

A Study on Inclusive Growth in Numaligarh, Assam: With Special Reference to CSR activities of NRL

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ABSTRACT

Purpose: The objective of the paper is to study the overall growth level in the villages around Numaligarh Refinery Limited (NRL), Assam achieved because of various corporate social responsibility (CSR) activities and to examine the status of standard of living of these people. Approach: The methodology of this paper is based on primary data collected through a structured interview schedule and questionnaire based on correlation and regression is used to analyze the status of growth of the region and the future expectation of people. Findings: A moderate relationship is found between the perceived satisfaction by the employees on CSR expenditure and their job-related variables. Even all the sub variables of CSR activities seem to have a moderate relationship with each other, but in case of job satisfaction, the correlation is quite weak. Research limitations: The area is a remote one and to get specific answers from these people is difficult. Value: It will be an addition to the related literature and suggestion for inclusive growth of the region.

Keywords: Assam, corporate social responsibility, Numligarh refinery limited

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INTRODUCTION

The 1947 partition isolated the region and sealed the land and sea routes, with which the any and every trade was possible at that time. It closed the accessibility to the traditional markets, which were established by the time and took the region backwards by a quarter of a century. It also alienated the rest of India with North East. The North East lost the Chittagong port to Bangladesh and in return it got a very narrow 27 km wide Siliguri corridor and this made the entire North East, a distant land and severed the movement of goods as well as people, making the natives an alien in their own country. The volatile neighborhood relationships added fuel to the fire of economic slowdown of the land and people. The well-established trade routes were converted into inaccessible International borders. All this led to the

evaporation of private investment from the region and poor infrastructure and governance coupled with low productivity and limited market access along with seasonal floods, which till today are uncontrolled by the government, dealt the death blow to the human entrepreneurship also. River banks, kept on eroding, human life was continually lost and the dependence on Central Government and PSUs operating in the region for resources, kept on increasing.

This coupled with lack of political willingness to uplift the region and Numaligarh Refinery Limited (NRL) being the only entity, working to uplift the living standards has boiled down to a situation where anybody and everybody has all the expectations from NRL only. Hence the central and state governments,

with the help of NRL, are trying towards identification of the factors which are responsible for slow growth rate, and the factors which can accelerate the growth rate. Following reflects expectations of villagers and a possible rationale behind such expectations:

- The villagers, because of being less educated, often confuse between infrastructural development and housing development. Hence, they believe that NRL must develop their housing facilities also and even maintain the housing structures at regular intervals.
- The quality of water has gone down substantially of the region. Only a limited number of houses have individual water supply facility and much of population is still dependent upon natural ponds or common water supply source in their locality and they expect that NRL should provide, each house, a good source of drinking water.
- India, as a country, is trying to improve upon the sanitation facilities and so is the area surrounding NRL. Villagers being ill informed about the recent thrusts propagated by the Govt. of India to improve upon the sanitation facilities and the financial help that Govt. of India is willing to give to the residents in every area, they still are unable to utilize the Govt. help and they expect that NRL should provide them with the concrete sanitation facilities.
- Education has long been accepted as a panacea for most of the social, economic and financial problems in the region. The people expect that NRL will develop school structure and education quality there.
- Health care is another area, which needs an altogether different approach. Though NRL is organizing an adequate medical system for the people but more improvements are needed there.

Inadequate backward and forward linkages for the goods grown, produced and crafted in the area, often render the goods as less marketable and this bereft the villagers from realizing the fair market value of the goods produced. This has given rise to a vicious cycle of producer to middleman to customer to middleman and back to producer. The only way to escape the cycle is to get the accessibility to the market. And better service roads are the only answer to this vicious cycle, so they expect that NRL would make the roads and provide them direct access to the markets.

- Electricity is another chord of discontent. There are many villages where electricity is provided or alternatives like solar panels are provided but still there are villages which do not have access to any of these, so they expect electricity or solar panels in their villages.
- Though the land is fertile and good for agriculture and many seasonal and traditional crops can be harvested but since the area is adjacent to the Kaziranga National Park and there is no boundary or barrier to stop wild animals from venturing into the farms. The villagers want some concrete actions in this regard along with some better agricultural facilities to increase their productivity.

LITERATURE REVIEW

Over the years, NRL has been trying to bring positive change to the lives of more and more people through CSR activities. Every year, new CSR programs are being identified to reach out to a larger section of the society and make a visible impact to their lives. The Community, particularly around the refinery at Numaligarh has witnessed perceptible improvement on socio economic front because of CSR initiatives of NRL. Efforts were made to ensure that benefits of the CSR activities reach to the less privileged and

marginalized section of the society under the focus areas of promotion of Agri allied activities; Skill Development; Education; Health care, Rural Infrastructure and Promotion of Sports.

In 2005 NRL implemented Some of the schemes such as free health checkup and medical camps, aids to educational institutions etc. in coordination with local bodies and various Government Departments [1]. In 2006 the Audit Committee of the Board reported the adequacy of internal control system. The various schemes essentially aiming at providing basic amenities and spreading a sense of well-being among the target population include the following:

- Free primary medical and health services and medicines through mobile health camps.
- Financial assistance to Schools and Colleges in the nearby area for developing its infrastructure, purchasing books for library and other educational aid.
- Awarding of scholarships to meritorious students.
- Improvement of roads and drinking water facility.
- Aid to various self-help groups through self-employment schemes (Annual Report NRL 2006).

In 2007 NRL developed the infrastructure of the two schools under the Community Development Scheme, i.e., Shrimahanta Shankerdev M.E. High School and Kamargaon M.E. High School. Professional and skilled medical practitioners were hired for medical treatment of the local people. Thus, NRL continued its definitive measures for improving the lives of the people in the neighboring areas through innovative and people friendly programs (Annual Report NRL 2006-07). In 2008, The Vivekananda Kendra NRL Hospital (VKNRL), a multi-

specialty 30 bed general hospital set up by NRL, has been providing round the clock emergency services to the surrounding populace along with its own employees. The hospital also conducts regular occupational health check-ups and mobile medical camps free of cost besides organizing various awareness programs in the surrounding villages within 10 KMs from the refinery. As a part of its corporate social responsibility, NRL provides support assistance towards Agri-allied/income generation activities, education, infrastructure development, community health and promotion of arts, sports, literature and culture etc. NRL gives cash awards to students securing first division in Metric and Higher Secondary Board Examinations under its 'Gyandeept' Scheme [2-3]. Since, 2008-09, NRL has also introduced a new scheme of Educational Excursion of Class X students of these 24 high schools to Delhi / Agra and 240 students and 48 teachers participated in the Excursion in 2008–2009 under the scheme 'Gyan Yatra'. During the year 2008-09, NRL has undertaken the following major schemes apart from the regular schemes as above:

- (1) Provision of one Fibre Glass Ambulance Speed Boat for the people of Majuli, the world-famous river island, to be used for crossing the mighty river Brahmaputra in shortest possible time in case of emergency.
- (2) Construction of "NRL Training and Placement Centre" at Jorhat Engineering College.
- (3) SWOT analysis and Institutional development in ITI, Jorhat for converting it into a Centre of Excellence [4].

NRL lays great emphasis in promoting education for the girl child. In 2009-10 under a scheme titled 'Prerona', scholarship is being awarded to meritorious girl students every year from

27 schools about the refinery. NRL has also introduced a scheme ‘Dronacharya’ for rewarding teachers based on results of students in Board Examinations. Various schemes are also being pursued by NRL for providing clean drinking water and hygienic sanitation in all villages within 10 km radius of the refinery. Against the approved CSR budget of Rs. 4.71 crores (which is 2% of the actual profit after tax for the year 2008–2009) for the year 2009–2010, NRL has spent the entire allocation for Social Welfare Schemes. NRL donated an Ambulance Speed Boat to the people of Majuli also under its CSR initiative [5].

In the year 2010–2011, the scheme covered 31 schools about the refinery. Under another scheme ‘Gyandeept’, scholarship is awarded to 106 meritorious students from High Schools and Junior Colleges. During the year, NRL sponsored one fully equipped boat clinic named ‘NUMALI’ under its CSR program for providing health service to the marginalized river island population of Sonitpur district, an innovative Boat Clinic Program which has been initiated by Centre for North East Studies and Policy Research (C-NES) under NRHM. During the year under review, NRL continued to give focused attention in the following areas for welfare of the economically weaker sections of the society and spent an amount of 4.97 crores against the approved CSR budget of 4.71 crores as shown in Table 1 [6].

Table 1. (Rupees in lakhs)

Agri-allied/Income generation activities	54
Assistance to Educational Institutions	190
Infrastructure Development	146
Community Health and sanitation	35
Promotion of Art, Sports, Literature and Culture	72
Total	497

During 2011–2012, actual expenditure against CSR activities was ` 5.86 crores against budget allocation of ` 5.58 crores.

Expenditure against CSR activities in the previous year was `4.97 crores. A total of 211 free medical camps were organized with support from the Vivekananda Kendra NRL Hospital, Numaligarh. Besides, demographic survey was conducted covering six villages about the refinery. A total of 386 girl students were awarded scholarships under the scheme “Prerona”.

Hygienic sanitation facilities were provided to 62 families below the poverty line. NRL donates Tractor as a part of CSR initiatives. With a view to spreading of environmental awareness amongst people living in neighborhood, several awareness programmers were conducted during the year. ‘World Environment Day’ was celebrated where employees as well as residents and students actively participated [7].

During 2012-13, against NRL’s CSR budget allocation of 558 lakhs, actual expenditure was 551 lakhs. 295 girl-child were given the benefit, under “Prerona Scholarship” within the 10 km radius of the refinery. Vivekananda Kendra NRL hospital organized 229 free mobile medical camps in the area surrounding the refinery. 70 BPL families were provided with hygienic sanitation facility. Within 5 km radius of the refinery. NRL Helping Hand and Millennium Development Goals (MDG) helped the differently abled people and physically challenged people, by providing them different aids and appliances in Golaghat district. More than 50 SHGs were aided by the NRL to encourage successful entrepreneurship ventures like piggery, poultry farms, animal husbandry farms and handloom units, improving the employment scenario and decreasing the dependence on Central/State Governments. Schemes like “Swa Nitbhar” provided livelihood assistance, under the aegis of NRL and even a Football Academy to enhance the sports related skills of the youth in the area

and even professional coaches from Spain, are being provided to the interested youth with skills (Annual Report NRL 2012-13).

NRL's initiatives towards CSR and Sustainability were pursued with increased emphasis during 2013-14. During this year NRL's expenditure on CSR and Sustainability activities was `5.29 crores against budget allocation of Rs.5.51 crores. A Board level CSR and Sustainability committee headed by an independent director besides a committee of executives headed by General Manager (HR) were constituted for formulating, implementing and monitoring identified CSR activities during the year. Under 'NRL Helping Hand' project rehabilitation aids were provided to 520 differently able persons. In association with the Lions Club of Jorhat and Numaligarh, free eye screening and cataract operation camps were organized [8].

Revised CSR and sustainability policy of NRL has been accorded by the Board in its meeting held on 19th January 2015 in line with provision of Company's Act, 2013 and DPE guideline on corporate social responsibility and sustainability for CPSE issued on 21st Oct 2014. A three-tier committee is constituted to implement and monitor CSR activities. Based on the average net profits of the Company for the last three financial years, total amount to be spent on CSR during the year 2014-15 was 762.30 lakhs against which actual amount spent was 762.45 lakhs. Highlights of these activities during the year can be summarized as - Aiding farmers of nearby localities by way of providing technical support such as SRI technique, fertilizer, seeds, Agri-farm equipment, water pump etc. to enhance production of rice [9].

Promotion of livelihood through cultivation of Rabi Crop. Setting up a center for implementation of digital Literacy curriculum at Letekujan Tea

Estate in association with IRDIS, Guwahati. Installation of Solar power lighting system in 8 schools under project "Suryajyoti". Financial support to various organizations for Promotion of art and Literature of Assam. Provide Financial support for construction of Ponka Sanskritik Vikash Kendra. Repairing/renovation of Ponka Borchapori wooden bridge through PWD. Under the scheme "Niramoy", 275 free Mobile Medical Camps were organized Under the scheme "Library for All", 10 libraries were established in 10 different schools etc [10].

Thus, NRL's increasing efforts on CSR is reflected in its CSR spending which has grown by many folds in the last few years. During 2016-17, NRL CSR expenditure has increased to Rs.20.69 crores, registering a growth of 78.8% over previous years CSR spending of Rs.11.57 crores. Major CSR and Sustainability initiatives undertaken during 2016-17 are:

- "Uttoron", a flagship project of NRL attempts to provide skill development training to the un employed youth. It also organized 6-month training for 20 local weavers through M/s Indian Institute of Entrepreneurship (IIE).
- One of the flagship CSR initiatives undertaken during 2016-17 was to set up VK NRL School of Nursing at Numaligarh at a project cost of Rs.26.00 crores.
- Three new school has been constructed at a project cost of ` 55.09 Lakh viz. Ponka R.H. High school, 1 no. Rongbong Karbi L.P. School and Lakhimi Bagan LP School.
- Exceptional teachers are being recognized and rewarded under "Dronacharya" scheme, "Gyandeeep" attempts to reward the first division holders in class X and XII examinations and girl child education is being facilitated with scholarships under "Prerona" scheme.

- Electrification work has been taken up in 8 nos. un-electrified villages in the neighboring areas.
- Five villages named Chawrabasti, Ponka, Mazdoor, Gandhigaon, Napathar Notun Gaon have been taken up for development as Model village. Where electricity condition, water supply system, road conditions, education etc. are on improving stage.
- Under the projects Drishti and Niramoy adequate medical campaigns and facilities are provided.
- Baseline surveys, with help of professional institutions like Kaziranga University, are being conducted to get a third party, neutral view, regarding the prevalent socio-economic conditions of the population in the nearby villages, to redress the needs of the underprivileged in the surrounding area.
- Initiation and training regarding hygienic practices for proper sanitation requirements and needs [11-14].

RESEARCH QUESTION

Research question is, that even with the presence of a Public-Sector Unit like NRL which is statutorily obligated to perform CSR activities in the adjacent areas to uplift the living standards of the population, how to initiate and execute the societal development programs to include inclusive growth. To investigate these questions following objectives were set.

Objectives

- (1) To study the socio-economic conditions of the identified villages.
- (2) To assess the possibility of creation of additional and sustainable livelihood avenues for the socio-economic development of the targeted community.
- (3) To ascertain the need and feasibility of improvement of basic infrastructure in the identified areas.

Since the nature and scope of these objectives is highly diverse and very large hence the conclusions drawn from these objectives would be of theoretical and conceptual nature and it would become difficult to develop an actionable plan with quantifiable parameters.

Hence, the objectives are further redefined as follows:

- (1) Assessment of education status of the area and identification of the reasons responsible for cessation of education pursuits of the population.
- (2) Identification of sources of livelihood and livelihood avenues.
- (3) Calibration of extent of population covered by mobile medical camps and identification of most frequent or common ailments for which the specific attention is required.
- (4) Quantification of awareness, availability and accessibility to banking, postal, and insurance services in the area.

RESEARCH METHODOLOGY

Survey method of census was used to collect the data with a purpose to collect relevant information from every member of population to identify the most common factors and every observation which might be present in the population.

- Population: 350 households (35 households in one ward in ten in four villages)
- Sample Size: Overall population
- Data collection tool: Structured interview schedule and questionnaire.
- Research Method: Descriptive quantitative research method combined with basic correlation and regression analysis.

Research Design

The research problem with this paper was calibration of impact of CSR activities undertaken by NRL for the inclusive growth of the population in the areas adjacent to NRL, Numaligarh. The

problem occurred to sporadic growth amongst different sections of the population since independence and the complete benefit of any of the Govt. has not reached to the population in its full potential. With this research, it is aimed to identify the convergent as well as totally divergent areas in the concerned, are as to strengthen the inclusive growth. The data required for the study would be acquired through personal interview and questionnaire and it was collected by means of cold calling, (cold calling is the process of approaching perspective mass who were not expecting such an interaction), and the research period was spread out in fifty-five days. For this purpose, the researchers choose the four villages including ten wards each.

Data Collection Techniques and Tools

For data collection, the researcher took help of primary data only. Hence there is no earlier research paper in this topic only twelve years Annual Reports of NRL considered for literature review.

The Structured Interview Schedule tool is used to collect data. This interview conducted where a mixture of structure and unstructured interviews. Scope was kept open for detailed discussion at the discretion of the interviewee. Where predetermined question put forwarded for the interviewee. The other method adopted in primary data collection was questionnaire. Questions are in dichotomous (yes or no answers), multiple choice and open-ended question.

To get a better understanding and to have a large exposure on the subject secondary data are collected. The Annual Reports of NRL are collected from its official website.

Sample Design

Sample design was based on principles of survey. Sample was decided on socio demographic factors such as age group, size of the family, income source,

longevity etc. The overall population is considered as sample size. The various parameters on which the research was conducted are employment, education, sanitation practices, types of fuel and water being used.

LIMITATIONS OF THE STUDY

The region is rich in natural resources, covered with dense forests, with large and small river systems nesting the land and is a treasure house of flora and fauna. While conducting the study the following limitations had been confronted:

- Troubled by history and geo-politics prevailed in the region.
- There is overwhelming dependence for resources on the Central Government and very high degree of expectations from PSUs operating in the region.
- Poor infrastructure and governance is combined with low productivity and market access. This region has been marked as one of the remote areas.
- The language problem occurs for some context.
- Some difficulties occurred while attempting in getting adequate answers from the villagers. Apart from this most of them were hesitated in revealing their monthly income amount.

ANALYSIS AND

INTERPRETATIONS observed from table 2-35.

Population Profile

The number of households interviewed: 350

Gender: male and female

Income source: Agriculture, daily wage earners and tea garden laborers.

Family size: Minimum number: 4

Maximum number: 8

- (1) Assessment of education status of the area and identification of the reasons responsible for cessation of education pursuits of the population.

(2) Income: All Panchayat (Rongbong, Letakujan, Ponka and Model Village)

Table 2. Income Numaligarh

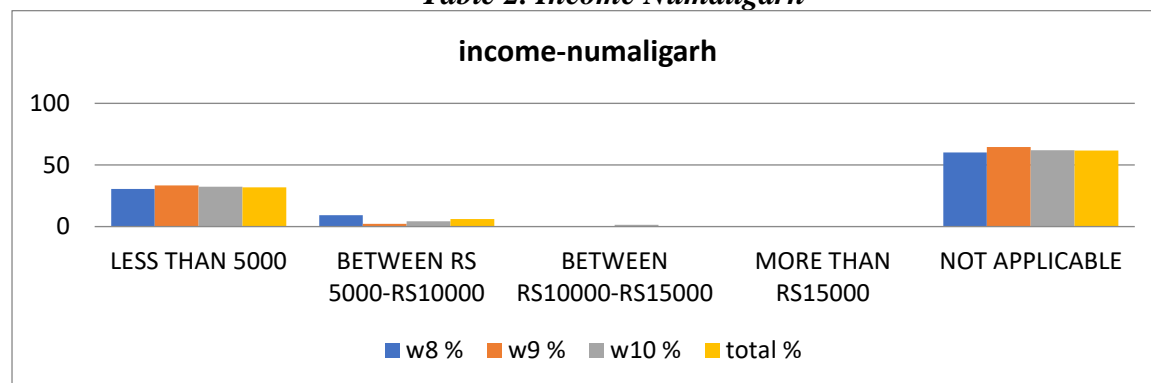


Table 3.

	EDUCATION								Gender	
	illiterate	primary	ME	HS	HSS	graduate	PG	other	MALE	FEMALE
w1	40.65	20.65	27.10	6.45	0.65	3.87	0.65	0.00	49.03	50.97
w2	38.83	26.70	18.93	9.95	2.91	1.94	0.49	0.24	52.18	47.82
w3	31.10	24.73	26.15	9.19	5.30	1.77	0.71	0.35	49.12	50.88
w4	29.02	28.24	19.61	12.55	5.88	4.31	0.00	0.39	48.63	51.37
w5	42.21	18.83	24.68	9.74	1.95	2.60	0.00	0.00	39.61	60.39
w6	38.69	25.55	21.17	8.03	0.00	0.73	0.00	0.00	49.64	50.36
w7	42.25	23.94	18.66	8.45	2.82	2.82	1.06	0.00	51.06	48.94
w8	29.44	20.81	27.92	13.71	3.05	3.55	0.00	1.52	50.25	49.75
w9	44.97	22.15	21.48	5.37	4.70	1.34	0.00	0.00	47.65	52.35
w10	37.00	32.60	17.58	4.03	3.30	2.93	1.10	1.47	49.82	50.18
w11	30.22	25.33	28.00	8.44	4.44	3.11	0.00	0.44	48.44	51.56
w12	33.33	0.00	0.00	33.33	33.33	0.00	0.00	0.00	33.33	66.67
w13	39.19	21.62	18.92	5.41	10.81	4.05	0.00	0.00	47.30	52.70
w14	36.42	33.77	16.56	7.28	0.00	1.99	1.32	0.00	51.66	48.34
w15	36.81	25.77	21.17	7.06	6.44	2.45	0.31	0.00	50.31	49.69
w16	33.33	27.31	23.15	10.19	5.09	0.93	0.00	0.00	49.54	50.46
w17	33.50	24.00	29.50	8.00	2.00	2.50	0.00	0.50	51.00	49.00
w18	26.29	28.17	33.33	7.98	1.88	2.35	0.00	0.00	51.17	48.83
w19	35.35	27.63	24.55	5.40	5.01	1.93	0.13	0.00	51.80	48.20
w20	45.24	26.19	23.02	3.97	1.59	0.00	0.00	0.00	53.17	46.83
w21	50.00	23.24	19.72	4.23	2.82	0.00	0.00	0.00	50.70	49.30
w22	33.03	27.98	23.39	6.42	3.21	5.05	0.00	0.00	47.71	52.29
w23	31.51	30.14	27.40	6.85	1.37	2.74	0.00	0.00	53.42	46.58
w24	33.19	29.74	25.43	3.88	0.00	0.00	0.00	0.00	52.59	47.41
w25	33.33	11.11	33.33	11.11	11.11	0.00	0.00	0.00	44.44	55.56
w26	53.42	21.92	13.70	4.11	4.11	1.37	1.37	0.00	49.32	50.68
w27	28.57	24.49	33.67	7.14	2.04	4.08	0.00	0.00	47.96	52.04
w28	26.67	46.67	20.00	4.44	0.00	2.22	0.00	0.00	40.00	31.00
w29	33.80	33.80	22.54	5.63	2.82	1.41	0.00	0.00	110.00	104.00

Table 4. Fuel and Illumination

illumination				Fuel for cooking			
electricity	solar	kerosene	candle	wood	lpg	kerosene	others
76.13	5.16	13.55	5.16	77.42	21.29	1.29	0.00
71.12	7.04	18.69	3.16	75.73	20.15	4.13	0.00
67.84	2.83	20.49	8.83	79.15	17.67	3.18	0.00
73.73	7.06	18.04	1.18	76.08	20.39	3.53	0.00
68.83	6.49	22.73	1.95	83.12	15.58	1.30	0.00
76.64	0.73	19.71	2.92	69.34	22.63	8.03	0.00
74.00	9.00	15.67	1.33	77.33	21.00	1.67	0.00
55.33	2.03	38.07	4.57	89.85	7.11	3.05	0.00
54.36	0.00	44.97	0.67	0.00	20.81	1.29	0.00
32.23	1.10	66.30	0.37	86.81	12.82	0.37	0.00
39.56	2.67	57.78	0.00	80.89	18.67	0.44	0.00
0.00	0.00	100.00	0.00	100.00	0.00	0.00	0.00
40.54	0.00	56.76	2.70	86.49	13.51	0.00	0.00
31.13	7.28	59.60	1.99	90.73	9.27	0.00	0.00
55.83	17.79	21.47	4.91	85.28	14.72	0.00	0.00
66.20	7.87	23.61	2.31	80.56	16.20	3.24	0.00
68.00	11.00	19.50	1.50	88.50	11.00	0.50	0.00
49.30	13.15	35.68	1.88	91.55	7.04	1.41	0.00
89.46	0.51	9.64	0.39	47.04	52.96	1.29	0.00
93.65	0.00	4.76	1.59	61.90	38.10	0.00	0.00
88.73	1.41	8.45	1.41	64.79	35.21	0.00	0.00
75.00	4.63	19.91	0.46	90.83	7.80	0.46	0.00
91.78	0.00	6.85	1.37	63.01	36.99	0.00	0.00
69.40	3.88	26.72	0.00	80.17	19.40	0.43	0.00
66.67	0.00	33.33	0.00	88.89	11.11	0.00	0.00
82.19	1.37	13.70	2.74	85.53	10.53	0.00	0.00
83.67	0.00	12.24	4.08	61.22	38.78	0.00	0.00
90.91	0.00	9.09	0.00	50.00	50.00	0.00	0.00
90.28	0.00	9.72	0.00	115.00	99.00	0.00	0.00

Table 5. All Panchayat

	illiterate	primary	ME	HS	HSS	graduate	PG	other	<5000	5000-10000	10000-15000	>15000	NA
Illiterate	1												
Primary	-0.762	1.000											
ME	-0.799	0.997	1.000										
HS	0.056	-0.688	-0.644	1.000									
HSS	0.874	-0.677	-0.734	0.087	1.000								
graduate	-0.665	0.131	0.208	0.521	-0.799	1.000							
PG	0.502	-0.898	-	0.838	0.616	-0.030	1.000						

			0.896										
Other	0.248	-0.694	-0.696	0.818	0.509	0.018	0.939	1.000					
<5000	-0.234	0.797	0.769	-0.974	-0.308	-0.315	-0.939	-0.907	1.000				
5000–10000	-0.801	0.247	0.314	0.507	-0.791	0.956	-0.025	0.120	-0.312	1.000			
10000–15000	0.699	-0.976	-0.957	0.711	0.521	0.030	0.825	0.587	-0.779	-0.132	1.000		
>15000	0.834	-0.912	-0.903	0.455	0.567	-0.143	0.640	0.338	-0.538	-0.356	0.948	1.000	
NA	0.557	-0.560	-0.613	0.278	0.880	-0.625	0.718	0.764	-0.477	-0.494	0.365	0.272	1.000

Table 6. RONGBONG

	illiterate	primary	ME	HS	HSS	graduate	PG	other	<5000	5000-10000	10000-15000	>15000	NA
illiterate	1												
primary	-0.359	1.000											
ME	-0.249	-0.719	1.000										
HS	-0.742	0.145	0.041	1.000									
HSS	-0.711	0.465	-0.128	0.595	1.000								
graduate	-0.296	-0.184	0.204	0.384	0.342	1.000							
PG	0.360	0.055	-0.157	-0.552	0.066	-0.041	1.000						
other	-0.731	-0.124	0.446	0.810	0.332	0.328	-0.358	1.000					
<5000	-0.013	0.410	-0.419	0.132	0.259	0.105	0.482	0.155	1.000				
5000–10000	0.035	0.310	-0.136	-0.479	0.278	-0.077	0.277	-0.667	-0.323	1.000			
10000–15000	-0.200	-0.004	0.125	0.173	0.019	-0.201	-0.781	-0.110	0.749	0.314	1.000		
>15000	-0.832	0.346	0.083	0.847	0.657	0.302	-0.301	0.811	0.452	-0.394	-0.061	1.000	
NA	0.182	-0.609	0.467	-0.172	-0.488	-0.103	-0.417	-0.076	-0.934	0.049	0.544	-0.532	1.000

Table 7. LETAKUJAN

	illiterate	primary	ME	HS	HSS	graduate	PG	other	<5000	5000-10000	10000-15000	>15000	NA
illiterate	1												
primary	-0.006	1.000											
ME	-0.332	0.653	1.000										
HS	-0.251	-0.886	-0.719	1.000									

HSS	-0.004	-0.947	-0.812	0.916	1.000								
graduate	0.011	0.533	0.504	-0.709	-0.518	1.000							
PG	0.187	0.533	-0.228	-0.265	-0.320	0.130	1.000						
other	-0.009	0.327	0.062	-0.269	-0.232	0.345	0.441	1.000					
<5000	0.387	0.805	0.680	-0.960	-0.876	0.560	0.167	0.259	1.000				
5000–10000	-0.213	-0.912	-0.745	0.972	0.953	-0.562	-0.248	-0.151	-0.958	1.000			
10000–15000	-0.383	0.519	0.575	-0.340	-0.560	-0.034	0.057	0.424	0.409	-0.434	1.000		
>15000	0.592	0.109	0.035	-0.300	-0.187	-0.026	0.056	0.339	0.426	-0.255	0.084	1.000	
NA	-0.588	-0.062	-0.141	0.356	0.182	-0.149	0.153	-0.494	-0.543	0.286	-0.252	-0.734	1.000

Table 8. PONKA

	Illiterate	primary	ME	HS	HSS	graduate	PG	other	<5000	5000-10000	10000-15000	>15000	NA
illiterate	1												
primary	-0.184	1.000											
ME	-0.820	-0.274	1.000										
HS	-0.544	-0.664	0.774	1.000									
HSS	-0.104	-0.894	0.431	0.814	1.000								
graduate	-0.378	0.414	-0.066	0.113	-0.120	1.000							
PG	0.636	-0.167	-0.720	-0.277	0.070	0.008	1.000						
other	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.000					
<5000	0.305	-0.670	0.158	0.471	0.605	-0.274	-0.068	#DIV/0!	1.000				
5000–10000	-0.592	-0.618	0.759	0.849	0.678	-0.082	-0.249	#DIV/0!	0.107	1.000			
10000–15000	-0.656	0.713	0.189	-0.081	-0.451	0.756	-0.411	#DIV/0!	-0.649	-0.062	1.000		
>15000	0.360	0.024	-0.606	-0.242	0.139	0.316	0.796	#DIV/0!	-0.171	-0.301	-0.070	1.000	
NA	-0.030	0.811	-0.423	-0.749	-0.802	0.217	0.155	#DIV/0!	-0.929	-0.461	0.563	0.232	1.000

NUMULIGARIH													
	Illiterate	primary	ME	HS	HSS	graduate	PG	other	<5000	5000-10000	10000-15000	>15000	NA
illiterate	1												
primary	-0.3456	1.0000											
ME	-0.0876	-0.9045	1.0000										

HS	0.1912	-0.9872	0.9610	1.0000									
HSS	0.8695	-0.7640	0.4158	0.6510	1.0000								
graduate	-0.5350	-0.6079	0.8885	0.7270	-0.0479	1.0000							
PG	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.0000						
other	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.0000					
<5000	-0.0836	0.9640	-0.9853	0.9941	-0.5648	-0.7972	#DIV/0!	#DIV/0!	1.0000				
5000–10000	0.0203	-0.9452	0.9942	0.9852	0.5115	0.8338	#DIV/0!	#DIV/0!	-0.9980	1.0000			
10000–15000	0.9662	-0.0920	-0.3414	0.0682	0.7129	-0.7347	#DIV/0!	#DIV/0!	0.1761	-0.2380	1.0000		
>15000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.0000	
NA	-0.3489	1.0000	-0.9030	0.9866	0.7662	-0.6051	#DIV/0!	#DIV/0!	0.9630	-0.9441	-0.0955	#DIV/0!	1.0000

1. Identification of sources of livelihood and livelihood avenues.
Sources of Livelihood:

Table 9. RONGBONG

Sources of Livelihood	W1	W3	W4	W5	W6	W7	W8	W9	TOTAL
	%	%	%	%	%	%	%	%	%
Govt Service	0.00	1.70	1.06	1.18	0.00	0.73	0.00	1.52	0.91
Pvt Service	0.65	1.70	2.12	0.39	0.00	2.19	1.76	1.52	1.39
AMC Worker At NRL	0.65	0.73	1.06	0.00	0.65	0.73	1.06	0.51	0.69
Non-AMC Worker At NRL	0.00	1.21	0.71	0.78	0.65	0.73	0.35	1.52	0.80
Permanent Employee At NRL	0.65	0.24	0.00	0.00	0.00	0.00	0.00	0.51	0.16
Agriculture	1.94	2.67	6.71	7.45	1.95	5.11	2.11	2.03	3.84
Contractor	0.65	0.24	1.06	0.39	0.00	0.00	0.35	0.00	0.37
Business at Telegram, Ponka, Kanaighat, Labonghat	0.65	0.49	0.00	0.39	0.65	1.46	0.70	0.51	0.53
Business at Other Location	3.87	0.73	0.71	1.96	1.95	2.19	0.35	0.00	1.23
Housewife	20.65	11.65	20.49	16.86	12.99	19.71	12.68	16.75	15.82
Unemployed	9.03	13.83	5.30	7.06	9.09	16.79	11.27	9.64	10.23
Daily Wage Earner	16.13	26.70	11.66	14.90	21.43	6.57	29.58	16.75	19.45
Agriculture Labour	8.39	3.40	7.42	7.45	3.90	11.68	1.76	6.60	5.70
Animal Husbandry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Horticulture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pisciculture	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Student	21.94	26.46	30.39	30.20	29.87	23.36	26.41	28.43	27.44
Others	14.84	8.01	11.31	10.98	16.88	8.76	11.62	13.71	11.40

Table 10. LETAKUJAN.

Sources of Livelihood	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	TOTAL
	%	%	%	%	%	%	%	%	%	%	%
Govt Service	0.00	1.10	0.89	0.00	0.00	0.00	0.00	0.46	0.00	0.94	0.71
Pvt Service	2.68	0.37	1.33	0.00	0.00	1.99	0.61	1.39	2.00	0.47	1.15
AMC worker at NRL	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.93	0.50	0.47	0.27
Non-AMC worker at NRL	0.00	0.00	1.78	0.00	2.70	1.32	1.53	0.00	0.00	0.00	0.71
Permanent employee at NRL	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.46	0.00	0.00	0.16
Agriculture	2.01	3.66	3.56	0.00	0.00	1.32	2.76	3.24	4.50	3.29	3.01
Contractor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
Business at Telegram, Ponka, Kanaighat, Labonghat	0.00	1.47	0.00	33.33	1.35	1.32	1.23	0.93	1.00	0.47	0.98
Business at Other Location	0.00	0.37	2.22	0.00	0.00	0.66	0.31	0.00	0.00	0.00	1.48
Housewife	12.08	12.09	16.89	33.33	13.51	17.88	12.58	16.67	19.00	15.02	14.97
Unemployed	20.13	12.82	5.78	33.33	18.92	17.22	18.10	12.96	10.50	9.86	13.55
Daily Wage Earner	30.87	27.84	18.67	0.00	25.68	23.84	18.40	18.06	19.50	18.78	21.69
Agriculture Labour	3.36	3.66	1.78	0.00	4.05	4.64	8.59	9.26	4.50	3.29	5.08
Animal Husbandry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Horticulture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pisciculture	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.46	0.50	0.00	0.16
Student	22.15	29.67	31.56	0.00	27.03	25.83	27.30	23.15	22.00	30.52	26.89
Others	5.37	6.96	14.22	0.00	6.76	3.97	7.06	9.26	11.50	14.08	9.07

Table 11. PONKA

Sources of Livelihood	W1	W2	W3	W4	W5	W6	W8	W10	TOTAL
	%	%	%	%	%	%	%	%	%
Govt Service	0.77	0.00	0.70	0.46	1.37	0.00	0.00	0.00	0.54
Pvt Service	1.54	3.97	1.41	0.46	1.37	1.29	0.00	0.00	1.45
AMC Worker at NRL	1.03	0.00	0.00	0.46	1.37	0.00	0.00	0.00	0.61
Non-AMC worker at NRL	0.00	0.79	0.70	0.92	0.00	0.86	0.00	0.00	0.54
Permanent Employee At NRL	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Agriculture	2.70	0.79	1.41	5.96	4.11	5.60	11.11	0.00	3.27
Contractor	0.13	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.12
Business at Telegram, Ponka, Kanaighat, Labonghat	1.41	0.00	0.00	0.92	2.74	0.86	0.00	5.48	1.27
Business at other location	0.64	1.59	0.00	1.38	0.00	0.86	0.00	0.00	0.73
Housewife	11.44	11.11	9.86	11.93	6.85	18.97	11.11	9.59	12.11
Unemployed	14.91	15.08	4.93	9.17	8.22	12.93	0.00	20.55	12.89
Daily wage earner	27.12	25.40	40.14	22.94	31.51	15.09	44.44	32.88	26.39
Agriculture labour	4.63	4.76	4.23	2.75	0.00	5.60	0.00	0.00	4.06
Animal husbandry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Horticulture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pisciculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Student	26.74	26.98	30.28	33.03	32.88	28.02	33.33	19.18	28.03
Others	6.30	9.52	6.34	9.17	9.59	9.91	0.00	12.33	7.81

Table 12. NUMALIGARH MODEL VILLAGE

Sources of Livelihood:	w8	w9	w10	total
	%	%	%	%
Govt Service	1.02	0.00	1.41	0.93
Pvt Service	3.06	0.00	0.00	1.40
AMC worker at NRL	1.02	0.00	0.00	0.47
Non-AMC worker at NRL	0.00	0.00	0.00	0.00
Permanent employee at NRL	0.00	0.00	0.00	0.00
Agriculture	3.06	0.00	2.82	2.34
Contractor	0.00	0.00	0.00	0.00
Business at Telegram, Ponka, Kanaighat, Labonghat	2.04	2.22	2.82	2.34
Business at other location	0.00	0.00	0.00	0.00
Housewife	15.31	8.89	9.86	12.15
Unemployed	13.27	8.89	12.68	12.15
Daily Wage Earner	21.43	31.11	21.13	23.36
Agriculture Labour	6.12	4.44	9.86	7.01
Animal Husbandry	0.00	0.00	0.00	0.00
Horticulture	0.00	0.00	0.00	0.00
Pisciculture	0.00	0.00	0.00	0.93
Student	27.55	42.22	29.58	31.31
Others	6.12	2.22	7.04	5.61

Interpretations of objective (1) and (2):

Because of lack of infrastructural facilities there are limited number of educational institutes which hampers the educational pursuits of the population, hence even the youth starts seeking the employment at the very early age. But due to low education the formal employment sector is barred for them and they are forced to become the daily wage earners or agricultural labor. This again limits the number of operating

cycles and productivity of the population and that ultimately affects the income of the residents which remains dismally low.

2. Calibration of extent of population covered by mobile medical camps and identification of most frequent or most common ailments for which the specific attention is required.

PROPER HEALTHCARE FACILITY**Table 13. RONGBONG**

Proper health care facility	W1	W3	W4	W5	W6	W7	W8	W9	total
Yes	27.74	32.04	63.96	38.04	37.66	29.20	40.67	28.93	38.56
No	72.26	67.96	36.04	61.96	62.34	70.80	59.33	71.07	72.01

Table 14. LETEKUJAN

Proper health care facility	w1	W2	W3	W4	W5	W6	W7	W8	W9	W10	Total
Yes	75.84	51.28	66.67	0.00	54.05	54.97	30.37	18.98	44.50	20.19	43.61
No	24.16	48.72	33.33	100.00	45.95	45.03	69.63	81.02	55.50	79.81	56.39

Table 15. PONKA

Proper health care facility	w1	w3	w4	w5	w6	w7	w8	w9	Total
Yes	27.74	32.04	63.96	38.04	37.66	29.20	40.67	28.93	38.56
NO	72.26	67.96	36.04	61.96	62.34	70.80	59.33	71.07	72.01

Table 16. NUMLIGARH

Proper health care facility	w8	w9	w10	total
yes	35.71	51.11	28.17	36.45
No	64.29	48.89	71.83	91.89

VKNRL Mobile Medical Facility

Table 17. RONGBONG

VKNRL Mobile Medical facility	W1	W3	W4	W5	W6	W7	W8	W9	total
Yes	18.71	68.69	48.06	33.33	27.27	11.68	42.33	19.29	39.94
No	81.29	31.31	51.94	66.67	72.73	88.32	57.67	80.71	60.06

Table 18. LETEKUJAN

VKNRL Medical Mobile facility	w1	W2	W3	W4	W5	W6	W7	W8	W9	W10	Total
Yes	16.11	9.16	14.67	0.00	25.68	18.54	24.54	18.98	17.00	31.46	19.18
No	83.89	90.84	85.33	100.00	74.32	81.46	75.46	81.02	83.00	68.54	80.82

Table 19. PONKA

	w1	w3	w4	w5	w6	w7	w8	w9	Total
Yes	18.71	68.69	48.06	33.33	27.27	11.68	42.33	19.29	39.94
No	81.29	31.31	51.94	66.67	72.73	88.32	57.67	80.71	60.06

Table 20. NUMALIGARH

	w8	w9	w10	total
Yes	72.44898	63.63636	81.94444	282.1429
No	27.55102	36.36364	18.05556	100

Interpretation: Healthcare is one of the primary concerns of all the government in most of the economies. But the lack infrastructural facilities combined with low educational status and reliance on traditional medicinal system, which at the times unable to manage emergency actions. The medical care provided by NRL are a highly sought-after facility and with increasing awareness of the residents the reliance on traditional medicinal system is reducing and modern medical facilities are being sought after more in degrees. NRL Hospital is a milestone investment of it in healthcare sector for local people.

3. Quantification of awareness, availability and accessibility to Banking, Postal, and Insurance services in the area.

It can be observed with the following analysis that education, banking, and insurance are highly correlated hence further regression analysis is required to ascertain the degree of dependence and the drawing power of any of these factors on the remaining two. But first, let's see the significance of correlation between these three.

Table 21. Education, Banking, and Insurance

EDUCATION								BANK		INSURANCE	
illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
40.65	20.65	27.10	6.45	0.65	3.87	0.65	0.00	44.52	55.48	3.87	96.13
38.83	26.70	18.93	9.95	2.91	1.94	0.49	0.24	63.35	36.65	10.68	89.32
31.10	24.73	26.15	9.19	5.30	1.77	0.71	0.35	61.84	38.16	16.61	83.39

29.02	28.24	19.61	12.55	5.88	4.31	0.00	0.39	67.06	32.94	10.20	89.80
42.21	18.83	24.68	9.74	1.95	2.60	0.00	0.00	59.09	40.91	7.79	92.21
38.69	25.55	21.17	8.03	0.00	0.73	0.00	0.00	78.83	21.17	9.49	90.51
42.25	23.94	18.66	8.45	2.82	2.82	1.06	0.00	58.00	42.00	9.33	90.67
29.44	20.81	27.92	13.71	3.05	3.55	0.00	1.52	63.96	36.04	3.55	96.45
44.97	22.15	21.48	5.37	4.70	1.34	0.00	0.00	65.77	34.23	4.70	95.30
37.00	32.60	17.58	4.03	3.30	2.93	1.10	1.47	72.53	27.47	1.47	98.53
30.22	25.33	28.00	8.44	4.44	3.11	0.00	0.44	75.11	24.89	4.44	95.56
33.33	0.00	0.00	33.33	33.33	0.00	0.00	0.00	100.00	0.00	0.00	100.00
39.19	21.62	18.92	5.41	10.81	4.05	0.00	0.00	74.32	25.68	97.30	2.70
36.42	33.77	16.56	7.28	0.00	1.99	1.32	0.00	73.51	26.49	0.66	99.34
36.81	25.77	21.17	7.06	6.44	2.45	0.31	0.00	68.71	31.29	5.21	94.79
33.33	27.31	23.15	10.19	5.09	0.93	0.00	0.00	62.04	37.96	6.94	93.06
33.50	24.00	29.50	8.00	2.00	2.50	0.00	0.50	51.00	49.00	4.50	95.50
26.29	28.17	33.33	7.98	1.88	2.35	0.00	0.00	50.23	49.77	4.23	95.77
35.35	27.63	24.55	5.40	5.01	1.93	0.13	0.00	81.36	18.64	10.80	89.20
45.24	26.19	23.02	3.97	1.59	0.00	0.00	0.00	61.90	38.10	10.32	89.68
50.00	23.24	19.72	4.23	2.82	0.00	0.00	0.00	82.39	17.61	3.52	96.48
33.03	27.98	23.39	6.42	3.21	5.05	0.00	0.00	64.81	35.19	1.39	98.61
31.51	30.14	27.40	6.85	1.37	2.74	0.00	0.00	64.38	35.62	15.07	84.93
33.19	29.74	25.43	3.88	0.00	0.00	0.00	0.00	66.38	33.62	6.47	93.53
33.33	11.11	33.33	11.11	11.11	0.00	0.00	0.00	33.33	66.67	0.00	100.00
53.42	21.92	13.70	4.11	4.11	1.37	1.37	0.00	76.71	23.29	6.85	93.15
28.57	24.49	33.67	7.14	2.04	4.08	0.00	0.00	74.49	25.51	9.18	90.82
26.67	46.67	20.00	4.44	0.00	2.22	0.00	0.00	63.64	36.36	13.64	86.36
33.80	33.80	22.54	5.63	2.82	1.41	0.00	0.00	73.61	26.39	15.28	84.72

Table 22. RONGBONG

	EDUCATION								BANK		INSURANCE	
	illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
w1	40.65	20.65	27.10	6.45	0.65	3.87	0.65	0.00	44.52	55.48	3.87	96.13
w3	38.83	26.70	18.93	9.95	2.91	1.94	0.49	0.24	63.35	36.65	10.68	89.32
w4	31.10	24.73	26.15	9.19	5.30	1.77	0.71	0.35	61.84	38.16	16.61	83.39
w5	29.02	28.24	19.61	12.55	5.88	4.31	0.00	0.39	67.06	32.94	10.20	89.80
w6	42.21	18.83	24.68	9.74	1.95	2.60	0.00	0.00	59.09	40.91	7.79	92.21
w7	38.69	25.55	21.17	8.03	0.00	0.73	0.00	0.00	78.83	21.17	9.49	90.51
w8	42.25	23.94	18.66	8.45	2.82	2.82	1.06	0.00	58.00	42.00	9.33	90.67
w9	29.44	20.81	27.92	13.71	3.05	3.55	0.00	1.52	63.96	36.04	3.55	96.45

Table 23. LETAKUJAN

	EDUCATION								BANK		INSURANCE	
	illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
w1	44.97	22.15	21.48	5.37	4.70	1.34	0.00	0.00	65.77	34.23	4.70	95.30
w2	37.00	32.60	17.58	4.03	3.30	2.93	1.10	1.47	72.53	27.47	1.47	98.53
w3	30.22	25.33	28.00	8.44	4.44	3.11	0.00	0.44	75.11	24.89	4.44	95.56

W4	33.33	0.00	0.00	33.33	33.33	0.00	0.00	0.00	100.00	0.00	0.00	100.00
W5	39.19	21.62	18.92	5.41	10.81	4.05	0.00	0.00	74.32	25.68	97.30	2.70
W6	36.42	33.77	16.56	7.28	0.00	1.99	1.32	0.00	73.51	26.49	0.66	99.34
W7	36.81	25.77	21.17	7.06	6.44	2.45	0.31	0.00	68.71	31.29	5.21	94.79
W8	33.33	27.31	23.15	10.19	5.09	0.93	0.00	0.00	62.04	37.96	6.94	93.06
W9	33.50	24.00	29.50	8.00	2.00	2.50	0.00	0.50	51.00	49.00	4.50	95.50
W10	26.29	28.17	33.33	7.98	1.88	2.35	0.00	0.00	50.23	49.77	4.23	95.77

Table 24. PONKA

	EDUCATION								BANK		INSURANCE	
	illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
w1	35.35	27.63	24.55	5.40	5.01	1.93	0.13	0.00	81.36	18.64	10.80	89.20
w2	45.24	26.19	23.02	3.97	1.59	0.00	0.00	0.00	61.90	38.10	10.32	89.68
w3	50.00	23.24	19.72	4.23	2.82	0.00	0.00	0.00	82.39	17.61	3.52	96.48
W4	33.03	27.98	23.39	6.42	3.21	5.05	0.00	0.00	64.81	35.19	1.39	98.61
W5	31.51	30.14	27.40	6.85	1.37	2.74	0.00	0.00	64.38	35.62	15.07	84.93
W6	33.19	29.74	25.43	3.88	0.00	0.00	0.00	0.00	66.38	33.62	6.47	93.53
W7	33.33	11.11	33.33	11.11	11.11	0.00	0.00	0.00	33.33	66.67	0.00	100.00
W8	53.42	21.92	13.70	4.11	4.11	1.37	1.37	0.00	76.71	23.29	6.85	93.15

Table 25. NUMULIGARH MODEL VILLAGE.

	EDUCATION								BANK		INSURANCE	
	illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
w8	28.57	24.49	33.67	7.14	2.04	4.08	0.00	0.00	74.49	25.51	9.18	90.82
w9	26.67	46.67	20.00	4.44	0.00	2.22	0.00	0.00	63.64	36.36	13.64	86.36
w10	33.80	33.80	22.54	5.63	2.82	1.41	0.00	0.00	73.61	26.39	15.28	84.72

CORRELATION

Table 26. ALL PANCHAYAT

.0	illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
illiterate	1											
primary	-0.76	1.00										
ME	-0.80	1.00	1.00									
HS	0.06	-0.69	-0.64	1.00								
HSS	0.87	-0.68	-0.73	0.09	1.00							
graduate	-0.67	0.13	0.21	0.52	-0.80	1.00						
PG	0.50	-0.90	-0.90	0.84	0.62	-0.03	1.00					
other	0.25	-0.69	-0.70	0.82	0.51	0.02	0.94	1.00				
YES	-0.08	0.67	0.65	-0.96	-0.24	-0.35	-0.90	-0.94				
NO	0.08	-0.67	-0.65	0.96	0.24	0.35	0.90	0.94	-1.00	1.00		
YES	-0.88	0.62	0.68	0.00	-1.00	0.85	-0.55	-0.44	0.16	-0.16	1.00	
NO	0.88	-0.62	-0.68	0.00	1.00	-0.85	0.55	0.44	-0.16	0.16	-1.00	1.00

Table 27. RONGBONG

	<i>illiterate</i>	<i>primary</i>	<i>ME</i>	<i>HS</i>	<i>HSS</i>	<i>graduate</i>	<i>PG</i>	<i>other</i>	<i>YES</i>	<i>NO</i>	<i>YES</i>	<i>NO</i>
<i>illiterate</i>	1.00											
<i>primary</i>	-0.36	1.00										
<i>ME</i>	-0.25	-0.72	1.00									
<i>HS</i>	-0.74	0.15	0.04	1.00								
<i>HSS</i>	-0.71	0.46	-0.13	0.60	1.00							
<i>graduate</i>	-0.30	-0.18	0.20	0.38	0.34	1.00						
<i>PG</i>	0.36	0.06	-0.16	-0.55	0.07	-0.04	1.00					
<i>other</i>	-0.73	-0.12	0.45	0.81	0.33	0.33	-0.36	1.00				
<i>YES</i>	-0.32	0.54	-0.40	0.35	0.06	-0.56	-0.54	0.15	1.00			
<i>NO</i>	0.32	-0.54	0.40	-0.35	-0.06	0.56	0.54	-0.15	-1.00	1.00		
<i>YES</i>	-0.20	0.59	-0.35	-0.09	0.55	-0.52	0.28	-0.31	0.35	-0.35	1.00	
<i>NO</i>	0.20	-0.59	0.35	0.09	-0.55	0.52	-0.28	0.31	-0.35	0.35	-1.00	1.00

Table 28. LETEKUJAN

	<i>illiterate</i>	<i>primary</i>	<i>ME</i>	<i>HS</i>	<i>HSS</i>	<i>graduate</i>	<i>PG</i>	<i>other</i>	<i>YES</i>	<i>NO</i>	<i>YES</i>	<i>NO</i>
<i>illiterate</i>	1.00											
<i>primary</i>	-0.01	1.00										
<i>ME</i>	-0.33	0.65	1.00									
<i>HS</i>	-0.25	-0.89	-0.72	1.00								
<i>HSS</i>	0.00	-0.95	-0.81	0.92	1.00							
<i>graduate</i>	0.01	0.53	0.50	-0.71	-0.52	1.00						
<i>PG</i>	0.19	0.53	-0.23	-0.27	-0.32	0.13	1.00					
<i>other</i>	-0.01	0.33	0.06	-0.27	-0.23	0.34	0.44	1.00				
<i>YES</i>	0.19	-0.65	-0.90	0.69	0.80	-0.32	0.14	-0.03	1.00			
<i>NO</i>	-0.19	0.65	0.90	-0.69	-0.80	0.32	-0.14	0.03	-1.00	1.00		
<i>YES</i>	0.28	-0.07	-0.03	-0.21	0.10	0.58	-0.23	-0.20	0.08	-0.08	1.00	
<i>NO</i>	-0.28	0.07	0.03	0.21	-0.10	-0.58	0.23	0.20	-0.08	0.08	-1.00	1.00

Table 29. PONKA

	<i>illiterate</i>	<i>primary</i>	<i>ME</i>	<i>HS</i>	<i>HSS</i>	<i>graduate</i>	<i>PG</i>	<i>other</i>	<i>YES</i>	<i>NO</i>	<i>YES</i>	<i>NO</i>
<i>illiterate</i>	1.00											
<i>primary</i>	-0.18	1.00										
<i>ME</i>	-0.82	-0.27	1.00									
<i>HS</i>	-0.54	-0.66	0.77	1.00								
<i>HSS</i>	-0.10	-0.89	0.43	0.81	1.00							
<i>graduate</i>	-0.38	0.41	-0.07	0.11	-0.12	1.00						
<i>PG</i>	0.64	-0.17	-0.72	-0.28	0.07	0.01	1.00					
<i>YES</i>	0.47	0.61	-0.77	-0.82	-0.59	0.15	0.31	#DIV/0!	1.00			
<i>NO</i>	-0.47	-0.61	0.77	0.82	0.59	-0.15	-0.31	#DIV/0!	-1.00	1.00		
<i>YES</i>	-0.05	0.63	-0.10	-0.38	-0.53	0.05	0.03	#DIV/0!	0.37	-0.37	1.00	
<i>NO</i>	0.05	-0.63	0.10	0.38	0.53	-0.05	-0.03	#DIV/0!	-0.37	0.37	-1.00	1.00

Table 30. NUMLIGARH

	illiterate	primary	ME	HS	HSS	graduate	PG	other	YES	NO	YES	NO
illiterate	1.00											
primary	-0.35	1.00										
ME	-0.09	-0.90	1.00									
HS	0.19	-0.99	0.96	1.00								
HSS	0.87	-0.76	0.42	0.65	1.00							
graduate	-0.53	-0.61	0.89	0.73	-0.05	1.00						
PG	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.00					
YES	0.65	-0.94	0.70	0.87	0.94	0.29	#DIV/0!	#DIV/0!	1.00			
NO	-0.65	0.94	-0.70	-0.87	-0.94	-0.29	#DIV/0!	#DIV/0!	-1.00	1.00		
YES	0.50	0.64	-0.91	-0.75	0.01	-1.00	#DIV/0!	#DIV/0!	-0.33	0.33	1.00	
NO	-0.50	-0.64	0.91	0.75	-0.01	1.00	#DIV/0!	#DIV/0!	0.33	-0.33	-1.00	1.00

Interpretation: Banking, postal, insurance services and education, all are highly correlated and hence further analysis is

needed to draw any substantial conclusion or interpretation.

REGRESSION

Table 31. EDUCATION AND BANKING

ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	2485.355	310.6694	3.080411	0.019631			
Residual	20	2017.064	100.8532					
Total	28	4502.42						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	221.2736	118.6557	1.864838	0.076947	-26.2378	468.785	-26.2378	468.785
illiterate	-1.23727	1.21332	-1.01974	0.320031	-3.76821	1.293675	-3.76821	1.293675
primary	-1.09435	1.26636	-0.86417	0.397742	-3.73593	1.547233	-3.73593	1.547233
ME	-2.70883	1.222842	-2.21519	0.038516	-5.25964	-0.15803	-5.25964	-0.15803
HS	-1.80185	1.49627	-1.20423	0.242559	-4.92302	1.319311	-4.92302	1.319311
HSS	-0.70773	1.209554	-0.58512	0.565011	-3.23082	1.815351	-3.23082	1.815351
graduate	-0.35626	1.619695	-0.21995	0.828136	-3.73488	3.022366	-3.73488	3.022366
PG	-9.05424	5.480457	-1.6521	0.114129	-20.4863	2.377793	-20.4863	2.377793
other	2.175529	5.305864	0.410023	0.686148	-8.89231	13.24337	-8.89231	13.24337

Table 32. BANKING AND EDUCATION

ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	2485.355	310.6694	3.080411	0.019631			
Residual	20	2017.064	100.8532					
Total	28	4502.42						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-121.274	118.6557	-1.02206	0.318956	-368.785	126.2378	-368.785	126.2378

illiterate	1.237267	1.21332	1.019737	0.320031	-1.29367	3.76821	-1.29367	3.76821
primary	1.094347	1.26636	0.864167	0.397742	-1.54723	3.735927	-1.54723	3.735927
ME	2.708832	1.222842	2.215195	0.038516	0.158029	5.259635	0.158029	5.259635
HS	1.801854	1.49627	1.204231	0.242559	-1.31931	4.923019	-1.31931	4.923019
HSS	0.707735	1.209554	0.58512	0.565011	-1.81535	3.23082	-1.81535	3.23082
graduate	0.356259	1.619695	0.219954	0.828136	-3.02237	3.734884	-3.02237	3.734884
PG	9.05424	5.480457	1.652096	0.114129	-2.37779	20.48627	-2.37779	20.48627
other	-2.17553	5.305864	-0.41002	0.686148	-13.2434	8.89231	-13.2434	8.89231

1. Education and banking are highly regressed but only one-way regression is substantial and hence it can be concluded that better education simply implies more and better usage of banking services.

Table 33. EDUCATION AND INSURANCE

ANOVA								
	Df	SS	MS	F	Significance F			
Regression	8	3585.005	448.1256	1.834391	0.12942			
Residual	20	4885.824	244.2912					
Total	28	8470.829						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	164.938	184.6705	0.893148	0.382399	-220.278	550.1539	-220.278	550.1539
illiterate	-1.3699	1.888359	-0.72545	0.476582	-5.30895	2.569144	-5.30895	2.569144
primary	-1.45028	1.970907	-0.73584	0.470368	-5.56152	2.660958	-5.56152	2.660958
ME	-1.85085	1.903177	-0.97251	0.342415	-5.82081	2.119106	-5.82081	2.119106
HS	-4.57394	2.328729	-1.96413	0.063565	-9.43158	0.283707	-9.43158	0.283707
HSS	1.214253	1.882497	0.645023	0.526243	-2.71257	5.141072	-2.71257	5.141072
graduate	4.22316	2.520822	1.675311	0.109439	-1.03518	9.481503	-1.03518	9.481503
PG	-10.9984	8.529543	-1.28944	0.211957	-28.7907	6.793948	-28.7907	6.793948
other	-3.80408	8.257815	-0.46066	0.650009	-21.0296	13.42142	-21.0296	13.42142

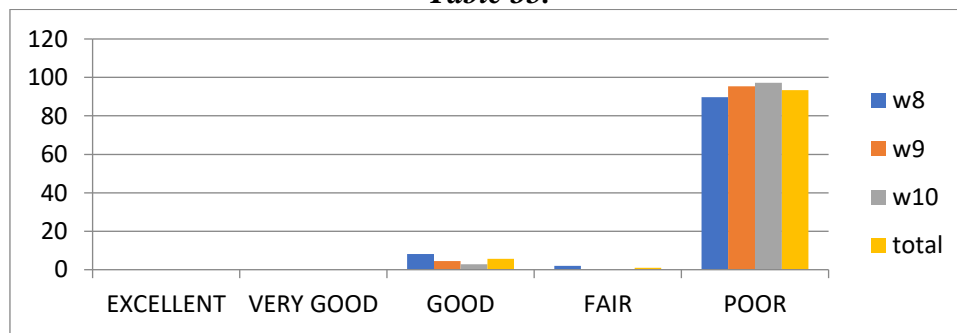
Table 34. Insurance and Education

ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	3585.005	448.1256	1.834391	0.12942			
Residual	20	4885.824	244.2912					
Total	28	8470.829						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-64.938	184.6705	-0.35164	0.728784	-450.154	320.2778	-450.154	320.2778
illiterate	1.369904	1.888359	0.725447	0.476582	-2.56914	5.308951	-2.56914	5.308951
primary	1.450282	1.970907	0.735845	0.470368	-2.66096	5.561522	-2.66096	5.561522
ME	1.850852	1.903177	0.972506	0.342415	-2.11911	5.82081	-2.11911	5.82081
HS	4.573937	2.328729	1.964134	0.063565	-0.28371	9.431581	-0.28371	9.431581
HSS	-1.21425	1.882497	-0.64502	0.526243	-5.14107	2.712566	-5.14107	2.712566
graduate	-4.22316	2.520822	-1.67531	0.109439	-9.4815	1.035183	-9.4815	1.035183
PG	10.99837	8.529543	1.289444	0.211957	-6.79395	28.79068	-6.79395	28.79068
other	3.804078	8.257815	0.460664	0.650009	-13.4214	21.02958	-13.4214	21.02958

2. The results are similar to as to previous observation that Education and Insurance are highly regressed but only one-way regression is substantial and hence it can be concluded that better education simply implies more and better usage of Insurance services.
3. The number of RCC houses in the area is very less and the general population is living in, broadly three types of houses, viz- Thatch, Semi Pucca with

tin roof and Assam Type. The population believes that fuels like LPG and kerosene are easily moveable and have resale value in the market, hence they are unwilling to purchase and use the LPG and kerosene and they still are using the traditional cooking and illumination sources like wood and candle, which are cost effective to them and perception of possible loss is minimum.

Table 35.



4. Most of the houses, in the area are semi pucca or thatch or Assam type and all three types are only partially suitable for individualized water supply source. Hence the population mostly has resorted to the public sources of water supply. If a common tap supplied with clean and controlled water by the local administration, can be provided then it would cause many benefits like the quantum of water borne diseases would go down, the requirement of medical expertise at inaccessible times would reduce in quantum and people would be safer.

Interpretation: Fuel for cooking and sources of illumination has already been covered under different heads and the analysis still stands valid for current set of analysis sheets. So, let's summarize the standards of living. The standard of living is correlated with almost all the factors. Education is one factor that has a power to drive many of the factors. And standard of living, rationally interpreted, is drive

positively and cohesively by the education. So, any attempt to improve upon the standards of living must start with up gradation of standards of education.

FINDINGS AND SUGGESTIONS

Findings

- There is no gender inequality observed among the villagers. Though various awareness programs are timely organized by the State Government and PSU present in the area (NRL) but there is old belief among these villagers that having more children is like having more hands to earn more.
- There is greatly needed to uplift the education system in this area, so the villagers can live their dream of pursuing high education. It will help them to cope up with their poor financial conditions. Better financial condition will lead a better standard of living. The Central/State Government and PSU (NRL) assisted in improving the infrastructure of schools in the

region but there are lack of colleges and high education institutions.

- The poor infrastructure is another hurdle in lifting the poor condition of the villagers. Being a remote area the only hope for the people is the Central/State Government and PSU (NRL). And NRL is working towards lifting the misery condition of the wards by constructing bridges etc. But the overall development of the region is solely depending on infrastructure. If roads are well connected with town area, then it will be feasible for the villagers to go outside and pursue higher education and make them eligible for formalized jobs. Thus, good financial condition will uplift their standard of living.
- NRL provided pucca toilet to many households and taking initiatives to make the same available for all households to maintain the social, moral and ethical norms. But the study reveals that these people are unaware with the fact that they are the only ones who can maintain the hygiene level and keep toilets neat and clean. Therefore, they are presuming that NRL is responsible for the same and most of these toilets are lying in most unhygienic conditions and are left unused by the residents. Some sort of awareness programmers must be organized by NRL to make them educate about the maintenance of toilets.
- NRL organizes mobile medical camps and is assisting people in providing medicines, artificial limbs or spectacles or cataract operations. Qualified medical professionals are allotted the medical job.
- NRL arranges the way to get the houses electrified and provides solar panel to most of them. It has provided water supply system to villagers and water quality is excellent. But most

inside areas are not covered under this scheme

- The villagers prefer ethnic style of cooking only because according to them the wood is cost effective than LPG and Kerosene. Again, the poor financial condition of people lowers down their standard of living.

Suggestions

Sanitation

- The villagers should be made aware of the initiatives that Government of India is driving to upgrade the sanitary habits so that they can get their own personalized sanitation facility in their own homes for which they will be responsible as an owner and user.

Drinking Water

- More number of wells at an equal distance, with a lid to cover the water from dirt and dust could have eased the task of providing safe drinking water to the population.

Health

- In one village the “Jackson Village” most of the population is affected by Skin Disease between the age group of 0–10 year’s child and Cardiac problems along with TB is most prevalent in different parts of the villages particularly amongst women working in tea gardens. Though the cardiac problems can be attributed to cigarette smoking and hence villagers should be made aware of the dangerous after effects of smoking.
- A proper access to healthcare facilities during pregnancy periods and at the time of delivery should be ensured and the distribution of medicines should be undertaken only when the sufficient shelf life of medicines is ensured.
- Mobile medical facility of VK NRL should reach to every corner of remote villages and an awareness drive, to inform them the existence of such

facility should be undertaken because a large segment of population reported that they are totally unaware about such facility. For this a signboard or Hoarding should be placed in proper places, containing the details related to time, place, day and venue for the mobile medical facility.

- More number of qualified medical professional and a common reporting facility, for such professional/assistants are required. It has been expressed that such professional, after reporting to their reporting office should move to their respective areas and after attending the designated area they can sign out from their reporting area.

Education

- Most of the school going kid left school for bad economic condition as well as long distance travel towards school. This is one of the major reasons for low literacy rate and high fall out ratio. Concentrated efforts should be taken to reduce the drop-out ratio from schools. Every student can be provided with a book account, from where they can take books relevant to their classes and they would return the books for further use after they pass a class.
- The senior population in the villages is still not aware about the importance of education. Campaign should be conducted for making them aware about the importance of education.
- The school teachers also lack the motivation for their own job so if teachers training programs can be initiated then the scenario should improve.

Family Planning Awareness

- Most of the villagers still believe that a greater number of children means more working hands in a family. Various measures like informal evening

gatherings, parent teacher meetings at school's posters and billboards, family planning awareness etc., and villagers should be made aware about the benefits of age difference between successive children and health benefits to the mother etc.

Infrastructure

- There is strong demand for proper road conditions of the villages. NRL must work to construct the road which will uplift their educational, health and economic conditions.

CONCLUSION

Uplifting the living standards of the population, is the primary job of the Central and State Governments. With this agenda, it has been made obligatory to perform corporate social responsibility by NRL which is primarily associated in finding the status of people living in nearby areas and to take initiatives by conducting base line survey periodically. By analyzing the previous NRL annual reports and base line survey report, this study reflects the prime areas where more work needs to be done. NRL is doing a tremendous job under its CSR activity since long.

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