.00	0.00	650.00
	Lalsara Chhat	18.5	45.45	54.55	0.00	0.00	0.00	0.00	0.00	645.45
	Ujanu	4.3	93.75	6.25	0.00	0.00	0.00	0.00	0.00	693.75
	Dumriguri Chhat	16	80.95	14.29	4.76	0.00	0.00	0.00	0.00	676.19
	Sisabari	9.8	76.19	23.81	0.00	0.00	0.00	0.00	0.00	676.19
	Karaibari	10.7	66.67	25.00	8.33	0.00	0.00	0.00	0.00	658.33
	Putimari	12.7	83.33	16.67	0.00	0.00	0.00	0.00	0.00	683.33
	Rajpairi	11.1	78.05	19.51	2.44	0.00	0.00	0.00	0.00	675.61
	Bhujia Banir Chhat	13	72.34	23.40	4.26	0.00	0.00	0.00	0.00	668.09
	Bara Pathuram	9.5	83.05	10.17	6.78	0.00	0.00	0.00	0.00	676.27
	Liusipukuri	16.5	73.58	20.75	5.66	0.00	0.00	0.00	0.00	667.92
Mahishmari	9.4	62.50	31.25	6.25	0.00	0.00	0.00	0.00	656.25	
Kauakhali	5.4	94.77	5.23	0.00	0.00	0.00	0.00	0.00	694.77	
II	Tharu Bhita	25.6	40.00	60.00	0.00	0.00	0.00	0.00	0.00	640.00
	Gangaram Maler Chhat	24.1	30.00	70.00	0.00	0.00	0.00	0.00	0.00	630.00
	Bairbhita	24.9	40.00	60.00	0.00	0.00	0.00	0.00	0.00	640.00
	Grammanir Chhat	24.3	30.00	70.00	0.00	0.00	0.00	0.00	0.00	630.00

	Sivok Hill Forest	23.2	20.00	50.00	30.00	0.00	0.00	0.00	0.00	590.00
	Grammani	24.1	40.00	40.00	20.00	0.00	0.00	0.00	0.00	620.00
	Dalkajhar Forest	21.8	40.00	50.00	10.00	0.00	0.00	0.00	0.00	630.00
	Bhelu	24.1	45.45	45.45	9.09	0.00	0.00	0.00	0.00	636.36
	Dhemaler Chhar	23.3	40.00	46.67	13.33	0.00	0.00	0.00	0.00	626.67
	Siubar	29.4	42.11	31.58	26.32	0.00	0.00	0.00	0.00	615.79
	Dandrajhar	33.3	36.36	31.82	31.82	0.00	0.00	0.00	0.00	604.55
	Chamtaguri Chhat	10.1	66.67	22.22	11.11	0.00	0.00	0.00	0.00	655.56
	Trihana Tea Garden	22.9	32.50	42.50	25.00	0.00	0.00	0.00	0.00	607.50
	Jogibhita	29.1	40.00	24.44	35.56	0.00	0.00	0.00	0.00	604.44
	Hetmuri	19.4	43.48	23.91	32.61	0.00	0.00	0.00	0.00	610.87
	Uttar Bansaon Kismat	23	43.12	32.11	22.02	0.00	0.00	0.00	2.75	607.34
	Madhya Bansaon	25.6	51.63	19.02	26.09	2.17	0.00	0.00	1.09	615.76
	Pashchim Madati	37.1	44.28	26.57	22.14	5.90	0.37	0.00	1.85	606.64
III	Tukriajhar Forest	34.3	20.00	50.00	10.00	0.00	0.00	0.00	20.00	510.00
	Dhakna Gachh	32.7	30.00	30.00	10.00	0.00	0.00	0.00	30.00	470.00
	Fulbarir Chhat	34.9	20.00	60.00	0.00	0.00	0.00	0.00	20.00	520.00
	Madan	32.2	30.00	20.00	20.00	0.00	0.00	0.00	30.00	460.00
	Nazir	38.2	20.00	50.00	10.00	0.00	0.00	0.00	20.00	510.00
	Dudha	34.3	20.00	20.00	30.00	0.00	0.00	0.00	30.00	440.00
	Jamatulla	38	18.18	27.27	27.27	0.00	0.00	0.00	27.27	454.55
	Singbhita	32.8	27.27	18.18	27.27	0.00	0.00	0.00	27.27	463.64
	Chhota Paikpara Arazi	40.7	28.57	21.43	28.57	0.00	0.00	0.00	21.43	492.86
	Chunilal	44.8	40.91	27.27	18.18	0.00	0.00	0.00	13.64	554.55
	Subalbhita	35.6	36.36	22.73	18.18	13.64	0.00	0.00	9.09	545.45
Naksalbari	28.2	38.89	36.11	11.11	5.56	0.00	0.00	8.33	575.00	
Debiganja	47.1	33.33	30.95	19.05	7.14	0.00	0.00	9.52	552.38	

Chayansing	37.4	31.82	27.27	27.27	4.55	0.00	0.00	9.09	550.00
Dayaram	29.3	28.57	41.43	17.14	5.71	0.00	0.00	7.14	564.29
Mandila Jhar	44.5	30.53	32.06	20.61	9.16	0.00	0.00	7.63	553.44
Bara Paikpara Arazi	41.2	31.54	22.15	28.86	10.74	0.00	0.00	6.71	547.65
Uttar Ramdhan	32.3	29.80	23.18	22.52	13.91	0.00	0.00	10.60	526.49
Lahugaon	44	28.06	23.32	21.74	15.02	0.00	0.00	11.86	517.00

Source: Computed by the Researcher.

Interaction between rural and urban area for economic purpose is of paramount importance. Economic interaction includes interaction for financial purpose, employment purpose, trade and commerce purpose and daily shopping purpose. Table 6.2 shows the rural-urban interaction among the households of the selected 55 villages from three zones with Siliguri Municipal Corporation for economic purpose. According to the table, households of the villages under Zone I interact very frequently for economic purpose with Siliguri Municipal Corporation. From Zone I, the highest interaction for economic purpose was observed by the people living in Kauakhali village, while the lowest was from Lalsara Chhat village. Similarly from Zone II, the highest interaction for economic purpose was observed by people living in Chamtaguri Chhat, while the lowest was from Sivok Hill Forest. In general the interaction for economic purpose has declined considerably for villages located in Zone II compared to villages located in Zone I. Within Zone III, the highest interaction for economic purpose was observed by people living in Naksalbari village, while the lowest was by people living in Dudha village. A general observation from the table is that interaction for economic purpose is highest with Siliguri Municipal Corporation by the villages located in Zone I, which subsequently decrease for Zone II and Zone III respectively.

Simple bi-variate regression equation has been calculated among the 55 selected villages with their road distance from Siliguri Municipal Corporation and their composite index of interaction for economic purpose (Fig. 6.1). It is evident from the figure that there is a negative relationship between the road distance of any village from Siliguri Municipal Corporation and their composite index of interaction for economic purpose. This signifies that with increase in distance of a village from Siliguri Municipal Corporation, its interaction with Siliguri Municipal Corporation for economic purposes decreases. The coefficient of determination calculated shows a value of 0.6823, which means that around 68% of variation

in composite index of interaction for economic purposes among the villages in the study area can be explained by their variation in distance from Siliguri Municipal Corporation.

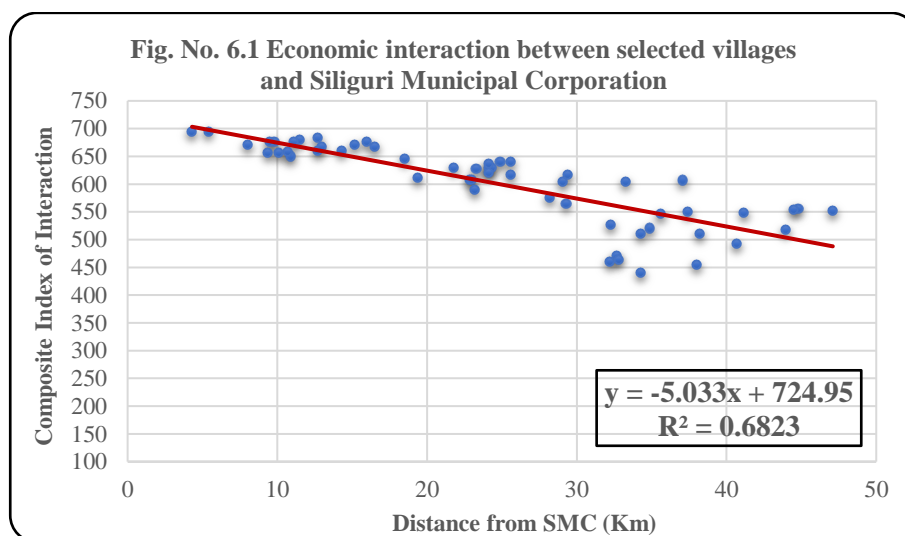


Table No. 6.3 Agricultural interaction between selected villages and Siliguri Municipal Corporation

Zone	Name of the Villages	Distance form SMC (Km)	Households Availing Agricultural Interaction							Composite Index of Interaction
			Daily	3- 4 times per week	1-2 times per week	1-2 times per month	1-2 times per six month	1-2 times per year	Never Visited	
I	Champasari Chhat	11.5	60.00	20.00	10.00	0.00	0.00	0.00	10.00	600.00
	Ruhini Chhat	14.3	40.00	40.00	20.00	0.00	0.00	0.00	0.00	620.00
	Salbari Chhat Pratham Khanda	8	40.00	50.00	0.00	0.00	0.00	0.00	10.00	590.00
	Fulbari Pataner Chhat	15.2	50.00	40.00	0.00	0.00	0.00	0.00	10.00	600.00
	Kamala barir Chhat	12.7	40.00	60.00	0.00	0.00	0.00	0.00	0.00	640.00
	Purba Karai Barir chhat	10.9	50.00	40.00	10.00	0.00	0.00	0.00	0.00	640.00
	Lalsara Chhat	18.5	45.45	36.36	9.09	0.00	0.00	0.00	9.09	590.91
	Ujanu	4.3	68.75	18.75	6.25	0.00	0.00	0.00	6.25	631.25
	Dumriguri Chhat	16	71.43	14.29	9.52	0.00	0.00	0.00	4.76	638.10
	Sisabari	9.8	57.14	33.33	4.76	0.00	0.00	0.00	4.76	628.57
Karaibari	10.7	54.17	20.83	12.50	4.17	0.00	0.00	8.33	591.67	

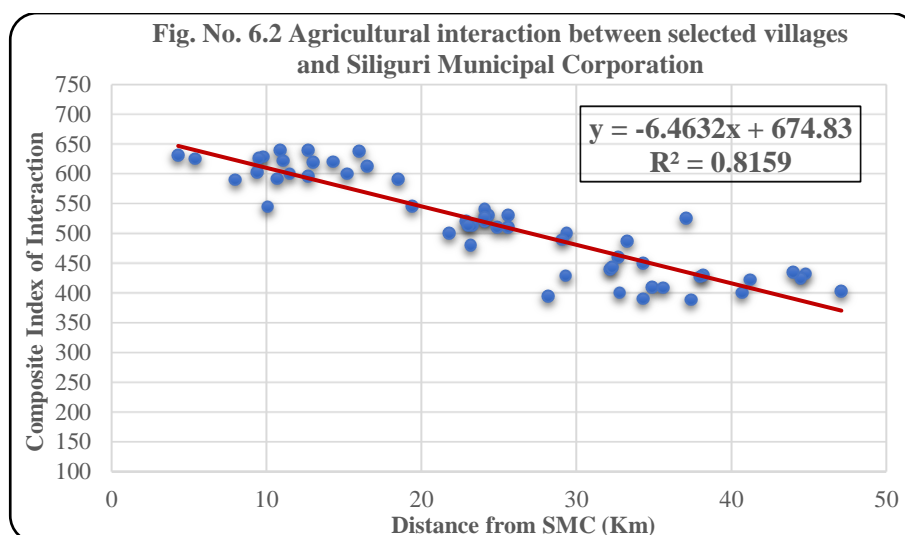
	Putimari	12.7	62.50	12.50	8.33	8.33	0.00	0.00	8.33	595.83
	Rajpauri	11.1	63.41	24.39	4.88	0.00	0.00	0.00	7.32	621.95
	Bhujia Banir Chhat	13	61.70	23.40	6.38	2.13	0.00	0.00	6.38	619.15
	Bara Pathuram	9.5	69.49	11.86	8.47	5.08	0.00	0.00	5.08	625.42
	Liusipukuri	16.5	59.43	22.64	6.60	5.66	0.00	0.00	5.66	613.21
	Mahishmari	9.4	54.69	25.78	10.16	1.56	0.00	0.00	7.81	602.34
	Kauakhali	5.4	66.67	13.73	11.11	3.92	0.00	0.00	4.58	624.84
II	Tharu Bhita	25.6	30.00	20.00	30.00	10.00	0.00	0.00	10.00	530.00
	Gangaram Maler Chhat	24.1	20.00	30.00	30.00	10.00	0.00	0.00	10.00	520.00
	Bairbhita	24.9	20.00	30.00	20.00	20.00	0.00	0.00	10.00	510.00
	Grammanir Chhat	24.3	0.00	40.00	50.00	10.00	0.00	0.00	0.00	530.00
	Sivok Hill Forest	23.2	10.00	20.00	40.00	20.00	0.00	0.00	10.00	480.00
	Grammani	24.1	20.00	40.00	30.00	0.00	0.00	0.00	10.00	540.00
	Dalkajhar Forest	21.8	10.00	40.00	30.00	10.00	0.00	0.00	0.00	500.00
	Bhelu	24.1	18.18	27.27	45.45	0.00	0.00	0.00	9.09	527.27
	Dhemaler Chhar	23.3	13.33	46.67	20.00	6.67	0.00	0.00	13.33	513.33
	Siubar	29.4	21.05	31.58	21.05	10.53	0.00	0.00	15.79	500.00
	Dandrajhar	33.3	18.18	22.73	31.82	9.09	4.55	0.00	13.64	486.36
	Chamtaguri Chhat	10.1	44.44	18.52	18.52	3.70	0.00	0.00	14.81	544.44
	Trihana Tea Garden	22.9	25.00	32.50	20.00	7.50	2.50	0.00	12.50	520.00
	Jogibhita	29.1	8.89	33.33	42.22	0.00	0.00	0.00	15.56	488.89
	Hetmuri	19.4	36.96	23.91	19.57	8.70	0.00	0.00	10.87	545.65
Uttar Bansgaon Kismat	23	27.52	25.69	22.94	8.26	1.83	0.00	13.76	513.76	
Madhya Bansgaon	25.6	26.09	21.74	30.98	5.43	2.17	0.00	13.59	509.78	

	Pashchim Madati	37.1	20.30	40.59	19.93	4.43	3.69	0.00	11.07	525.09
III	Tukriajhar Forest	34.3	0.00	10.00	60.00	20.00	0.00	0.00	10.00	450.00
	Dhakna Gachh	32.7	0.00	10.00	70.00	10.00	0.00	0.00	10.00	460.00
	Fulbarir Chhat	34.9	0.00	10.00	50.00	20.00	0.00	0.00	20.00	410.00
	Madan	32.2	0.00	20.00	60.00	0.00	0.00	0.00	20.00	440.00
	Nazir	38.2	0.00	10.00	70.00	0.00	0.00	0.00	20.00	430.00
	Dudha	34.3	0.00	20.00	40.00	10.00	0.00	0.00	30.00	390.00
	Jamatulla	38	0.00	9.09	63.64	9.09	0.00	0.00	18.18	427.27
	Singbhita	32.8	0.00	9.09	63.64	0.00	0.00	0.00	27.27	400.00
	Chhota Paikpara Arazi	40.7	0.00	14.29	57.14	0.00	0.00	0.00	28.57	400.00
	Chunilal	44.8	0.00	9.09	68.18	4.55	0.00	0.00	18.18	431.82
	Subalbhita	35.6	0.00	13.64	50.00	13.64	0.00	0.00	22.73	409.09
	Naksalbari	28.2	0.00	11.11	47.22	16.67	0.00	0.00	25.00	394.44
	Debiganja	47.1	0.00	14.29	45.24	16.67	0.00	0.00	23.81	402.38
	Chayansing	37.4	0.00	11.36	47.73	13.64	0.00	0.00	27.27	388.64
	Dayaram	29.3	0.00	8.57	62.86	11.43	0.00	0.00	17.14	428.57
	Mandila Jhar	44.5	0.00	19.08	45.80	15.27	0.00	0.00	19.85	424.43
	Bara Paikpara Arazi	41.2	0.00	16.78	48.32	14.77	0.00	0.00	20.13	421.48
Uttar Ramdhan	32.3	0.00	26.49	49.67	3.97	0.00	0.00	19.87	443.05	
Lahugaon	44	0.00	11.86	55.34	17.79	0.00	0.00	15.02	433.99	
Source: Computed by the Researcher										

Interaction between rural and urban area for agricultural purpose is also very important. Surplus agricultural commodities produced in the rural areas are sold in urban markets. Agricultural interaction includes interaction for agricultural commodities, fruits, vegetables, dairy products and agricultural inputs. Table 6.3 shows the rural-urban interaction among the

households of the selected 55 villages from three zones with Siliguri Municipal Corporation for agricultural purpose. According to the table, households of the villages under Zone I interact very frequently for agricultural purpose with Siliguri Municipal Corporation. From Zone I, the highest interaction for agricultural purpose was observed by the people living in Dumriguri Chhat village, while the lowest was from Salbari Chhat Pratham Khanda village. Similarly, from Zone II, the highest interaction for agricultural purpose was observed by people living in Hetmuri, while the lowest was from Sivok Hill Forest. Like economic interaction, the interaction for agricultural purpose has declined considerably for villages located in Zone II compared to villages located in Zone I. Within Zone III, the highest interaction for agricultural purpose was observed by people living in Dhakna Gachh village, while the lowest was by people living in Chayansing village. A general observation from the table is that interaction for agricultural purpose is highest with Siliguri Municipal Corporation by the villages located in Zone I, which subsequently decrease for Zone II and Zone III respectively. This trend is quite similar to the one observed for interaction due to economic purpose. However, interaction for agricultural purpose with the villages in the study area and Siliguri Municipal Corporation is relatively less compared to that of interaction for economic purpose.

Simple bi-variate regression equation has been calculated among the 55 selected villages with their road distance from Siliguri Municipal Corporation and their composite index of interaction for agricultural purpose (Fig. 6.2). It is evident from the figure that there is a negative relationship between the road distance of any village from Siliguri Municipal Corporation and their composite index of interaction for agricultural purpose. This signifies that with increase in distance of a village from Siliguri Municipal Corporation, its interaction with Siliguri Municipal Corporation for agricultural purposes decreases. The coefficient of determination calculated shows a value of 0.8159, which means that around 81% of variation in composite index of interaction for agricultural purposes among the villages in the study area can be explained by their variation in distance from Siliguri Municipal Corporation.

**Table No. 6.4 Educational interaction between selected villages and Siliguri Municipal Corporation**

Zone	Name of the Villages	Distance form SMC (Km)	Households Availing Educational Interaction							Composite Index of Interaction
			Daily	3- 4 times per week	1-2 times per week	1-2 times per month	1-2 times per six month	1-2 times per year	Never Visited	
I	Champasari Chhat	11.5	50.00	40.00	0.00	0.00	0.00	0.00	10.00	600.00
	Ruhini Chhat	14.3	40.00	40.00	0.00	0.00	0.00	0.00	20.00	540.00
	Salbari Chhat Pratham Khanda	8	60.00	30.00	10.00	0.00	0.00	0.00	0.00	650.00
	Fulbari Pataner Chhat	15.2	60.00	20.00	20.00	0.00	0.00	0.00	0.00	640.00
	Kamala barir Chhat	12.7	40.00	50.00	0.00	0.00	0.00	0.00	10.00	590.00
	Purba Karai Barir chhat	10.9	50.00	20.00	20.00	0.00	0.00	0.00	10.00	580.00
	Lalsara Chhat	18.5	36.36	27.27	0.00	0.00	0.00	0.00	27.27	445.45
	Ujanu	4.3	75.00	12.50	0.00	0.00	0.00	0.00	12.50	612.50
	Dumriguri Chhat	16	71.43	0.00	23.81	0.00	0.00	0.00	4.76	623.81
	Sisabari	9.8	71.43	23.81	0.00	0.00	0.00	0.00	4.76	647.62
	Karaibari	10.7	58.33	25.00	12.50	0.00	0.00	0.00	4.17	625.00
	Putimari	12.7	75.00	0.00	16.67	0.00	0.00	0.00	8.33	616.67
	Rajpairi	11.1	68.29	24.39	2.44	0.00	0.00	0.00	4.88	641.46
Bhujia Banir Chhat	13	63.83	21.28	2.13	0.00	0.00	0.00	12.77	597.87	

	Bara Pathuram	9.5	67.80	16.95	6.78	1.69	0.00	0.00	6.78	623.73
	Liusipukuri	16.5	66.04	18.87	9.43	0.00	0.00	0.00	5.66	628.30
	Mahishmari	9.4	58.59	19.53	14.06	0.00	0.00	0.00	7.81	605.47
	Kauakhali	5.4	81.70	6.54	1.31	0.00	0.00	0.00	11.76	629.41
II	Tharu Bhita	25.6	20.00	10.00	0.00	0.00	0.00	0.00	70.00	270.00
	Gangaram Maler Chhat	24.1	10.00	30.00	0.00	0.00	0.00	0.00	60.00	310.00
	Bairbhita	24.9	20.00	20.00	0.00	0.00	0.00	0.00	60.00	320.00
	Grammanir Chhat	24.3	0.00	30.00	0.00	0.00	0.00	0.00	70.00	250.00
	Sivok Hill Forest	23.2	20.00	10.00	10.00	0.00	0.00	0.00	60.00	310.00
	Grammani	24.1	10.00	20.00	0.00	0.00	0.00	0.00	70.00	260.00
	Dalkajhar Forest	21.8	10.00	20.00	0.00	0.00	0.00	0.00	70.00	260.00
	Bhelu	24.1	18.18	9.09	0.00	0.00	0.00	0.00	63.64	245.45
	Dhemaler Chhar	23.3	20.00	13.33	6.67	0.00	0.00	0.00	60.00	313.33
	Siubar	29.4	26.32	10.53	0.00	0.00	0.00	0.00	63.16	310.53
	Dandrajhar	33.3	13.64	4.55	9.09	0.00	0.00	0.00	72.73	240.91
	Chamtaguri Chhat	10.1	51.85	33.33	3.70	0.00	0.00	0.00	11.11	592.59
	Trihana Tea Garden	22.9	7.50	10.00	35.00	0.00	0.00	0.00	47.50	335.00
	Jogibhita	29.1	2.22	15.56	26.67	0.00	0.00	0.00	55.56	297.78
	Hetmuri	19.4	8.70	13.04	21.74	0.00	0.00	0.00	56.52	304.35
	Uttar Bansgaon Kismat	23	0.00	9.17	27.52	4.59	3.67	0.00	55.05	277.06
Madhya Bansgaon	25.6	3.80	2.72	10.87	5.43	8.15	2.72	66.30	215.22	
Pashchim Madati	37.1	3.32	11.07	4.06	9.23	7.38	1.85	63.10	235.79	
III	Tukriajhar Forest	34.3	0.00	20.00	0.00	0.00	0.00	0.00	80.00	200.00
	Dhakna Gachh	32.7	0.00	10.00	10.00	0.00	0.00	0.00	80.00	190.00
	Fulbarir Chhat	34.9	0.00	10.00	10.00	0.00	0.00	0.00	80.00	190.00
	Madan	32.2	0.00	0.00	20.00	0.00	0.00	0.00	80.00	180.00
	Nazir	38.2	0.00	0.00	10.00	20.00	0.00	0.00	70.00	200.00

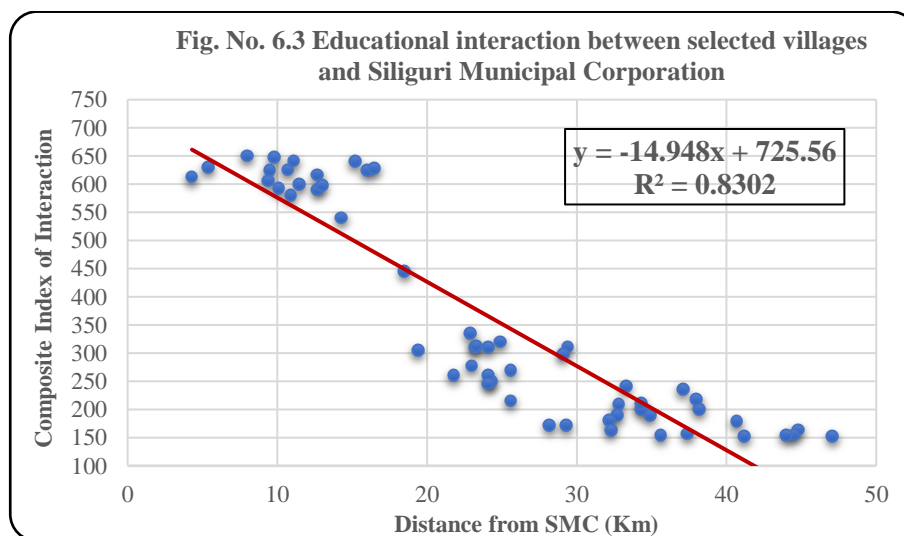
Dudha	34.3	0.00	0.00	20.00	10.00	0.00	0.00	70.00	210.00
Jamatulla	38	0.00	0.00	18.18	9.09	9.09	0.00	63.64	218.18
Singbhita	32.8	0.00	0.00	9.09	18.18	9.09	0.00	63.64	209.09
Chhota Paikpara Arazi	40.7	0.00	0.00	14.29	7.14	0.00	0.00	78.57	178.57
Chunilal	44.8	0.00	0.00	9.09	9.09	0.00	0.00	81.82	163.64
Subalbhitia	35.6	0.00	0.00	0.00	18.18	0.00	0.00	81.82	154.55
Naksalbari	28.2	0.00	0.00	5.56	11.11	8.33	0.00	75.00	172.22
Debiganja	47.1	0.00	0.00	4.76	7.14	9.52	2.38	66.67	152.38
Chayansing	37.4	0.00	0.00	9.09	6.82	0.00	0.00	84.09	156.82
Dayaram	29.3	0.00	0.00	0.00	18.57	5.71	4.29	71.43	171.43
Mandila Jhar	44.5	0.00	0.00	3.82	8.40	6.11	2.29	79.39	154.96
Bara Paikpara Arazi	41.2	0.00	0.00	2.68	8.05	6.04	5.37	77.85	152.35
Uttar Ramdhan	32.3	0.00	0.00	2.65	10.60	6.62	6.62	73.51	162.25
Lahugaon	44	0.00	0.00	1.98	5.93	11.46	5.93	74.70	154.55

Source: Computed by the Researcher.

Interaction between rural and urban areas for educational purpose is also very important for the students living in rural area but want to get the best of educational opportunities available in the nearby urban centre. Educational interaction includes interaction for primary education, secondary education, higher secondary education, higher education, technical education and for private tuition and coaching classes. Table 6.4 shows the rural-urban interaction among the households of the selected 55 villages from three zones with Siliguri Municipal Corporation for educational purpose. According to the table, households of the villages under Zone I interact quite frequently for educational purpose with Siliguri Municipal Corporation. From Zone I, the highest interaction for educational purpose was observed by the people living in Salbari Chhat Pratham Khanda village, while the lowest was from Lalsara Chhat village. Similarly, from Zone II, the highest interaction for educational purpose was observed by people living in Chamtaguri Chhat, while the lowest was from Madhya Bansaon. Like economic interaction and agricultural interaction, the interaction for educational purpose has declined considerably for villages located in Zone II compared to villages located in Zone I. Within Zone III, the highest interaction for educational purpose was observed by people

living in Jamatulla village, while the lowest was by people living in Bara Paikpara Arazi village. A general observation from the table is that interaction for educational purpose is highest with Siliguri Municipal Corporation by the villages located in Zone I, which subsequently decrease for Zone II and Zone III respectively. This trend is quite similar to the one observed for interaction due to economic purpose and agricultural purpose. However, comparing the composite index of interaction for educational, economic and agricultural purpose it can be said that interaction for educational purpose between the villages of the study area with Siliguri Municipal Corporation is relatively less than that of agricultural and economic interaction.

Simple bi-variate regression equation has been calculated among the 55 selected villages with their road distance from Siliguri Municipal Corporation and their composite index of interaction for educational purpose (Fig. 6.3). It is evident from the figure that there is a negative relationship between the road distance of any village from Siliguri Municipal Corporation and their composite index of interaction for educational purpose. This signifies that with increase in distance of a village from Siliguri Municipal Corporation, it's interaction with Siliguri Municipal Corporation for educational purposes decreases. Infact, interaction for educational purpose decrease very rapidly with increase in road distance from Siliguri Municipal Corporation. The coefficient of determination calculated shows a value of 0.8302, which means that around 83% of variation in composite index of interaction for educational purposes among the villages in the study area can be explained by their variation in distance from Siliguri Municipal Corporation.



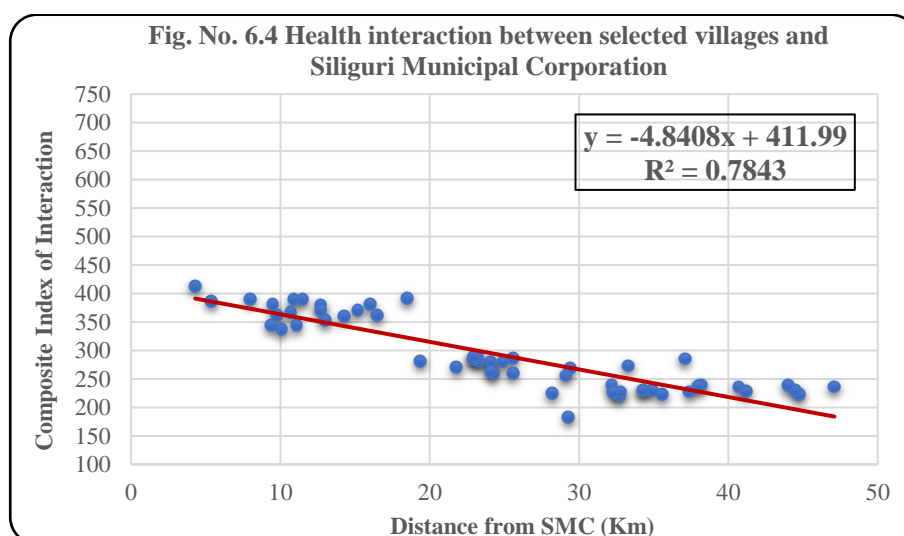
Zone	Name of the Villages	Distance form SMC (Km)	Households Availing Health Interaction							Composite Index of Interaction
			Daily	3- 4 times per week	1-2 times per week	1-2 times per month	1-2 times per six month	1-2 times per year	Never Visited	
I	Champasari Chhat	11.5	0.00	0.00	20.00	50.00	30.00	0.00	0.00	390.00
	Ruhini Chhat	14.3	0.00	0.00	20.00	30.00	40.00	10.00	0.00	360.00
	Salbari Chhat	8	0.00	0.00	30.00	30.00	40.00	0.00	0.00	390.00
	Pratham Khanda									
	Fulbari Pataner Chhat	15.2	0.00	0.00	20.00	40.00	30.00	10.00	0.00	370.00
	Kamala barir Chhat	12.7	0.00	0.00	20.00	40.00	40.00	0.00	0.00	380.00
	Purba Karai Barir chhat	10.9	0.00	0.00	30.00	30.00	40.00	0.00	0.00	390.00
	Lalsara Chhat	18.5	0.00	0.00	27.27	36.36	36.36	0.00	0.00	390.91
	Ujanu	4.3	0.00	0.00	37.50	37.50	25.00	0.00	0.00	412.50
	Dumriguri Chhat	16	0.00	0.00	23.81	38.10	33.33	4.76	0.00	380.95
	Sisabari	9.8	0.00	0.00	19.05	38.10	28.57	14.29	0.00	361.90
	Karaibari	10.7	0.00	0.00	16.67	41.67	33.33	8.33	0.00	366.67
	Putimari	12.7	0.00	0.00	20.83	41.67	25.00	12.50	0.00	370.83
	Rajpauri	11.1	0.00	0.00	9.76	39.02	36.59	14.63	0.00	343.90
	Bhujia Banir Chhat	13	0.00	0.00	10.64	42.55	36.17	10.64	0.00	353.19
	Bara Pathuram	9.5	0.00	0.00	15.25	42.37	33.90	16.95	0.00	381.36
Liusipukuri	16.5	0.00	0.00	15.09	42.45	31.13	11.32	0.00	361.32	
Mahishmari	9.4	0.00	0.00	15.63	35.16	27.34	21.88	0.00	344.53	
Kauakhali	5.4	0.00	0.00	29.41	37.25	23.53	9.80	0.00	386.27	
II	Tharu Bhita	25.6	0.00	0.00	0.00	20.00	30.00	40.00	10.00	260.00
	Gangaram Maler Chhat	24.1	0.00	0.00	0.00	20.00	40.00	40.00	0.00	280.00
	Bairbhita	24.9	0.00	0.00	0.00	10.00	60.00	30.00	0.00	280.00
	Grammanir Chhat	24.3	0.00	0.00	0.00	10.00	50.00	30.00	10.00	260.00
	Sivok Hill Forest	23.2	0.00	0.00	0.00	20.00	50.00	30.00	0.00	290.00
	Grammani	24.1	0.00	0.00	0.00	20.00	40.00	40.00	0.00	280.00
	Dalkajhar Forest	21.8	0.00	0.00	0.00	10.00	60.00	20.00	10.00	270.00
	Bhelu	24.1	0.00	0.00	0.00	0.00	63.64	36.36	0.00	263.64
	Dhemaler Chhar	23.3	0.00	0.00	0.00	13.33	53.33	33.33	0.00	280.00
	Siubar	29.4	0.00	0.00	0.00	10.53	47.37	42.11	0.00	268.42
	Dandrajhar	33.3	0.00	0.00	0.00	9.09	54.55	36.36	0.00	272.73
	Chamtaguri Chhat	10.1	0.00	0.00	0.00	51.85	33.33	14.81	0.00	337.04

	Trihana Tea Garden	22.9	0.00	0.00	0.00	10.00	65.00	25.00	0.00	285.00
	Jogibhita	29.1	0.00	0.00	0.00	11.11	33.33	55.56	0.00	255.56
	Hetmuri	19.4	0.00	0.00	0.00	13.04	54.35	32.61	0.00	280.43
	Uttar Bansaon Kismat	23	0.00	0.00	0.00	17.43	55.05	27.52	0.00	289.91
	Madhya Bansaon	25.6	0.00	0.00	0.00	13.04	59.78	27.17	0.00	285.87
	Pashchim Madati	37.1	0.00	0.00	0.00	15.13	55.35	29.52	0.00	285.61
III	Tukriajhar Forest	34.3	0.00	0.00	0.00	10.00	30.00	40.00	20.00	230.00
	Dhakna Gachh	32.7	0.00	0.00	0.00	10.00	20.00	50.00	20.00	220.00
	Fulbarir Chhat	34.9	0.00	0.00	0.00	10.00	20.00	60.00	10.00	230.00
	Madan	32.2	0.00	0.00	0.00	20.00	20.00	40.00	20.00	240.00
	Nazir	38.2	0.00	0.00	0.00	10.00	30.00	50.00	10.00	240.00
	Dudha	34.3	0.00	0.00	0.00	10.00	20.00	60.00	10.00	230.00
	Jamatulla	38	0.00	0.00	0.00	9.09	18.18	72.73	0.00	236.36
	Singbhita	32.8	0.00	0.00	0.00	9.09	18.18	63.64	9.09	227.27
	Chhota Paikpara Arazi	40.7	0.00	0.00	0.00	14.29	14.29	64.29	7.14	235.71
	Chunilal	44.8	0.00	0.00	0.00	9.09	13.64	68.18	9.09	222.73
	Subalbhita	35.6	0.00	0.00	0.00	4.55	18.18	72.73	4.55	222.73
	Naksalbari	28.2	0.00	0.00	0.00	5.56	19.44	69.44	5.56	225.00
	Debiganja	47.1	0.00	0.00	0.00	4.76	30.95	59.52	4.76	235.71
	Chayansing	37.4	0.00	0.00	0.00	4.55	22.73	68.18	4.55	227.27
	Dayaram	29.3	0.00	0.00	0.00	5.71	30.00	34.29	1.43	182.86
	Mandila Jhar	44.5	0.00	0.00	0.00	6.11	25.19	61.07	7.63	229.77
	Bara Paikpara Arazi	41.2	0.00	0.00	0.00	6.04	23.49	63.76	6.71	228.86
	Uttar Ramdhan	32.3	0.00	0.00	0.00	6.62	19.87	66.89	6.62	226.49
Lahugaon	44	0.00	0.00	0.00	8.30	27.67	59.29	4.74	239.53	
Source: Computed by the Researcher.										

Interaction between rural and urban areas for health purpose is also very important given the fact that most of the hospitals in rural areas does not have specialized medical facilities required during emergency and critical illness. Health interaction includes interaction for OPD service, diagnostic service, hospitalization, vaccination and medicine service. Table 6.5 shows the rural-urban interaction among the households of the selected 55 villages from three zones with Siliguri Municipal Corporation for health purpose. According to the table, households of the villages under Zone I interact quite frequently for health purpose with Siliguri Municipal Corporation. From Zone I, the highest interaction for health purpose was observed by the people living in Ujanu village, while the lowest was from Rajpairi village. Similarly, from Zone II, the highest interaction for health purpose was observed by people living in Chamtaguri Chhat, while the lowest was from Jogibhita. Like economic interaction,

agricultural interaction and educational interaction, interaction for health purpose has declined considerably for villages located in Zone II compared to villages located in Zone I. Within Zone III, the highest interaction for health purpose was observed by people living in Madan and Nazir village, while the lowest was by people living in Chayansing village. A general observation from the table is that interaction for health purpose is highest with Siliguri Municipal Corporation by the villages located in Zone I, which subsequently decrease for Zone II and Zone III respectively. This trend is quite similar to the one observed for interaction due to economic purpose, agricultural purpose and educational purpose. However, comparing the composite index of interaction for educational, economic, agricultural and health purpose it can be said that interaction for health purpose between the villages of the study area with Siliguri Municipal Corporation is relatively less than that of the earlier discussed interaction.

Simple bi-variate regression equation has been calculated among the 55 selected villages with their road distance from Siliguri Municipal Corporation and their composite index of interaction for health purpose (Fig. 6.4). It is evident from the figure that there is a negative relationship between the road distance of any village from Siliguri Municipal Corporation and their composite index of interaction for health purpose. This signifies that with increase in distance of a village from Siliguri Municipal Corporation, its interaction with Siliguri Municipal Corporation for health purposes decreases. The coefficient of determination calculated shows a value of 0.7843, which means that around 78% of variation in composite index of interaction for health purposes among the villages in the study area can be explained by their variation in distance from Siliguri Municipal Corporation.



Zone	Name of the Villages	Distance from SMC (Km)	Households Availing Entertainment Interaction							Composite Index of Interaction
			Daily	3- 4 times per week	1-2 times per week	1-2 times per month	1-2 times per six month	1-2 times per year	Never Visited	
I	Champasari Chhat	11.5	0.00	10.00	50.00	40.00	0.00	0.00	0.00	470.00
	Ruhini Chhat	14.3	0.00	0.00	60.00	40.00	0.00	0.00	0.00	460.00
	Salbari Chhat Pratham Khanda	8	0.00	10.00	70.00	20.00	0.00	0.00	0.00	490.00
	Fulbari Pataner Chhat	15.2	0.00	10.00	60.00	30.00	0.00	0.00	0.00	480.00
	Kamala barir Chhat	12.7	0.00	0.00	60.00	40.00	0.00	0.00	0.00	460.00
	Purba Karai Barir chhat	10.9	0.00	10.00	50.00	40.00	0.00	0.00	0.00	470.00
	Lalsara Chhat	18.5	0.00	18.18	45.45	36.36	0.00	0.00	0.00	481.82
	Ujanu	4.3	0.00	62.50	31.25	6.25	0.00	0.00	0.00	556.25
	Dumriguri Chhat	16	0.00	14.29	47.62	38.10	0.00	0.00	0.00	476.19
	Sisabari	9.8	0.00	14.29	47.62	33.33	4.76	0.00	0.00	471.43
	Karaibari	10.7	0.00	12.50	50.00	37.50	0.00	0.00	0.00	475.00
	Putimari	12.7	0.00	12.50	45.83	33.33	8.33	0.00	0.00	462.50
	Rajpairi	11.1	0.00	12.20	51.22	36.59	0.00	0.00	0.00	475.61
	Bhujia Banir Chhat	13	0.00	10.64	53.19	36.17	0.00	0.00	0.00	474.47
	Bara Pathuram	9.5	0.00	11.86	50.85	37.29	0.00	0.00	0.00	474.58
	Liusipukuri	16.5	0.00	9.43	56.60	33.96	0.00	0.00	0.00	475.47
Mahishmari	9.4	0.00	10.94	54.69	34.38	0.00	0.00	0.00	476.56	
Kauakhali	5.4	0.00	38.56	41.83	19.61	0.00	0.00	0.00	518.95	
II	Tharu Bhita	25.6	0.00	0.00	20.00	50.00	30.00	0.00	0.00	390.00
	Gangaram Maler Chhat	24.1	0.00	0.00	30.00	50.00	20.00	0.00	0.00	410.00
	Bairbhita	24.9	0.00	0.00	20.00	60.00	20.00	0.00	0.00	400.00
	Grammanir Chhat	24.3	0.00	0.00	30.00	40.00	30.00	0.00	0.00	400.00
	Sivok Hill Forest	23.2	0.00	0.00	20.00	50.00	30.00	0.00	0.00	390.00

	Grammani	24.1	0.00	0.00	30.00	50.00	20.00	0.00	0.00	410.00
	Dalkajhar Forest	21.8	0.00	0.00	20.00	40.00	40.00	0.00	0.00	380.00
	Bhelu	24.1	0.00	0.00	27.27	45.45	27.27	0.00	0.00	400.00
	Dhemaler Chhar	23.3	0.00	0.00	20.00	60.00	20.00	0.00	0.00	400.00
	Siubar	29.4	0.00	0.00	15.79	63.16	21.05	0.00	0.00	394.74
	Dandrajhar	33.3	0.00	0.00	18.18	59.09	22.73	0.00	0.00	395.45
	Chamtaguri Chhat	10.1	0.00	0.00	40.74	48.15	11.11	0.00	0.00	429.63
	Trihana Tea Garden	22.9	0.00	0.00	12.50	47.50	37.50	2.50	0.00	370.00
	Jogibhita	29.1	0.00	0.00	11.11	51.11	33.33	4.44	0.00	368.89
	Hetmuri	19.4	0.00	0.00	15.22	43.48	41.30	0.00	0.00	373.91
	Uttar Bansaon Kismat	23	0.00	0.00	9.17	45.87	44.95	0.00	0.00	364.22
	Madhya Bansaon	25.6	0.00	0.00	16.30	57.07	26.63	0.00	0.00	389.67
	Pashchim Madati	37.1	0.00	0.00	12.55	63.10	24.35	0.00	0.00	388.19
III	Tukriajhar Forest	34.3	0.00	0.00	0.00	30.00	50.00	20.00	0.00	310.00
	Dhakna Gachh	32.7	0.00	0.00	0.00	20.00	40.00	40.00	0.00	280.00
	Fulbarir Chhat	34.9	0.00	0.00	20.00	20.00	40.00	20.00	0.00	340.00
	Madan	32.2	0.00	0.00	10.00	30.00	30.00	30.00	0.00	320.00
	Nazir	38.2	0.00	0.00	0.00	20.00	60.00	20.00	0.00	300.00
	Dudha	34.3	0.00	0.00	0.00	30.00	50.00	20.00	0.00	310.00
	Jamatulla	38	0.00	0.00	0.00	27.27	54.55	18.18	0.00	309.09
	Singbhita	32.8	0.00	0.00	0.00	27.27	45.45	27.27	0.00	300.00
	Chhota Paikpara Arazi	40.7	0.00	0.00	0.00	28.57	57.14	14.29	0.00	314.29
	Chunilal	44.8	0.00	0.00	0.00	36.36	54.55	9.09	0.00	327.27
	Subalbhita	35.6	0.00	0.00	0.00	27.27	59.09	13.64	0.00	313.64
	Naksalbari	28.2	0.00	0.00	0.00	27.78	58.33	13.89	0.00	313.89
	Debiganja	47.1	0.00	0.00	0.00	23.81	59.52	16.67	0.00	307.14
Chayansing	37.4	0.00	0.00	0.00	25.00	56.82	18.18	0.00	306.82	

Dayaram	29.3	0.00	0.00	0.00	18.57	64.29	17.14	0.00	301.43
Mandila Jhar	44.5	0.00	0.00	0.00	15.27	68.70	16.03	0.00	299.24
Bara Paikpara Arazi	41.2	0.00	0.00	0.00	20.13	61.74	18.12	0.00	302.01
Uttar Ramdhan	32.3	0.00	0.00	0.00	22.52	62.91	14.57	0.00	307.95
Lahugaon	44	0.00	0.00	0.00	19.76	55.34	24.90	0.00	294.86

Source: Computed by the Researcher.

Interaction between rural and urban areas for entertainment purpose is to some extent optional. However, with the waves of globalization hitting the nook and corner of India, rural areas have also witnessed a lot of change in recent times. For young generation living in rural areas also, visiting multiplex, wearing branded cloths and eating in branded eateries have become a status symbol. To fulfil this aspirations people from the rural areas frequently visit nearby large urban centre. Interaction for entertainment purpose includes interaction related to shopping, eating out, movies, hangouts, festivals, fairs and shopping for luxury and high value goods. Table 6.6 shows the rural-urban interaction among the households of the selected 55 villages from three zones with Siliguri Municipal Corporation for entertainment purpose. According to the table, households of the villages under Zone I interact quite frequently for entertainment purpose with Siliguri Municipal Corporation. From Zone I, the highest interaction for entertainment purpose was observed by the people living in Ujanu village, while the lowest was from Ruhini Chhat and Kamala Barir Chhat village. Similarly, from Zone II, the highest interaction for entertainment purpose was observed by people living in Chamtaguri Chhat, while the lowest was from Uttar Bansgaon Kismat. Like economic interaction and agricultural interaction, the interaction for entertainment purpose has declined considerably for villages located in Zone II compared to villages located in Zone I. Within Zone III, the highest interaction for entertainment purpose was observed by people living in Fulbarir Chhat village, while the lowest was by people living in Dhakna Gachh village. A general observation from the table is that interaction for entertainment purpose is highest with Siliguri Municipal Corporation by the villages located in Zone I, which subsequently decrease for Zone II and Zone III respectively. This trend is quite similar to the one observed for interaction due to economic purpose and agricultural purpose. However, given the fact that although interaction for entertainment purpose is purely optional, comparing the composite index of interaction for entertainment, education and health purpose it can be said that entertainment has emerged as a big motivational factor for people from the rural area to interact with the nearby urban centre.

Simple bi-variate regression equation has been calculated among the 55 selected villages with their road distance from Siliguri Municipal Corporation and their composite index of interaction for entertainment purpose (Fig. 6.5). It is evident from the figure that there is a negative relationship between the road distance of any village from Siliguri Municipal Corporation and their composite index of interaction for entertainment purpose. This signifies that with increase in distance of a village from Siliguri Municipal Corporation, its interaction with Siliguri Municipal Corporation for entertainment purposes decreases. Interaction for entertainment purpose decrease gradually with increase in road distance from Siliguri Municipal Corporation. The coefficient of determination calculated shows a value of 0.8279, which means that around 82% of variation in composite index of interaction for entertainment purposes among the villages in the study area can be explained by their variation in distance from Siliguri Municipal Corporation.

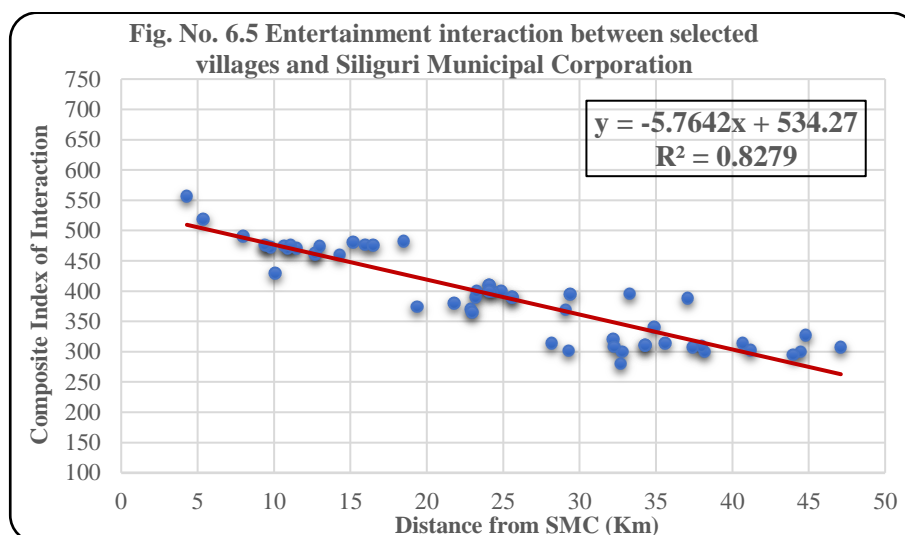


Table No. 6.7 Administration and organizational interaction between selected villages and Siliguri Municipal Corporation

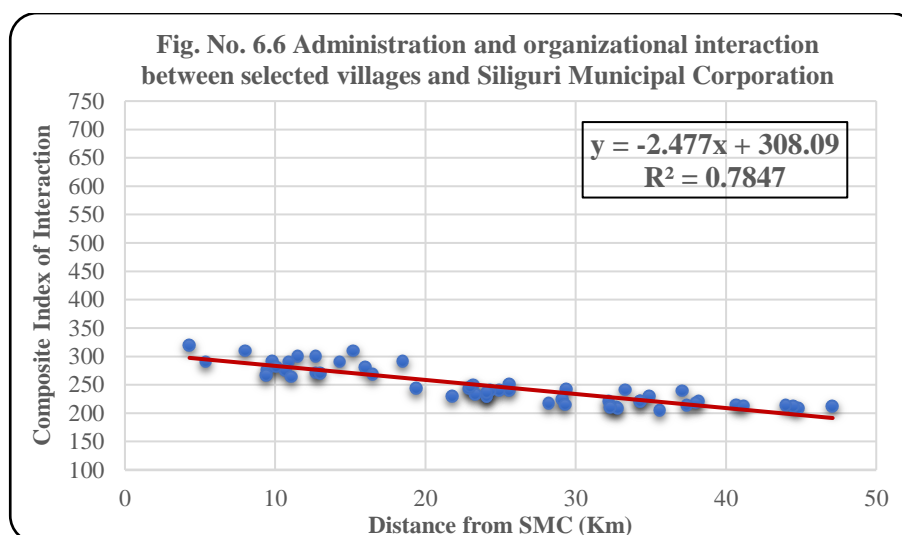
Zone	Name of the Villages	Distance from SMC (Km)	Households Availing Administration or Organizational Interaction							Composite Index of Interaction
			Daily	3- 4 times per week	1-2 times per week	1-2 times per month	1-2 times per six month	1-2 times per year	Never Visited	
I	Champasari Chhat	11.5	0.00	0.00	0.00	30.00	40.00	30.00	0.00	300.00
	Ruhini Chhat	14.3	0.00	0.00	0.00	20.00	50.00	30.00	0.00	290.00
	Salbari Chhat Pratham Khanda	8	0.00	0.00	0.00	30.00	50.00	20.00	0.00	310.00

	Fulbari Pataner Chhat	15.2	0.00	0.00	0.00	40.00	30.00	30.00	0.00	310.00
	Kamala barir Chhat	12.7	0.00	0.00	0.00	30.00	40.00	30.00	0.00	300.00
	Purba Karai Barir chhat	10.9	0.00	0.00	0.00	30.00	30.00	40.00	0.00	290.00
	Lalsara Chhat	18.5	0.00	0.00	0.00	27.27	36.36	36.36	0.00	290.91
	Ujanu	4.3	0.00	0.00	0.00	37.50	43.75	18.75	0.00	318.75
	Dumriguri Chhat	16	0.00	0.00	0.00	19.05	42.86	38.10	0.00	280.95
	Sisabari	9.8	0.00	0.00	0.00	23.81	42.86	33.33	0.00	290.48
	Karaibari	10.7	0.00	0.00	0.00	16.67	41.67	41.67	0.00	275.00
	Putimari	12.7	0.00	0.00	0.00	12.50	45.83	41.67	0.00	270.83
	Rajpairi	11.1	0.00	0.00	0.00	7.32	48.78	43.90	0.00	263.41
	Bhujia Banir Chhat	13	0.00	0.00	0.00	12.77	44.68	42.55	0.00	270.21
	Bara Pathuram	9.5	0.00	0.00	0.00	16.95	42.37	40.68	0.00	276.27
	Liusipukuri	16.5	0.00	0.00	0.00	10.38	47.17	42.45	0.00	267.92
	Mahishmari	9.4	0.00	0.00	0.00	10.16	46.88	42.97	0.00	267.19
	Kauakhali	5.4	0.00	0.00	0.00	18.30	53.59	28.10	0.00	290.20
II	Tharu Bhita	25.6	0.00	0.00	0.00	0.00	40.00	60.00	0.00	240.00
	Gangaram Maler Chhat	24.1	0.00	0.00	0.00	0.00	30.00	70.00	0.00	230.00
	Bairbhita	24.9	0.00	0.00	0.00	0.00	40.00	60.00	0.00	240.00
	Grammanir Chhat	24.3	0.00	0.00	0.00	0.00	40.00	60.00	0.00	240.00
	Sivok Hill Forest	23.2	0.00	0.00	0.00	0.00	50.00	50.00	0.00	250.00
	Grammani	24.1	0.00	0.00	0.00	0.00	30.00	70.00	0.00	230.00
	Dalkajhar Forest	21.8	0.00	0.00	0.00	0.00	30.00	70.00	0.00	230.00
	Bhelu	24.1	0.00	0.00	0.00	0.00	36.36	63.64	0.00	236.36
	Dhemaler Chhar	23.3	0.00	0.00	0.00	0.00	33.33	66.67	0.00	233.33
	Siubar	29.4	0.00	0.00	0.00	0.00	42.11	57.89	0.00	242.11
	Dandrajhar	33.3	0.00	0.00	0.00	0.00	40.91	59.09	0.00	240.91
Chamtaguri Chhat	10.1	0.00	0.00	0.00	18.52	44.44	37.04	0.00	281.48	

	Trihana Tea Garden	22.9	0.00	0.00	0.00	0.00	42.50	57.50	0.00	242.50
	Jogibhita	29.1	0.00	0.00	0.00	0.00	37.78	48.89	13.33	224.44
	Hetmuri	19.4	0.00	0.00	0.00	0.00	43.48	56.52	0.00	243.48
	Uttar Bansgaon Kismat	23	0.00	0.00	0.00	0.00	45.87	54.13	0.00	245.87
	Madhya Bansgaon	25.6	0.00	0.00	0.00	2.17	46.20	51.63	0.00	250.54
	Pashchim Madati	37.1	0.00	0.00	0.00	0.37	45.76	50.18	0.00	239.11
III	Tukriajhar Forest	34.3	0.00	0.00	0.00	0.00	20.00	80.00	0.00	220.00
	Dhakna Gachh	32.7	0.00	0.00	0.00	0.00	20.00	70.00	10.00	210.00
	Fulbarir Chhat	34.9	0.00	0.00	0.00	0.00	30.00	70.00	0.00	230.00
	Madan	32.2	0.00	0.00	0.00	0.00	20.00	80.00	0.00	220.00
	Nazir	38.2	0.00	0.00	0.00	0.00	20.00	80.00	0.00	220.00
	Dudha	34.3	0.00	0.00	0.00	0.00	20.00	80.00	0.00	220.00
	Jamatulla	38	0.00	0.00	0.00	0.00	18.18	81.82	0.00	218.18
	Singbhita	32.8	0.00	0.00	0.00	0.00	18.18	72.73	9.09	209.09
	Chhota Paikpara Arazi	40.7	0.00	0.00	0.00	0.00	14.29	85.71	0.00	214.29
	Chunilal	44.8	0.00	0.00	0.00	0.00	13.64	81.82	4.55	209.09
	Subalbhita	35.6	0.00	0.00	0.00	0.00	13.64	77.27	9.09	204.55
	Naksalbari	28.2	0.00	0.00	0.00	0.00	16.67	83.33	0.00	216.67
	Debiganja	47.1	0.00	0.00	0.00	0.00	16.67	78.57	4.76	211.90
	Chayansing	37.4	0.00	0.00	0.00	0.00	18.18	77.27	4.55	213.64
	Dayaram	29.3	0.00	0.00	0.00	0.00	14.29	85.71	0.00	214.29
	Mandila Jhar	44.5	0.00	0.00	0.00	0.00	16.03	80.15	3.82	212.21
	Bara Paikpara Arazi	41.2	0.00	0.00	0.00	0.00	16.11	80.54	3.36	212.75
Uttar Ramdhan	32.3	0.00	0.00	0.00	0.00	13.91	82.78	3.31	210.60	
Lahugaon	44	0.00	0.00	0.00	0.00	17.79	77.87	4.35	213.44	
Source: Computed by the Researcher.										

Interaction between rural and urban areas for administration and organizational purpose is the least frequent one among the reasons of interaction. Interaction for administrative and organizational purpose includes interaction related to office visit and court visit. Table 6.7 shows the rural-urban interaction among the households of the selected 55 villages from three zones with Siliguri Municipal Corporation for administration and organizational purpose. As mentioned earlier interaction for administration and organizational purpose is comparatively less as it is not a part of the daily requirement of people living in the rural areas. From Zone I, the highest interaction for administration and organizational purpose was observed by the people living in Ujanu village, while the lowest was from Rajpairi village. Similarly, from Zone II, the highest interaction for administration and organizational purpose was observed by people living in Chamtaguri Chhat, while the lowest was from Jogibhita. Unlike the other interactions, there is less variation among the villages under three zones with respect to interaction for administration and organizational purpose. Within Zone III, the highest interaction for administration and organizational purpose was observed by people living in Fulbarir Chhat village, while the lowest was by people living in Subalbhita village. A general observation from the table is that interaction for administrative and organizational purpose is highest with Siliguri Municipal Corporation by the villages located in Zone I, which subsequently decrease for Zone II and Zone III respectively. This trend is quite similar to the one observed for interaction due to economic purpose and agricultural purpose, however variation among the different zones is comparatively less.

Simple bi-variate regression equation has been calculated among the 55 selected villages with their road distance from Siliguri Municipal Corporation and their composite index of interaction for administration and organizational purpose (Fig. 6.6). It is evident from the figure that there is a negative relationship between the road distance of any village from Siliguri Municipal Corporation and their composite index of interaction for administration and organizational purpose. This signifies that with increase in distance of a village from Siliguri Municipal Corporation, its interaction with Siliguri Municipal Corporation for administration and organizational purposes decreases. The coefficient of determination calculated shows a value of 0.7847, which means that around 78% of variation in composite index of interaction for administration and organizational purposes among the villages in the study area can be explained by their variation in distance from Siliguri Municipal Corporation.



In the above section rural-urban interaction between the selected 55 villages of Siliguri sub-division with Siliguri Municipal Corporation has been analyzed for economic, agricultural, educational, health, entertainment and administration and organizational purpose. From the tables and figures it can be said that there is a negative relationship in the study area with respect to distance of any village from Siliguri Municipal Corporation and their level of interaction with Siliguri Municipal Corporation for various purpose. The coefficient of determination calculated also validates this point. Therefore, the fourth hypothesis i.e. rural-urban interaction decrease with an increase in distance from Siliguri Municipal Corporation remains is accepted and is valid for all the selected purposes of interaction in the study area.

Income of any household plays a significant role in determining the rural-urban interaction. Usually, households with higher income tends to put them in a better position to explore the outside world. In rural areas households with very low income, living below the poverty line or just above the poverty line remain confined to their own village. Although, in many cases because of poverty these people are forced to migrate to large metropolitan cities in search of employment and to change their economic fortune. However, households having better economic condition tends to visit the nearby urban centre frequently for economic, educational, health and entertainment purpose. Moreover, relatively well-off farmers will also interact more with the nearby urban centre to market their agricultural products and also to buy agricultural inputs. In this section an attempt has been made to analyze the relationship between the average income of households in a village and their composite index of interaction with Siliguri Municipal Corporation for various purpose within the study area. Table 6.8 shows the composite index of interaction for 55 selected villages of the study area for various purpose with Siliguri Municipal Corporation and the average household income of each village. Based

on this table simple bivariate regression equation has been calculated by taking average income of household of each village and their composite index of interaction for each purpose. It shows that although, there is a positive relationship between the average income of households of any village and their composite index of interaction with Siliguri Municipal Corporation for various purposes but the coefficient of determination calculated are as follows: 0.2310 for average household income with composite index of interaction for economic purpose, 0.2525 for average household income with composite index of interaction for agricultural purpose, 0.3149 for average household income with composite index of interaction for educational purpose, 0.2623 for average household income with composite index of interaction for health purpose, 0.2907 for average household income with composite index of interaction for entertainment purpose and 0.2558 for average household income with composite index of interaction for administration and organizational purpose respectively. Hence, although the relationship is positive but it is not significant because only about 25% to 30% of variation in composite index of interaction for each purpose can be explained by variation in average household income. This signifies that for rural-urban interaction among the villages of the study area with Siliguri Municipal Corporation, income of the household is not the primary factor but other factor like distance of the village from Siliguri Municipal Corporation plays a dominant role in controlling the level of interaction.

Table No. 6.8 Relationship between Income of household and rural-urban interaction

Zone	Name of the Villages	Average Household Income (Rs./month)	Composite Index of Interaction					Administration and Organizational Purpose
			Economic Purpose	Agricultural Purpose	Educational Purpose	Health Purpose	Entertainment Purpose	
I	Champasari Chhat	8960	680.00	600.00	600.00	390.00	470.00	300.00
	Ruhini Chhat	7590	660.00	620.00	540.00	360.00	460.00	290.00
	Salbari Chhat Pratham Khanda	8340	670.00	590.00	650.00	390.00	490.00	310.00
	Fulbari Pataner Chhat	7650	670.00	600.00	640.00	370.00	480.00	310.00
	Kamala barir Chhat	9240	660.00	640.00	590.00	380.00	460.00	300.00
	Purba Karai Barir chhat	7600	650.00	640.00	580.00	390.00	470.00	290.00
	Lalsara Chhat	9800	645.45	590.91	445.45	390.91	481.82	290.91
	Ujanu	12550	693.75	631.25	612.50	412.50	556.25	318.75
	Dumriguri Chhat	13600	676.19	638.10	623.81	380.95	476.19	280.95

	Sisabari	12800	676.19	628.57	647.62	361.90	471.43	290.48
	Karaibari	13450	658.33	591.67	625.00	366.67	475.00	275.00
	Putimari	9820	683.33	595.83	616.67	370.83	462.50	270.83
	Rajpauri	8350	675.61	621.95	641.46	343.90	475.61	263.41
	Bhujia Banir Chhat	10560	668.09	619.15	597.87	353.19	474.47	270.21
	Bara Pathuram	8775	676.27	625.42	623.73	381.36	474.58	276.27
	Liusipukuri	7650	667.92	613.21	628.30	361.32	475.47	267.92
	Mahishmari	10250	656.25	602.34	605.47	344.53	476.56	267.19
	Kauakhali	13800	694.77	624.84	629.41	386.27	518.95	290.20
II	Tharu Bhita	11000	640.00	530.00	270.00	260.00	390.00	240.00
	Gangaram Maler Chhat	7690	630.00	520.00	310.00	280.00	410.00	230.00
	Bairbhita	7700	640.00	510.00	320.00	280.00	400.00	240.00
	Grammanir Chhat	8500	630.00	530.00	250.00	260.00	400.00	240.00
	Sivok Hill Forest	8600	590.00	480.00	310.00	290.00	390.00	250.00
	Grammani	9650	620.00	540.00	260.00	280.00	410.00	230.00
	Dalkajhar Forest	7650	630.00	500.00	260.00	270.00	380.00	230.00
	Bhelu	8500	636.36	527.27	245.45	263.64	400.00	236.36
	Dhemaler Chhar	8700	626.67	513.33	313.33	280.00	400.00	233.33
	Siubar	8350	615.79	500.00	310.53	268.42	394.74	242.11
	Dandrajhar	7350	604.55	486.36	240.91	272.73	395.45	240.91
	Chamtaguri Chhat	14250	655.56	574.07	592.59	337.04	429.63	281.48
	Trihana Tea Garden	10000	607.50	520.00	335.00	285.00	370.00	242.50
	Jogibhita	9425	604.44	488.89	297.78	255.56	368.89	224.44
	Hetmuri	7435	610.87	506.52	304.35	280.43	373.91	243.48
	Uttar Bansgaon Kismat	7980	607.34	513.76	277.06	289.91	364.22	245.87
	Madhya Bansgaon	7650	615.76	509.78	215.22	285.87	389.67	250.54
Pashchim Madati	8250	606.64	525.09	235.79	285.61	388.19	239.11	
III	Tukriajhar Forest	7450	510.00	450.00	200.00	230.00	310.00	220.00
	Dhakna Gachh	7680	470.00	460.00	190.00	220.00	280.00	210.00
	Fulbarir Chhat	8775	520.00	410.00	190.00	230.00	340.00	230.00
	Madan	7500	460.00	440.00	180.00	240.00	320.00	220.00
	Nazir	7600	510.00	430.00	200.00	240.00	300.00	220.00
	Dudha	8500	440.00	390.00	210.00	230.00	310.00	220.00
	Jamatulla	8250	454.55	427.27	218.18	236.36	309.09	218.18

Singbhita	8375	463.64	400.00	209.09	227.27	300.00	209.09
Chhota Paikpara Arazi	7886	492.86	400.00	178.57	235.71	314.29	214.29
Chunilal	7355	554.55	431.82	163.64	222.73	327.27	209.09
Subalbhita	7560	545.45	409.09	154.55	222.73	313.64	204.55
Naksalbari	10245	575.00	394.44	172.22	225.00	313.89	216.67
Debiganja	7345	552.38	402.38	152.38	235.71	307.14	211.90
Chayansing	8215	550.00	388.64	156.82	227.27	306.82	213.64
Dayaram	7995	564.29	428.57	171.43	182.86	301.43	214.29
Mandila Jhar	7690	553.44	424.43	154.96	229.77	299.24	212.21
Bara Paikpara Arazi	8015	547.65	421.48	152.35	228.86	302.01	212.75
Uttar Ramdhan	7554	526.49	443.05	162.25	226.49	307.95	210.60
Lahugaon	7650	517.00	433.99	154.55	239.53	294.86	213.44

Source: computed by the Researcher.

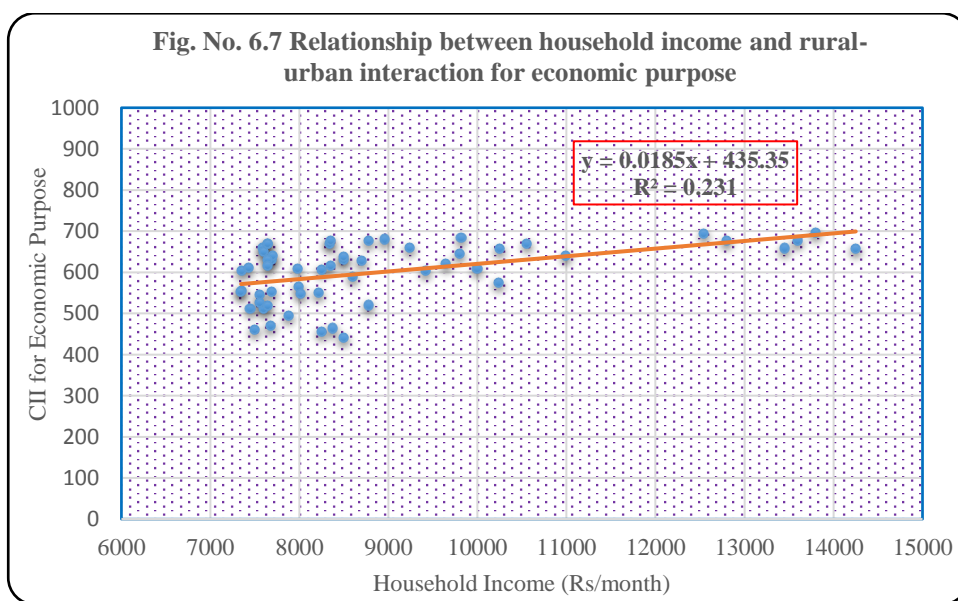


Fig. No. 6.8 Relationship between household income and rural-urban interaction for agricultural purpose

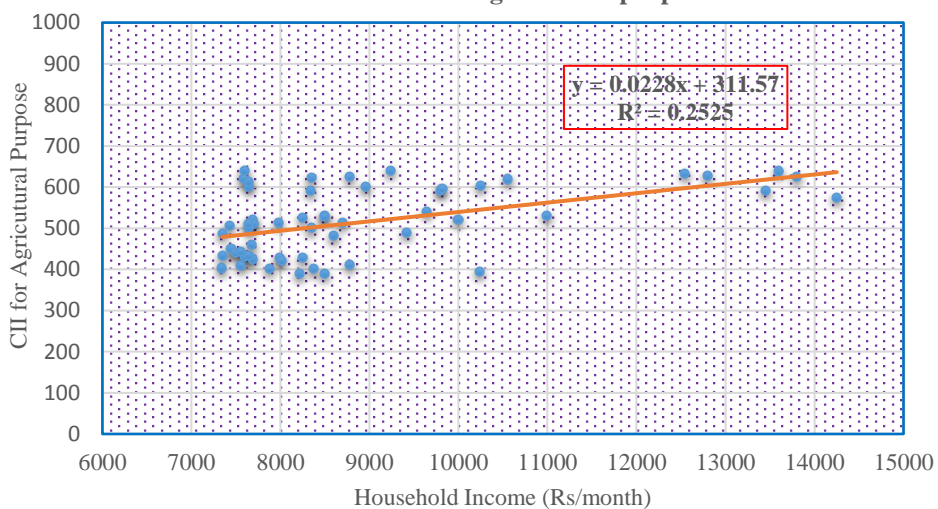


Fig. No. 6.9 Relationship between household income and rural-urban interaction for educational purpose

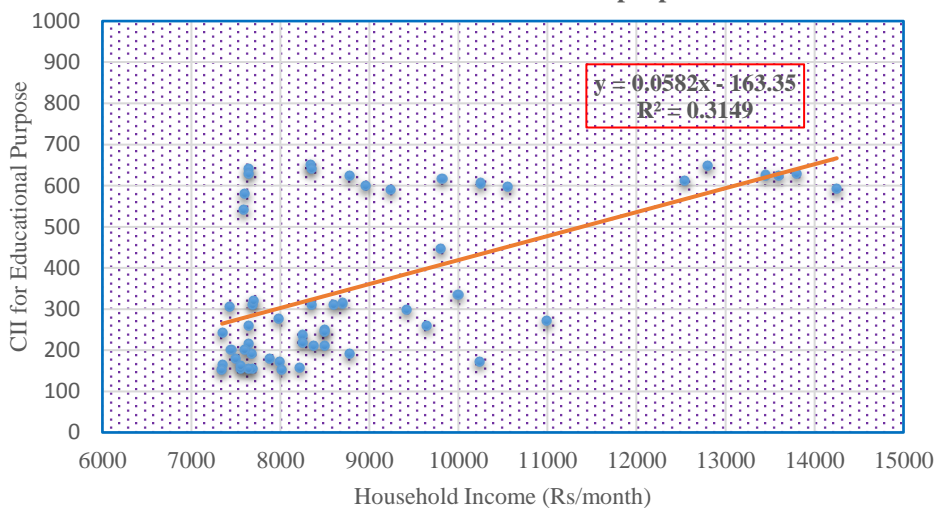
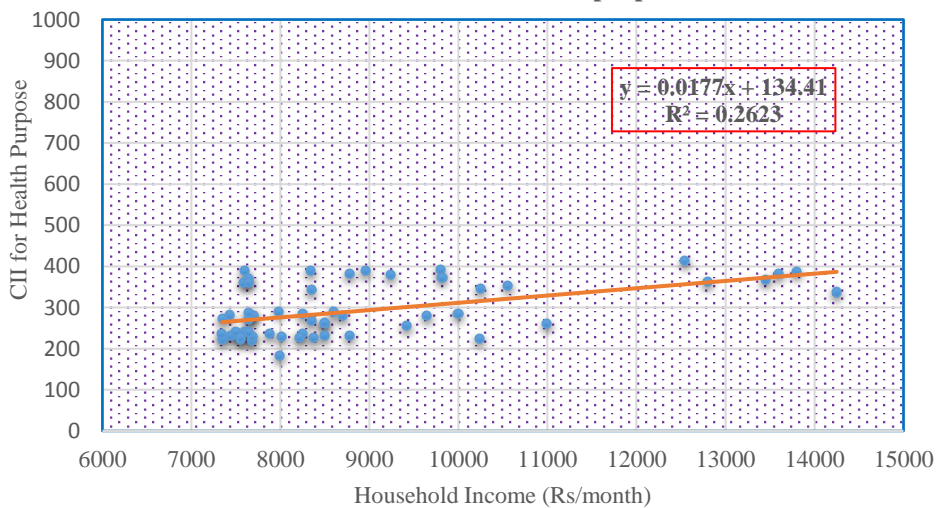
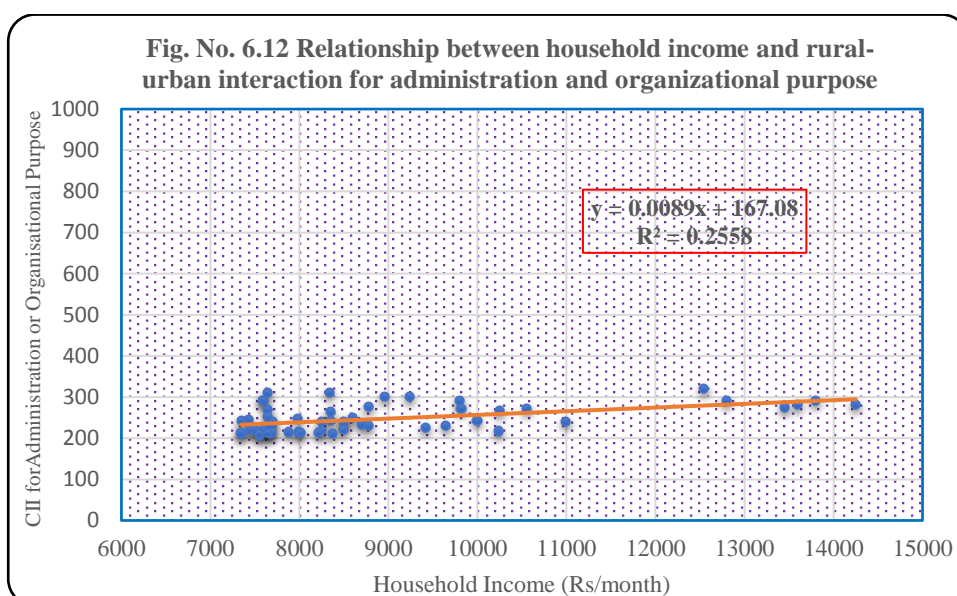
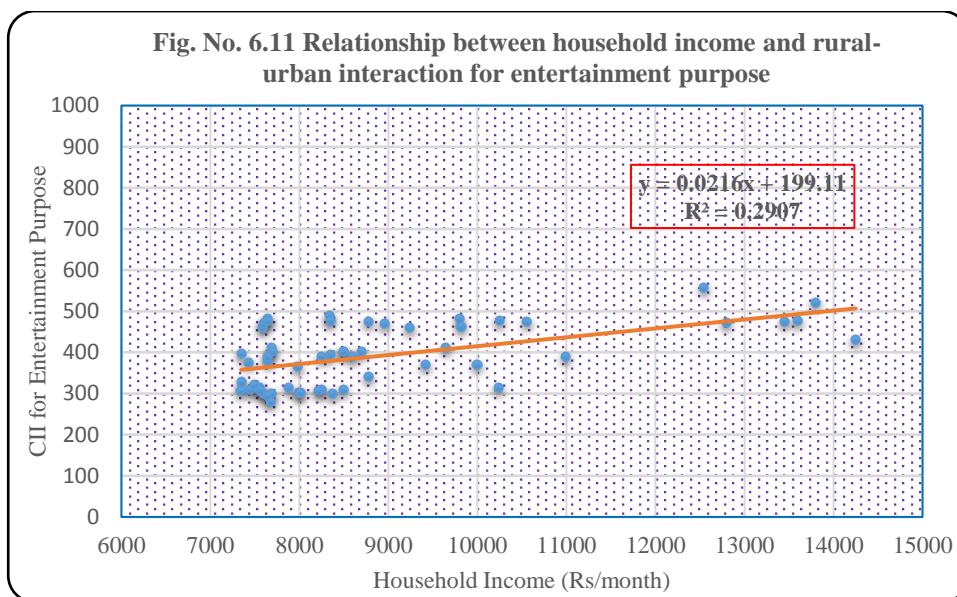


Fig. No. 6.10 Relationship between household income and rural-urban interaction for health purpose





Literacy rate plays a significant role in determining the rural-urban interaction. Usually, villages with higher literacy rate tends to interact more with outside world. Education plays a pivotal role for rural population to venture into new fields of economic opportunities. In this section an attempt has been made to analyze the relationship between the literacy rate of a village and their composite index of interaction with Siliguri Municipal Corporation for various purpose within the study area. Table 6.9 shows the composite index of interaction for 55 selected villages of the study area for various purpose with Siliguri Municipal Corporation and their literacy rate. Based on this table simple bivariate regression equation has been calculated by taking literacy rate of each village and their composite index of interaction for each purpose. It shows that although, there is a positive relationship between the literacy rate of any village and their composite index of interaction with Siliguri Municipal Corporation for various

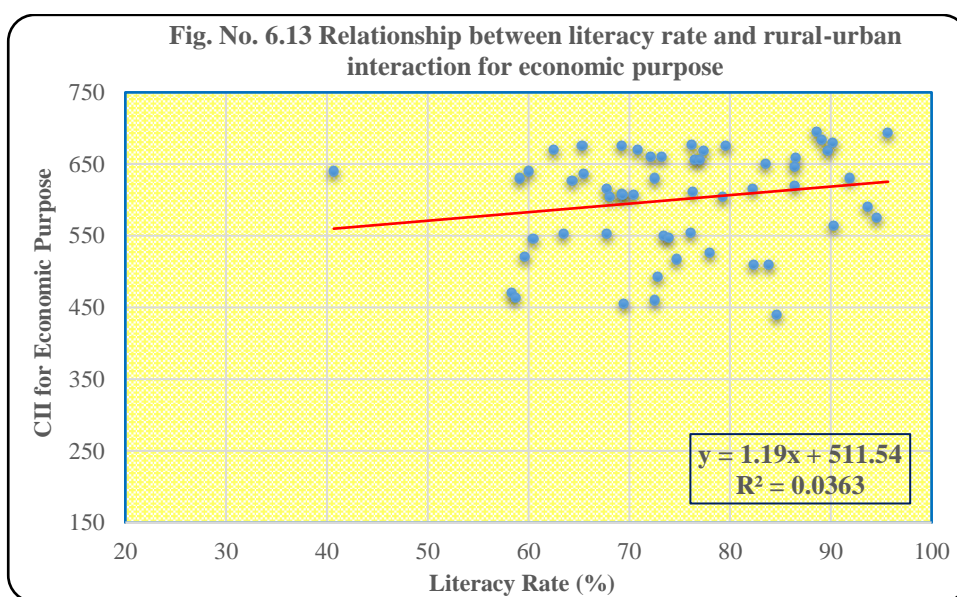
purposes but except interaction for educational purpose, the literacy rate of the villages does not have any significant effect on rural-urban interaction in the study area. The coefficient of determination calculated are as follows: 0.0363 for literacy rate of a village with composite index of interaction for economic purpose, 0.0346 for literacy rate of a village with composite index of interaction for agricultural purpose, 0.0634 for literacy rate of a village with composite index of interaction for educational purpose, 0.0771 for literacy rate of a village with composite index of interaction for health purpose, 0.0618 for literacy rate of a village with composite index of interaction for entertainment purpose and 0.0671 for literacy rate of a village with composite index of interaction for administration and organizational purpose. Hence, although the relationship is positive but it is not significant because only about 3% to 7% of variation in composite index of interaction for each purpose can be explained by variation in literacy rate. This signifies that for rural-urban interaction among the villages of the study area with Siliguri Municipal Corporation, literacy rate is not the primary factor but other factor like distance of the village from Siliguri Municipal Corporation plays a dominant role in controlling the level of interaction.

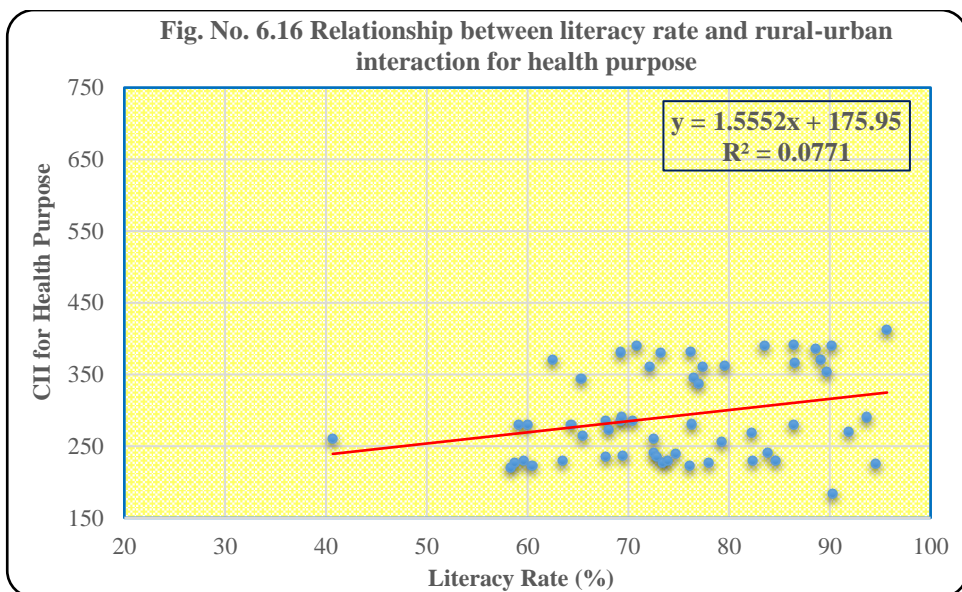
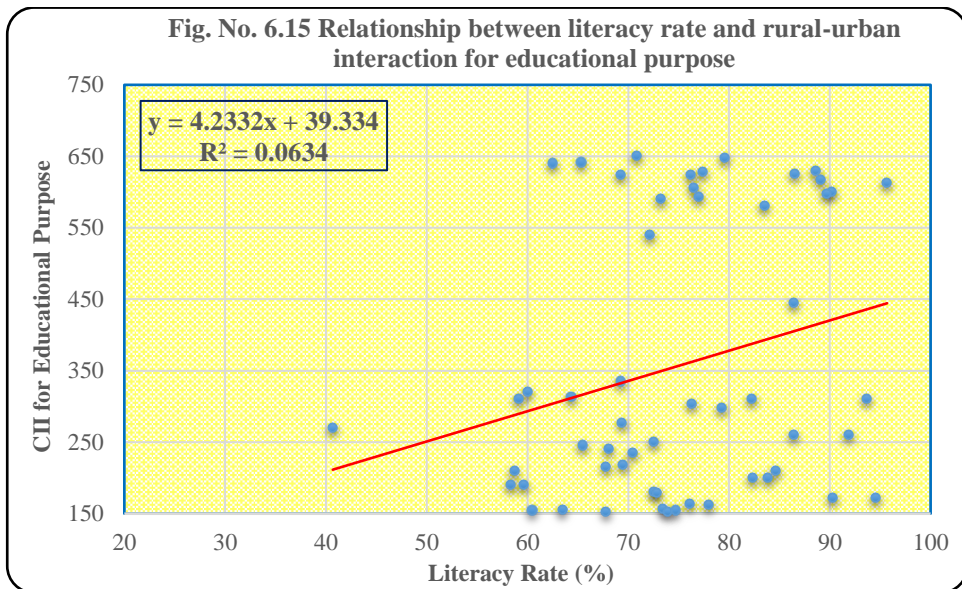
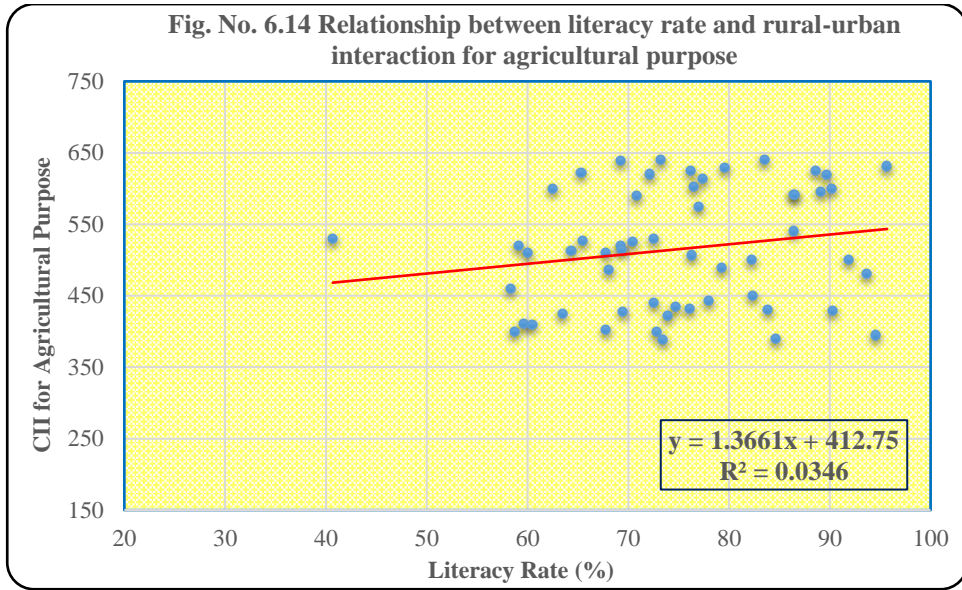
Table No. 6.9 Relationship between literacy rate and rural-urban interaction								
Zone	Name of the Villages	Literacy Rate	Composite Index of Interaction					Administration and Organizational Purpose
			Economic Purpose	Agricultural Purpose	Educational Purpose	Health Purpose	Entertainment Purpose	
I	Champasari Chhat	90.23	680.00	600.00	600.00	390.00	470.00	300.00
	Ruhini Chhat	72.15	660.00	620.00	540.00	360.00	460.00	290.00
	Salbari Chhat Pratham Khanda	70.85	670.00	590.00	650.00	390.00	490.00	310.00
	Fulbari Pataner Chhat	62.54	670.00	600.00	640.00	370.00	480.00	310.00
	Kamala barir Chhat	73.21	660.00	640.00	590.00	380.00	460.00	300.00
	Purba Karai Barir chhat	83.52	650.00	640.00	580.00	390.00	470.00	290.00
	Lalsara Chhat	86.47	645.45	590.91	445.45	390.91	481.82	290.91
	Ujanu	95.68	693.75	631.25	612.50	412.50	556.25	318.75
	Dumriguri Chhat	69.25	676.19	638.10	623.81	380.95	476.19	280.95
	Sisabari	79.58	676.19	628.57	647.62	361.90	471.43	290.48

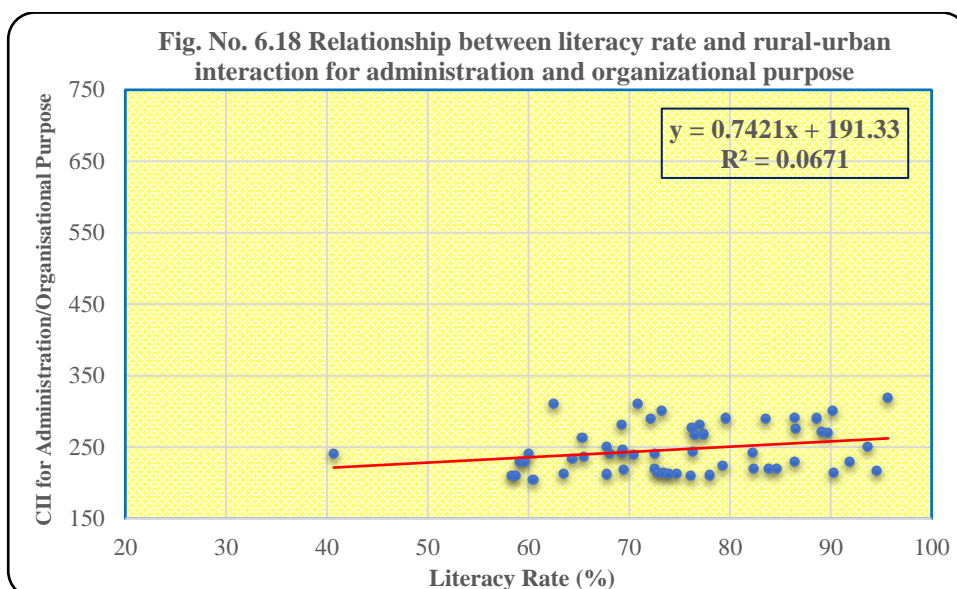
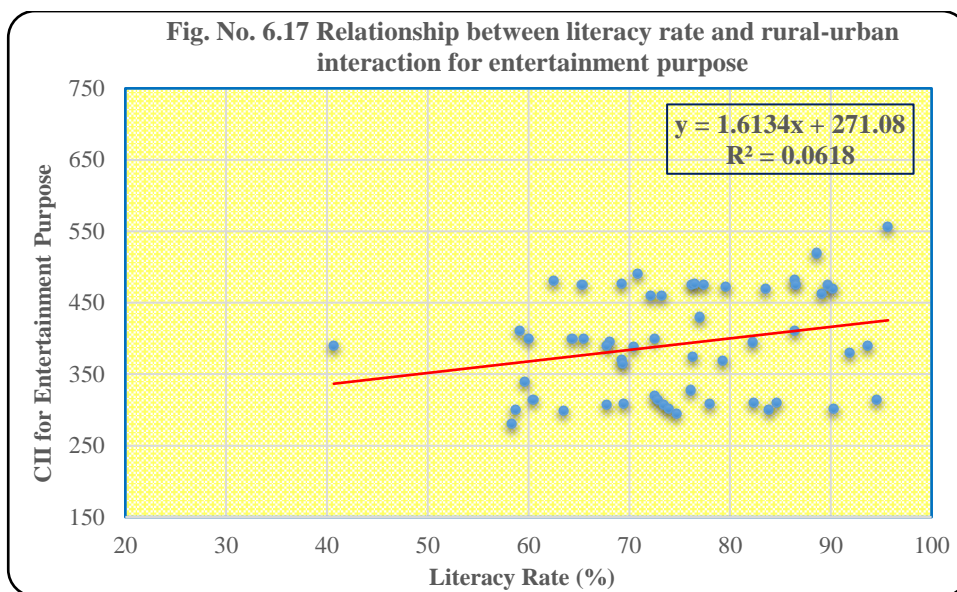
	Karaibari	86.52	658.33	591.67	625.00	366.67	475.00	275.00
	Putimari	89.14	683.33	595.83	616.67	370.83	462.50	270.83
	Rajpauri	65.34	675.61	621.95	641.46	343.90	475.61	263.41
	Bhujia Banir Chhat	89.68	668.09	619.15	597.87	353.19	474.47	270.21
	Bara Pathuram	76.24	676.27	625.42	623.73	381.36	474.58	276.27
	Liusipukuri	77.39	667.92	613.21	628.30	361.32	475.47	267.92
	Mahishmari	76.54	656.25	602.34	605.47	344.53	476.56	267.19
	Kauakhali	88.59	694.77	624.84	629.41	386.27	518.95	290.20
II	Tharu Bhita	40.68	640.00	530.00	270.00	260.00	390.00	240.00
	Gangaram Maler Chhat	59.2	630.00	520.00	310.00	280.00	410.00	230.00
	Bairbhita	60	640.00	510.00	320.00	280.00	400.00	240.00
	Grammanir Chhat	72.57	630.00	530.00	250.00	260.00	400.00	240.00
	Sivok Hill Forest	93.68	590.00	480.00	310.00	290.00	390.00	250.00
	Grammani	86.47	620.00	540.00	260.00	280.00	410.00	230.00
	Dalkajhar Forest	91.9	630.00	500.00	260.00	270.00	380.00	230.00
	Bhelu	65.49	636.36	527.27	245.45	263.64	400.00	236.36
	Dhemaler Chhar	64.37	626.67	513.33	313.33	280.00	400.00	233.33
	Siubar	82.29	615.79	500.00	310.53	268.42	394.74	242.11
	Dandrajhar	68.1	604.55	486.36	240.91	272.73	395.45	240.91
	Chamtaguri Chhat	76.97	655.56	574.07	592.59	337.04	429.63	281.48
	Trihana Tea Garden	69.3	607.50	520.00	335.00	285.00	370.00	242.50
	Jogibhita	79.25	604.44	488.89	297.78	255.56	368.89	224.44
	Hetmuri	76.31	610.87	506.52	304.35	280.43	373.91	243.48
	III	Uttar Bansaon Kismat	69.42	607.34	513.76	277.06	289.91	364.22
Madhya Bansaon		67.83	615.76	509.78	215.22	285.87	389.67	250.54
Pashchim Madati		70.47	606.64	525.09	235.79	285.61	388.19	239.11
Tukriajhar Forest		82.39	510.00	450.00	200.00	230.00	310.00	220.00
Dhakna Gachh		58.4	470.00	460.00	190.00	220.00	280.00	210.00
Fulbarir Chhat		59.67	520.00	410.00	190.00	230.00	340.00	230.00
	Madan	72.58	460.00	440.00	180.00	240.00	320.00	220.00
	Nazir	83.9	510.00	430.00	200.00	240.00	300.00	220.00
	Dudha	84.67	440.00	390.00	210.00	230.00	310.00	220.00

Jamatulla	69.5	454.55	427.27	218.18	236.36	309.09	218.18
Singbhita	58.7	463.64	400.00	209.09	227.27	300.00	209.09
Chhota Paikpara Arazi	72.85	492.86	400.00	178.57	235.71	314.29	214.29
Chunilal	76.13	554.55	431.82	163.64	222.73	327.27	209.09
Subalbhita	60.49	545.45	409.09	154.55	222.73	313.64	204.55
Naksalbari	94.6	575.00	394.44	172.22	225.00	313.89	216.67
Debiganja	67.83	552.38	402.38	152.38	235.71	307.14	211.90
Chayansing	73.49	550.00	388.64	156.82	227.27	306.82	213.64
Dayaram	90.3	564.29	428.57	171.43	182.86	301.43	214.29
Mandila Jhar	63.48	553.44	424.43	154.96	229.77	299.24	212.21
Bara Paikpara Arazi	73.96	547.65	421.48	152.35	228.86	302.01	212.75
Uttar Ramdhan	78	526.49	443.05	162.25	226.49	307.95	210.60
Lahugaon	74.69	517.00	433.99	154.55	239.53	294.86	213.44

Source: Computed by the Researcher.







6.3 Summary

The major objective of this chapter was to study the pattern of rural-urban interaction within the study area. For analyzing the rural-urban interaction in the study area 55 villages were selected based on their size-class category from Zone I, II and III respectively. Since rural-urban interaction takes place for a variety of reasons so in this study, rural-urban interaction was analyzed for the following purposes viz. economic, agricultural, educational, health, entertainment and administration and organizational. Then from each of the 55 selected villages, the households were classified on the basis of frequency of visit to Siliguri Municipal Corporation for each of the above mentioned purposes. The unequal weightage method was used, with the highest weightage given to those households who visit Siliguri Municipal Corporation daily and the lowest weightage to those households who never visit Siliguri

Municipal Corporation. This gave a composite index of interaction for each of the 55 villages with respect to different purpose of the rural-urban interaction individually. While analyzing the rural-urban interaction, it was seen that interaction for economic, agricultural and educational purposes were in general higher compared to interaction for health, entertainment and administration and organizational purpose between the villages of the study area with Siliguri Municipal Corporation. However, a dominant trend with respect to all the purposes of rural-urban interaction in the study area is the frequency and volume of interaction decrease with an increase in distance from Siliguri Municipal Corporation. Infact, while analyzing the relationship with average income of households and the literacy rate of 55 selected villages with their composite index of interaction, no significant relationship was established. Therefore, it can be said that for rural-urban interaction between the villages of the study area with Siliguri Municipal Corporation, distance of a village from Siliguri Municipal Corporation plays the dominant role in determining the level of interaction.

6.4 References

1. Alam, S.M. (1965) *Hyderabad, Secunderabad: A Study in Urban Geography*, Osmania University Press, Hyderabad. Rao, V.L.S.P. & Tewari, V. K. (1974) *Regions in Kamataka Mimetographed ISEC*, Bangalore.
2. Deshpande, C.D., Arunachalam, B. & Bhat, L.S. (1980) *Impact of a Metropolitan City on the Surrounding Region a Study of South Kolaba, Maharashtra*. Concept Publishing Company, New Delhi.
3. Ellefsen, R.A. (1962) *City-Hinterland Relationship in India, with spec. ref. to hinterlands of Bombay, Delhi, Madras, Hyderabad, Baroda*. In Roy Turner (ed.) *India's Urban Future*~ Oxford Univ. Press.
4. Kaur, R. (1995) *Urban-Rural Relations A Geographical Analysis*, Anmol Publications Pvt Ltd, New Delhi.
5. Nangia, S.K. (1976) *Delhi Metropolitan Region: A Study in Settlement Geography*, K.B Publications, New Delhi.
6. Singh R. L. (1964), *Banaras, A Study of Urban Geography*, Nand Kishore & Bros, Banaras.