

Socio Economic Indicators of Rural Development: A Block Wise Study in Lakhimpur District of Assam

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Abstract

Rural development incorporates all round development of the rural areas. It is not a new concept for India rather it is a very basic principle of our culture. Rural development is a strategy of development designed to make the rural people develop in respect of the economic and social life. It means sustained growth of income of the rural people along with the distribution of income and economic assets in favor of the poorer section of the community in such a way as to uplift their standard of living and progressively remove unemployment. It requires using natural and human resource, techniques, infrastructural facilities, government schemes and project to provide proper education, works and improve the quantity of human life in the rural societies. The basic difference that separates a rural area from its urban counterpart is the infrastructure. Absence of proper roads, non availability of electricity, poor communication and connectivity, lack of education facility, medical facilities and above all lack of supply of essential commodities of daily needs are certain things that our rural areas are putting up. The main objective of the study was to know about the CD block wise overall development in Lakhimpur district, Assam.

Key words: Rural development, economic, community development block, infrastructure, Comparative, government, empowerment

1.1 Introduction:

development is a term that concentrated on the actions taken for the development of rural areas to improve and sustain. Also the term rural development represents overall development of rural areas to improve the quality of life of rural people. In this sense, it is a comprehensive and multidimensional concept. The study of Rural Development has been raised for two lines of reasoning. The first and the more obvious consideration is that in India where a large majority of the population i.e. around 70 to 80 percent lives in rural areas, and that the incidence and intensity of poverty is also relatively high in the rural areas across the country. The general deficiency in basic infrastructure and facilities such as roads,

communication, power, education, health care and even sanitation and drinking water has a depressing effect on the quality of life especially in rural areas. The other line of reasoning which calls for special focus on rural development arises from disparities in the distribution of opportunities between urban and rural areas. For centuries, the true magnitude of poverty has been concealed from view by pushing by a large part of it to the rural areas. In order to provide the rural people with better prospects for economic development, increased participation of people in the rural development programmes, decentralization of planning, better enforcement of land reforms and greater access to credit are needed. The basic difference that separates a rural area from its urban counterpart is the infrastructure. Absence of proper roads, non availability of electricity, poor communication and connectivity, lack of education facility, medical facilities and above all lack of supply of essential commodities of daily needs are certain things that our rural areas are putting up.

Rural areas contribute significantly to economies of many countries. The food and agriculture organization (FAO) of UN estimates that more than 3 billion people almost half of the world population live in rural areas approximately 32 per cent of world's population is employed in agriculture. A majority of women workers are engaged in agricultural activities. It is not a new concept for India, rural development in India has a long history. Before the country achieved independence, rural development was under the role concern of British concern. Frequent famines and unresponsive and cruel attitude of the British govt left the rural economy completely shattered. The Christian missionaries played active role in the field of rural development. Of course many reforms and philanthropist started various innovative rural development programme, a few of these are Rural reconstruction programme (1890) in Baroda by Maharaja gaekwad III, rural reconstruction (1903) by Daniel Hamilton in 'Sunderban' areas of west Bengal; Servanths of Indian Society by Gopal Krishna Gokhale (1905), Gurgaon experimental (1920), Rural development programme (1935) and Grow more food Campaign (1943). This last programme forwarded in the post independent era. In this context, the role of Mohan Das karam chand Gandhi is note worthy. His programme of Sarvodaya, Samagra gram Seba, Economic reorganization and all round village development had substantial impact on shaping India's post independent rural development strategy.

India is predominantly a rural economy. As per the 2011 census 68.8 percent of the country's population and 72.4 per cent of work force resided in rural areas. Traditionally, agriculture is

the prime sector of rural economy and rural employment. The transition in composition of output and occupation from agriculture to more productive non-farm sectors is considered an important source of economic growth and transformation in rural and total economy. The contribution of rural areas in the economy of India for the period 1970-71 to 2011-12 shows a declining trend (from 62.4% to 46.9%). The record areas engaged 84.1% of the total workforce and produced 62.4% of the Net Domestic product (NDP) in 1970-71. Subsequently, rural share in the national income declined sharply till 1990-00. After 1990, growth rate of rural economy picked up the pace and reached at par with the growth rate of urban economy. On the other hand, rural share in total workforce declined steadily from 76.1% in 1999-00 to 79% in 2011-12. The sector wise disaggregation shows significant changes in the contribution of rural areas in the national economy. Besides producing almost all agricultural produce, rural areas contributed around one third of non farm output and 48.7 percent of non-farm employment. The most significant change between 1970-71 and 2011-12 is doubling of share of rural areas in output of manufacturing sector but could not fetch any increase in rural share in employment in manufacturing sector.

Assam is situated in the middle of the North-East and about 80% of people are lives in rural area. As Assam is an unceasing flood affected area and far from the central government Administration, most rural areas of Assam remain unpaid attention; and the Lakhimpur district is an administrative district in the state of Assam. Lakhimpur district is situated on the North East corner of Assam and at the north bank of the river Brahmaputra. The total area of Lakhimpur district is 2277 km. Thus the density of Lakhimpur district is 458 people per square kilometer. As per the initial provisional data of census 2011, around 36.15 sq. km. area is under urban region while 2240.85 sq. km. area is under rural region. Lakhimpur district has two subdivisions; Dhakuakhana and North Lakhimpur and it is consisting of nine community development (CD) blocks. The total population of Lakhimpur district as per Census 2011 is 1042137. Male comprises 529674 while female consists of 512463. Out of the total population of the district, 950804 falls under rural and 91333 are under urban areas of the district. In rural areas 482582 and 468222 are males and female respectively. From the source of population 2011-12 data the average literacy rate of Lakhimpur district in 2011 were 77.20 compared to 68.56 of 2001. If we see from gender wise, male and female literacy rate were 83.52 and 70.67 respectively in the year of 2011. For 2001 census, male literacy was 77.06 and female literacy was 59.59 in Lakhimpur district. Total literate in Lakhimpur

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district in the year of 2011 were 683,486 of which male and female were 375552 and 307934 respectively. Again in 2001, literates record 6715475 where male were 3703027 and female were 3012448. From this table there is one significant component is that literacy rate and literates were increase in both the section i.e. male and female section in the year of 2011. The sex ratio of Lakhimpur district is 968, thus for every 1000 men there were 968 females in Lakhimpur district. Also as per census 2011, the child sex ratio was 959 which is less than average sex ratio i.e. 968 of Lakhimpur district. The population of children of age 0-6 years in Lakhimpur district is 156739 which are 15% of the total population, which is 14% in case of Assam. There are 80016 male children and 76723 female children between the ages of 0-6 years.

This district has also so many rivers and is one of the main flood affected area among 33 districts in Assam. Flood is one of the main barrier for development in this rural areas; sometime it has to be noticed that so many people become homeless because of flood and it takes away their precious cattles, also so many rural infrastructure are affected or damaged by flood; for example- road, schools, hospitals (which is nearby river). So there are so many tribal people in Lakhimpur district who made their house with a raised platform or chang due to flood. Flood has mainly effect on rural people's necessities so government should take proper initiatives to prevent reoccurrence of flood in Lakhimpur district and should try to use infrastructure facilities in productive way. Although there are schools in rural areas but they are not sufficient as per the population also they lack in terms of the classrooms, toilet facilities etc. Again in case of health sector it goes without saying that the health infrastructure is poorly developed in rural areas of Lakhimpur district. This poses a great threat to the lives of rural population in the district. Again in case of education facility and connectivity this district is already lagging behind or it is not same for all the blocks, some blocks are leading and some are inferior.

1.2 Literature review:

Bhuyan (2020) found that a huge portion of people in rural areas moved towards non firm activities, but due to lack of skill, low education and less of available jobs they were unable to pick success than urban areas to improve their standard of living. This is one of the major differences between urban and rural areas according to author. The people of rural areas are

literate but the average year of schooling is less than 10 year in rural areas. Basumatary (2016) found that the basic needs like livelihood, health and education are the main problem of rural areas. Poor crops yields, lack of irrigation are needed to be tackled down for rural development. Also good moral values and commitment for upliftment of the community are also need for rural development. The author also says that the rural development programme should facilitate sustainable management of natural resource and environment protection. Mili (2019) found that the need for rural communities to approach development from a wider perspective has created more focus on a broad range of development goals rather than merely creating an incentive for agricultural or resource-based businesses. Assam rural poor need to part references the development and implementation of the relevant policies and programs, which need to ensure education development, environment development, health, electricity, communication, small industries, agriculture etc. Das (2018) found that for the development of rural industries such as village and cottage industries and the agricultural sectors of Assam, there should be proper utilization of Natural Resources, the marketing arrangement should be proper, better infrastructure, export oriented, good irrigation facilities for agriculture, availability of fertilizers and Government support. Barman & Bhattacharjya (2015) found that the only way to reduce the rural poverty is to provide economic support to the rural people, mainly the rural women through the self-help group. Providing economic support or loans help them to strengthen their positions and also empowered them both economically and socially. Borah and Saikia (2020) found that rural development is the prior objective of development planning for every state in India. In Assam, most of the people live in rural areas of the state and most of them are found poverty ridden and economically backward. The state government of Assam has been giving special trust for the elimination of rural poverty as well as upliftment of the economic condition of people in rural areas. To achieve the objective, the state government has been implementing various poverty alleviation programs undertaken by the government of India. Das & Puzari (2010) found that the women of rural areas are engaged in self help groups to improve their livelihood pattern. Through this they do some economical work animal husbandry, weaving, sericulture, biscuit making, cake making and this could developed a small scale enterprise. Women in rural areas individually do tailoring; making pickles for business purpose and this indirectly connect to rural development. Sundaram (2019) found that rural development requires a tremendous push in the infrastructure and private investment has seen to be very low. However, the pattern of

meagre investment in rural area is progressively changing in terms of economic sustenance. The study also recommended that rural development can be conceivable if there is proper balance between service-oriented programmes and development-oriented and self-reliant centered programmes. Francis (2015) found that changes in global production networks and increased urbanization have changed the character of rural areas. Agriculture, with its allied sectors, is unquestionably the largest livelihood provider in India, more so in the vast rural areas. Sustainable agriculture, in terms of food security, rural employment, and environmentally sustainable technologies such as soil conservation, sustainable natural resource management and biodiversity protection, are essential for holistic rural development. Madu (2007) found that rural development is multifaceted and thus requires an integrated approach for its achievement. Also found that rural development patterns and the assessment of the underlying factors are important for identifying gaps and recommending appropriate policies to address them. Chaurey and Le (2020) found that Physical infrastructure investments are important determinants of economic growth, and are one of the main United Nations Sustainable Development Goals. Among rural, remote, and low-income households, where the demand for some services is low, studying the effects of infrastructure is complicated. Prabhath (2011) found that culture and education are inseparable and yet complementary with multiple points of interaction. A good proportion of India's population lives in the rural areas; which means that urbanization haven't yet consumed its soul's i.e. rural India, despite some signs of the disconcerting air of their urban brethren rubbing on to the rural populace. Ranjithumar (2018) found that rural development is traditionally focused on the exploitation of natural resources such as agricultural, forest and mining. Rural planning is the process of improving the quality of life and economic well being of community living in relatively unpopulated areas rich in natural resources. Tokapur (2019) found that development of all aspects within rural communities is vital for the effective development of the country. Rural individuals need to be aware of all modern and innovative methods and techniques that are vital to augment productivity. Within the country, the rural communities are still in an underdeveloped state. It is essential to formulate programs, schemes and measures that have the main objective of bringing about improvements in rural communities. Ravalian and datt (1995) had talked about the growth and poverty in rural India. The author has found that measures of absolute rural poverty responds elastically to changes in mean consumption for the rural poor. The authors have attributed the long run

gains from growth to higher average farm yields which benefited poor people both directly and through higher real agricultural wages. Shivnani (2017) found that the government has already come up with so many social and financial alleviation schemes for the poor however, the fate of those unfortunates still remains a concern. After demonetization in India, many initiatives have been successfully implemented in rural India and rural people are more aware of how to access government benefits. The presence of an extensive system would also lead to a boost in the economy and would also help to enable the rural population to take a part in the growth of India. Rajalakshmi & Salvan (2020) found that MGNREGS is widely acclaimed that it provides employment, income and help the rural people to come out of poverty. In India, agriculture and rural development have tremendous potential to achieve the Government's objective of doubling farmer's income by 2022. The government has taken more efforts to facilitate a good environment for manufacturing revolution, job creation, skill up gradation and poverty reduction in rural areas. Rajamohan & Dhanabalan (2013) found that for the development of human resources government of India has been implemented many rural development programmes accompanied with ministry of rural development. Such programmes are MGNREGA, IAY, and SJWY. After implantation of these programmes there are positive outcomes in the nation's human resources as well as economic development. Gupta and Singh (2016) found that the state-wise analysis of monthly per-capita consumption expenditure revealed three aspects; firstly, that in both urban and rural areas, the states that have overall high per-capita expenditures, are also the ones that are high in ranking in terms of food and non-food expenditure. Secondly, the consumption expenditure is higher in urban areas versus rural areas and there are fewer states being above the all-India average in urban areas than rural areas. Finally, findings showed that the non-food consumption expenditure carries higher weightage in urban areas as compared to rural areas. Mahanty (2014) found that the prime objectives of Panchayati Raj Institutions are to eradicate poverty, uplift standard of living of people living in rural areas and bring about a healthy society by creating awareness for hygiene, sanitation, eradication of illiteracy and to ensure social justice to the rural people. At present, Panchayati Raj Institutions are more concerned about implementation of rural development programmes in rural areas. Torre and wallet (2019) found that the development policies of rural areas and regions must be adapted to their particular characteristics, to the structure of their economies as well as to their diversity. They also found that the smart development policies are well adapted to the

developed or intermediate regions containing at the same time rural and urban areas when their population is important enough, but do not really function for the more rural or more peripheral regions. Kumar and Joshi (2013) found that the economically weaker states of the country have been benefitted maximum and have implemented the MGNREGA more vigorously. MGNREGA has been successful in reducing the poverty level and provided almost equal employment benefits to all the categories of farm-sizes, household-types and income-groups, which indirectly leads to development in the former area. Johnson and Ifeoma (2018) found that demographic, environmental and economic issues become primary areas of concern with the rapid growth of Nigerian urban centers and its attendant effect on rural areas. Their findings also revealed that Government needs to do more to stem rural-urban migration. Government must intensify rural development in Nigeria as expected by majority of the rural populace. Sarabu (2018) found that rural entrepreneurship plays an important role in the economic development in India, especially in the rural economy. It helps in producing employment opportunities in the country zones with low capital, raising the real income of the people, contributing to the development of agriculture by reducing disguised unemployment, underemployment, poverty, migration and economic disparity. The study suggested that the rural development programs should consolidate infrastructure development, education and health services, investment in agriculture and the advancement of rural non-farm activities in which women and rural population can engage themselves. Rural development and rural entrepreneurships the way of converting developing country into developed nation. Gaila (1976) found that spatial speculation methodologies which depend on the assumption that capital invested into metropolitan development communities will spread to the surrounding periphery should be recognized considering the overall pattern of resultant distance rot. Urban based spatial speculation system will accordingly essentially bring about an exacerbated pattern of rural-urban developmental inequity. Elective spatial speculation systems include those which are more scattered; explicitly, investing into a more prominent number of smaller centers, subsequently increasing the availability of the country area to basic services, or, perhaps, investing in development way. Ashley and Maxwell (2001) found that the agriculture sector still an important sector for rural development in the rural economy. In numerous rural areas per capita income was moderately low, opportunities for professional development particularly for educated youngsters are very limited or don't exist, declining levels of public services prompted the emigration of economically active

population, prompting to an aging rural population. The study also observed that the structural change and advancement in the area put focus on the labour market in rural areas. Dev and Evenson (2003) found that agricultural development as well as migration was one of the mechanisms that rural population used for maintaining or increasing their incomes. A significant exertion to education and all the more critically to achieve improvement in skill levels of those in age bunch reliable with their level of education should and therefore have high priority. Tacoli (2003) found that there are conflicts between many urban interests and the needs of most of the urban population. There are also significant synergies between many rural and urban interests. At the national level, macroeconomic policies linked to reform and adjustment has an impact on rural–urban linkages. The sharp reduction in subsidies to agricultural inputs has affected the incomes of small-scale, under-capitalized farmer in most nations, whilst the retrenchment on workers in the formal sector has deepened financial insecurity in the urban centers. Mehta (2021) found that the two features of structural transformation visible in India are an increase in the overall gross domestic product and per capita incomes, enabled by the shift away from agriculture to other sectors or occupations with higher productivity; and greater urbanization. Jiang *et al.* (2020) found that using the exploratory spatial data analysis, the principal component analysis and the cluster analysis, this paper analyzes the spatial differentiation and correlation and categorizes the types of rural development. This comes with four types of results. And the corresponding development path is proposed in combination with different types of rural development to provide a theoretical basis and decision-making reference for rural revitalization. Devi (2019) found that women assume a basic part in cultivating and in improving the quality of life in country zones. In any case, their commitments frequently stay hid because of gender inclination. Winters *et al.* (2008) found that as per capita income of rural households increases, the share of income from the non-agricultural economy grows while the share from farming declines. They found that pattern of rural development is one in which as per capita income increases households shift from agricultural production and toward non-agricultural wage and self employment. Furthermore, the shift to non-agricultural wage employment is even more pronounced in countries with higher levels of GDP per capita indicating the effect strengthens with development. Li *et al.* (2015) found that spatial analysis show that the rurality index can largely reflect the spatio-temporal patterns of China's rural development, and the Pearson correlation analysis confirmed that counties with high rurality have been

marginalized in the aspects of both geographical location and economic development. Yakanna (2017) found that economic development depends on rural development and it assists the economy to grow and sustain. Also find that there is a direct relationship between agriculture production, income and the demand for industrial goods. Mahanti (2018) found that rural development through manufacture of packaging paper and board in rural locations, using reclaimed wastepaper has been suggested in this paper due to growing consumption of the same, availability of raw material from waste collection, as well as, other pertinent aspects including economic, social and environmental benefits. Presently, the rural population is mainly engaged in agriculture which is seasonal and often with low remuneration. Setting up properly planned and designed small capacity mills can be extremely efficient and competitive, besides providing alternate employment. Gill *et al.* (1999) found that rural development is an all out interaction of economic, social, and human development. Development programs have various implications in distinctive political and social frameworks, yet there is the need to decrease unemployment, poverty, and imbalance with the participation of the masses. But they admit the rural development efforts have failed to trickle down to the rural mass due to the reason of lack of diversification in the rural economy. Naeire *et al.* (2015) found that by using the quantitative data analysis they found that the linkage between improving health and rural development is influenced negatively by health insurance subsidization and health services financing. For reasons of being unsustainable, associated with low quality services, creation of a tax burden and the fact that the supply side of subsidy creates no incentives for services providers to provide good services. Geographical scope of the organization regarding the reach of the NGOs/SFGs has a significant effect on industrial improvement. These findings support advocate for agro-based industry policies for industry has a positive effect on industry improvement in the rural areas. Uddin *et al.* (2015) found that expenditure on rural development programs increases income and socio-economic capacity of rural poor households in Bangladesh. The relationship between rural development dimensions: housing and agriculture, health, education, training, and communication imply that rural poor households experienced positive impacts and also succeeded in bring a positive impact on the alleviation of poverty and development of socio-economic capacity of rural poor households. Nedumaran & Manida (2020) found that e - agribusiness assumes key job in beneficial and expanded farming on the planet with the utilization of present day information technology strategies. Agriculture plays a significant

role in addressing these challenges and moving the livelihood of Indian farmers. Mathur (2011) found that the rural sector is important for the society because it generates the growth and development of the civilizations to sustain and achieve human goals for better existence. Economic growth and rural society is connected because most of the resources available for development come from the rural societies. The economic development of the rural environment can be by the government through the establishment, development, maintenance and optimization of long term mutually valuable relationships between the business and macroeconomic environmental variables. Singh & Bhowmick (2015) found that by using empirical data they found there are three factors of rural innovation. The factor structure represents that rural innovation about sharing of knowledge, new learning practice and new skill development in order to enhance economic efficiency, economic scale and economic scope respectively. Beg (2018) found that the government will focus on climate change, smart energy, agriculture, and water in the development of smart villages. The idea of smart village in the present day context seems more plausible as there is a limit of growth of cities which is leading to creation of urban jungles, where the population ratio per km of land is way above the desired norms. Raheja (2015) found that rural development is perceived as a process of not only increasing the level of per capital income in the rural areas but also the standard of living of the rural population measured by food and nutrition level, health education, housing, recreation and security. Greening rural development can stimulate rural economies, create jobs and help maintain critical ecosystem services and strengthen climate resilience of the rural people.

1.3 Objective of the study:

- a) To explore the status of rural infrastructural development in different Community development blocks.
- b) To find out the major problems in rural areas which have hampers in overall development.
- c) Comparative study between the community developments blocks in Lakhimpur district.

1.4 Research Questions:

- a) Do the community development blocks have necessary rural infrastructure?
- b) Are there any major constraints in development of rural infrastructure?
- c) Are there any differences in rural development among the blocks?

1.5 Data source and Methodology:

Present study used Descriptive statistics and for data analysis bar diagram, line graph technique has been used. The source of data used was secondary data; it was wholly quantitative in nature. The secondary data was collected from census statistics of India and national health profile. Besides, websites of the respective district are also visited for relevance information. In this study there are nine CD blocks which are compared in case of education facility, health facility, transport facility, post office facility and literacy.

After compare the indicators with all the CD blocks by taking average, we use pair wise correlation to show the association with indicators. Considering the focused objective and research question data have been collected from the secondary sources. The rural villages of nine CD blocks namely Narayanpur, Karunabari, Bihpuria, Nowboicha, Boginadi, Lakhimpur, Telahi, Dhakuakhana, Ghilamara of Lakhimpur district has been selected for this study.

Table 1.1:No of village and population in CD Block

Name of CD block	no of villages	population
Narayanpur	199	129640
Karunabari	109	177974
Bihpuria	62	42162
Nowboicha	134	126986
Boginodi	153	109900
Lakhimpur	122	115475
Telahi	103	75354
Dhakuakhana	156	100793
Ghilamara	108	72520
Total	1146	950804

Source: census 2011

2.1 Status of rural development in Assam:

Rural development is the main pillar of the state or nation. In spite of rapid urbanization, a large section of population still lives in the villages. The status of rural development in Assam is very low. Assam is one of the geo-politically large areas, and according to rural

population census 2011 the total population of Assam state, around 85.9 per cent live in the villages of rural areas. They are lagging behind in case of education and other facilities. They have face less earning options due to less employment opportunities. Also there's less health care facilities are provided, they are far away from all these facilities. These are prospering a bit with the help of government but not much as it is needed. In case of education also there is still the need of improvement in this sector. According to 2001 & 2011 census, the literary rate of India & North- East India is as follows-

Table 2.1: NER literacy rate

States	Literacy rate	
	2001	2011
Arunachal Pradesh	54.34	65.39
Assam	63.25	72.19
Manipur	70.5	76.9
Meghalaya	62.56	74.43
Mizoram	88.8	91.33
Nagaland	66.59	79.6
Sikkim	68.81	81.42
Tripura	73.19	87.22
India	64.84	72.99

Source: Census 2011

From the table it is observed that Assam is lagging behind not only India but also other states of North East. The rural literacy rate in the state is 69.34% as against 88.47% in urban areas. Due to illiteracy the rural people do not have knowledge about industrial and technological advancement. They have also failed to evolve marketing, banking and cooperative credit systems. Moreover they are not acquiring many employment opportunities due to illiteracy or lack of education. All these factors resulted in financial backwardness of the rural population. So education is very much important for the rural population for uplift their standard of living.

Table 2.2: Population coverage by health centers

States	Average rural population (Census 2011)		
	covered by a health center in 2011		
	Sub-centers	PHCs	CHCs
Arunachal Pradesh	3738	11022	22274
Assam	5817	28551	247968
Manipur	4523	23745	118727

Meghalaya	5849	21734	81689
Mizoram	1430	9281	58782
Nagaland	3553	11166	66993
Sikkim	3123	18998	227981
Tripura	4288	34304	246368
All India	5624	34876	173235

Source- Bulletin on Rural Health Statistics in India, 2011

Refer to table 2.2, this table shows the current status of rural health centers in the north eastern states vis-à-vis the country as a whole in terms of the average rural population covered by a Sub Centers, a PHC and a CHC in 2011. In 2011, all the north eastern states except Assam and Meghalaya are in better position in case of sub centers, whereas in case of PHCs all the states again in case of CHCs all the states but Assam, Sikkim and Tripura are in better position.

Table 2.3: Number of beds in government Hospitals (including CHCs) in rural areas

States	No of rural govt hospital	No of Beds in Rural govt hospital	Average rural population (2011) served per govt hospital	Average rural population (2011) served per govt hospital bed
	Arunachal Pradesh	146	1356	7323
Assam	108	3240	247968	8266
Manipur	217	664	8754	2861
Meghalaya	29	870	81689	2723
Mizoram	20	770	26452	687
Nagaland	23	705	61168	1996
Sikkim	30	730	15199	625
Tripura	14	950	193575	2853
India	7347	160862	113392	5179

Source- National Health Profile 2011

Refer to table 2.3, among North east India states health facility of Assam is quite better.

Due to the lack of government attention to the rural areas as compared to urban areas the difference between urban and rural people are increasing day by day. The facilitates to the urban people are available at reasonable rates, but costly to the rural people. This had lead to the failure of the rural people to avail all the facilities. Women empowerment is one of the main factors for rural development in Assam and SHG is one of the main sources of women empowerment. In Assam there are about 108555 no of SHGs (Statistical hand book Assam,

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2019). It aims to mobilize people, to give them voice and build people organization that will overcome barriers to participation and empowerment. It is helping to change the gender dynamics of power within a family and ultimately the society at large. Empowerment of rural poor people has become the key element in the development of any economy.

3.1 Comparative study between the CD blocks in Lakhimpur district:

Rural development plays key role in the development of a place and without rural development the development of the place is impossible because rural development highly co related with other sector in case of economic development of the particular place.

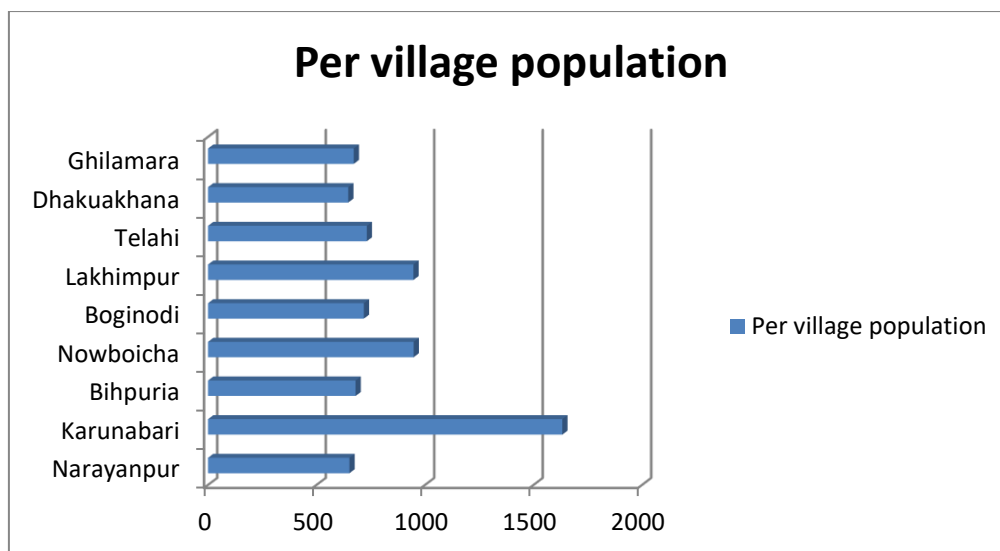
As I mentioned above, Lakhimpur district is consisting of nine CD blocks, let us now see the comparative analysis –

Table3.1:Per village rural population

Name of CD block	Per village population
Narayanpur	651.46
Karunabari	1632.79
Bihpuria	680.03
Nowboicha	947.66
Boginodi	718.30
Lakhimpur	946.52
Telahi	731.59
Dhakuakhana	646.11
Ghilamara	671.48
Total	7625.93

Source: Census 2011

Figure 3.1: Average population distribution of the sample block



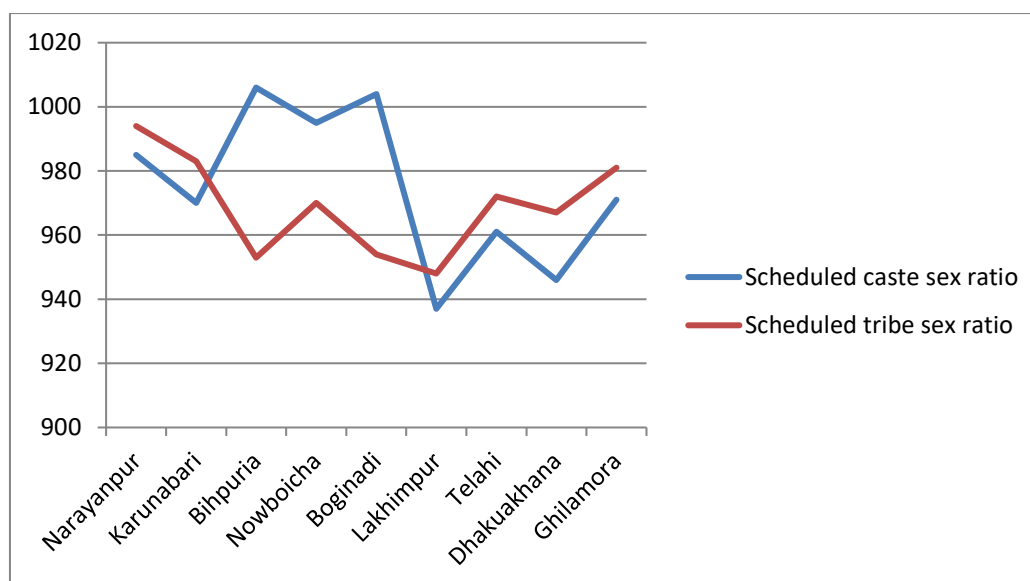
Refer to the table 3.1, shows the per village rural population in Lakhimpur district. Where the Karunabari block has shown the highest population with per village 1632.79 and with per village 645.11, Dhakuakhana block has recorded the lowest population as compared to other blocks. From Fig 3.1 we can see that Karunabari block has highest population as compared to the other blocks.

Table3.2: Sex ratio among SC and ST in CD blocks

CD blocks	Scheduled caste	Scheduled tribe
	sex ratio	sex ratio
Narayanpur	985	994
Karunabari	970	983
Bihpuria	1006	953
Nowboicha	995	970
Boginadi	1004	954
Lakhimpur	937	948
Telahi	961	972
Dhakuakhana	946	967
Ghilamora	971	981
Total	965	969

Source: Census 2011

Fig 3.2: Sex ratio among SC and ST population



The table 3.2 depicts the CD Block wise Sex ratio among SC and ST population. The district rural sex ratio of SC is 965 and ST is 969. Among the CD blocks, the highest sex ratio of SC is noticed in Bihpuria CD block with 1,006 females per 1000 males, and the lowest is at Lakhimpur CD block with 937 females per 1000 males. In case of ST, among the CD blocks, sex ratio is highest at Narayanpur CD block with 994 females per 1000 males and the lowest at Bihpuria CD block with 953 females per 1000 males. Fig 3.2 depicts the above explanation.

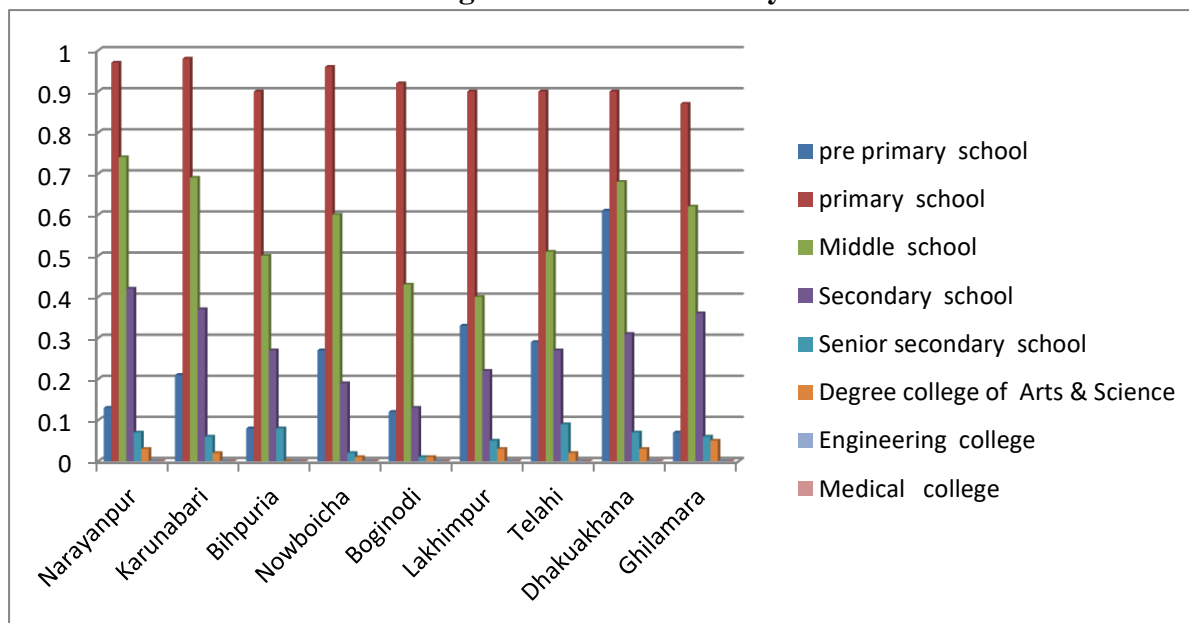
Table 3.3: Per village educational institution

Name of CD block	pre primary	primary	Middle	Secondary	Senior secondary	Degree college of	Engineering	Medical
	school	school	school	school	school	Arts & Science	college	
Narayanpur	0.13	0.97	0.74	0.42	0.07	0.03	0	0
Karunabari	0.21	0.98	0.69	0.37	0.06	0.02	0	0
Bihpuria	0.08	0.90	0.50	0.27	0.08	0.00	0	0
Nowboicha	0.27	0.96	0.60	0.19	0.02	0.01	0	0
Boginodi	0.12	0.92	0.43	0.13	0.01	0.01	0	0
Lakhimpur	0.33	0.90	0.40	0.22	0.05	0.03	0	0
Telahi	0.29	0.90	0.51	0.27	0.09	0.02	0	0

Dhakuakhana	0.61	0.90	0.68	0.31	0.07	0.03	0	0
Ghilamara	0.07	0.87	0.62	0.36	0.06	0.05	0	0
total	2.12	8.31	5.17	2.54	0.50	0.19	0	0

Source: Census 2011

Fig 3.3: Education facility



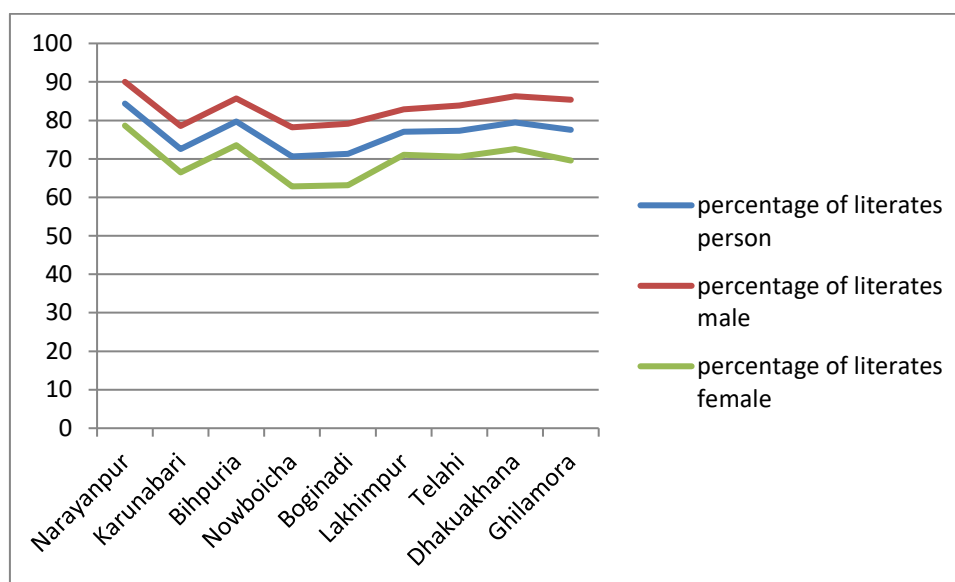
Refer to table 3.3, according to census 2011, we can see that in case of pre primary school, Dhakuakhana block has relatively highest no of pre primary school approx 0.61 as compared to others block. Again Ghilamora and Bihpuria block has less education facility approx 0.7 & 0.8 as compared to others block. In case of primary school Karunabari block has highest no of primary school as compared to other blocks, and Lakhimpur block has shown relatively less no of primary school. However Narayanpur block has shown highest no of middle school approx 0.74 and also highest no of secondary school approx 0.42 as compared to other blocks. Conversely Baginadi has shown lowest no of education facility in both secondary school and senior secondary school. If we see the overall data Baginadi block has showed relatively less educational infrastructure in every section as compared to other blocks. Since this table shows that there is no any Engineering and Medical college but one medical college is under construction at present. Also Fig 3.3 shows that pre primary school facility is highest among all other indicators of education infrastructure.

Table 3.4: Number of literates & illiterates, literacy rate by sex in CD blocks

CD blocks	Number of literates and illiterates						percentage of literates			gap in male & female literacy rate
	Number of literates			Number of illiterates			person	male	female	
	persons	males	females	persons	males	females				
Narayanpur	95,694	51,392	44,302	33,946	13,990	19,956	84.37	90.02	78.64	11.38
Karunabari	1,06,021	58,217	47,804	71,953	32,158	39,795	72.57	78.52	66.44	12.08
Bihpuria	28,712	15,691	13,021	13,450	5,782	7,668	79.74	85.68	73.59	12.09
Nowboicha	74,373	41,740	32,633	52,613	22,616	29,997	70.63	78.2	62.84	15.36
Boginadi	65,554	37,104	28,450	44,346	18,858	25,488	71.33	79.14	63.19	15.95
Lakhimpur	76,356	41,945	34,411	39,119	17,100	22,019	77.07	82.86	71.03	11.83
Telahi	49,698	27,447	22,251	25,656	10,915	14,741	77.31	83.85	70.53	13.32
Dhakuakhana	69,109	37,797	31,312	31,684	13,152	18,532	79.45	86.28	72.53	13.75
Ghilamora	47,659	26,473	21,186	24,861	10,205	14,656	77.55	85.38	69.58	15.8
Total	6,13,176	3,37,806	2,75,370	3,37,628	1,44,776	1,92,852	76.22	82.8	69.44	13.36

Source: Census 2011

Fig 3.4: Percentage of literates



Refer to table 3.4, shows the CD block wise number of literates and illiterates, literacy rate by sex in the district. The district rural literacy rate is 76.22 percent, of which 82.8 percent are

male and 69.44 percent female. From the table, it is seen that the highest literate and illiterate population is recorded in Karunabari CD block with 1,06,021 literate persons (58,217 males and 47,804 Females) and 71,953 illiterate persons (32,158 males and 39,795 females) respectively. On the other hand, the lowest literate and illiterate population is recorded in Bihpuria CD block with 28,712 literate persons (with 15,691 males and 13,021 females) and 13,450 illiterate persons (5,782 males and 7,668 females) respectively. In terms of literacy rate, Narayanpur CD block recorded the highest with 84.37 percent, 90.02 percent male and 78.64 percent female. The lowest literacy rate is recorded in Nowboicha CD block with 70.63 percent, 78.2 percent male and 62.84 percent female. From the table, it is also noticed that the gap in male female literacy rate is the highest in Boginodi CD block with 15.95 percent while Narayanpur CD block is the lowest with 11.38 percent. Fig 3.4 also depicts that the percentage of female literacy is comparatively low in each block of the Lakhimpur district. So we have to more focus on improving female education.

Table 3.5: percentage of rural population served by different amenities

Blocks	Drinking Water	Banks	Power Supply
Narayanpur	100	4.01	97.52
Karunabari	100	21.35	99.82
Bihpuria	100	0	91.53
Nowboicha	100	1.63	97.21
Boginadi	100	1.19	87.15
Lakhimpur	100	1.62	87.16
Telahi	100	2.89	69.3
Dhakuakhana	100	0	63.53
Ghilamara	100	5.62	76.64

Source: Census 2011

Refer to table 3.5, shows CD block wise distribution of villages according to availability of different amenity like drinking water, Banks, Power supply etc during 2011 census. The drinking power facilities availability is cent percent in all the inhabited villages in the district.

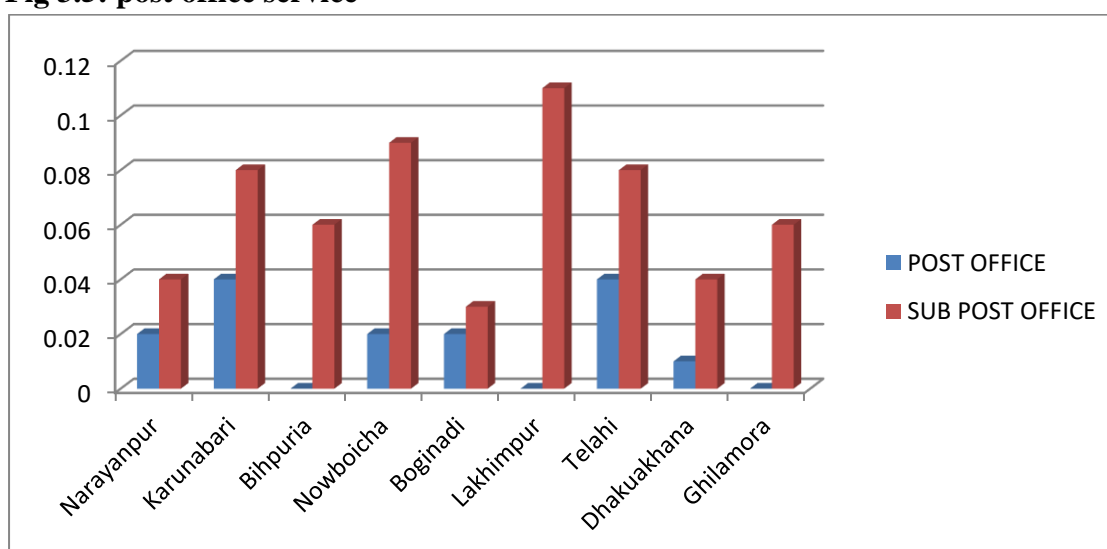
Benefits from power supply are highest in Karunabari block with 99.82 percent and lowest in Dhakuakhana block with 63.53 percent. Of the total population of 9,50,804 of inhabited villages in the district, 8,34,365 population benefits from power supply.

Table 3.6: Per village post office service

BLOCKs	POST OFFICE	SUB POST OFFICE
Narayanpur	0.02	0.04
Karunabari	0.04	0.08
Bihpuria	0.00	0.06
Nowboicha	0.02	0.09
Boginadi	0.02	0.03
Lakhimpur	0.00	0.11
Telahi	0.04	0.08
Dhakuakhana	0.01	0.04
Ghilamora	0.00	0.06

Source: Census 2011

Fig 3.5: post office service



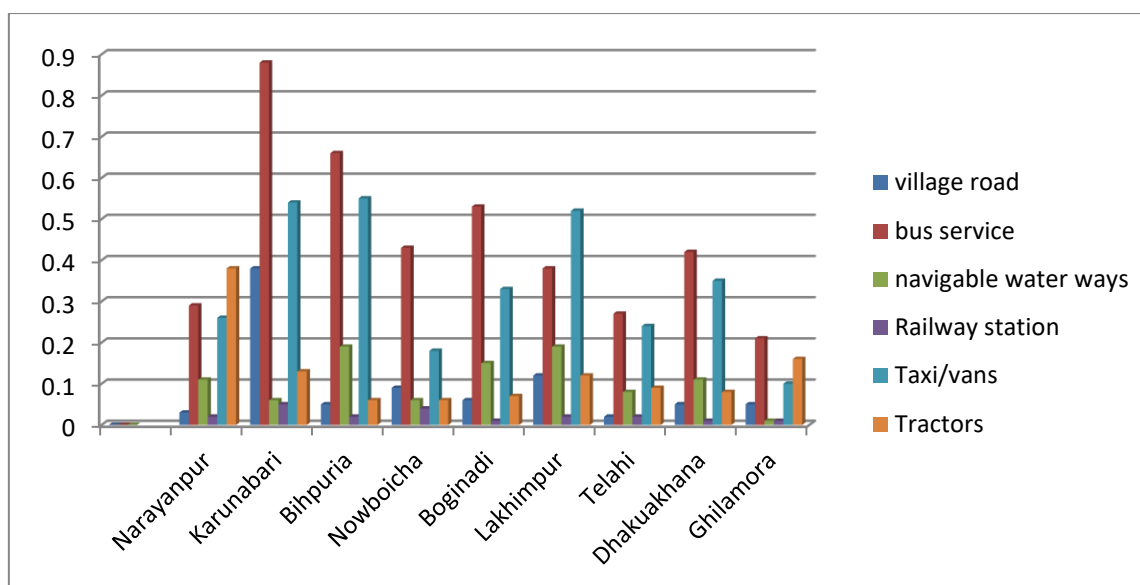
Refer to table 3.6, shows the per village post office services in the district. Out of 9 blocks in the district, Karunabari and Telahi block recorded relatively highest post office service of 0.04, and the lowest relatively 0.01 is seen in Dhakuakhana block. Also in case of sub post office, Lakhimpur block recorded highest service of 0.11 and the lowest is 0.03 which is seen in Boginadi block. Fig 3.5 portrays the above explanation where we can clearly see that in case of post office service Karunabari and Telahi block has record the highest, also in case of sub post office Lakhimpur block has record the highest.

Table 3.7: Per village transport facility

BLOCKS	village road	bus service	navigable water ways	Railway station	Taxi/vans	Tractors
	pucca road	public/private	(water/canal/sea ferry service)			
Narayanpur	0.03	0.29	0.11	0.02	0.26	0.38
Karunabari	0.38	0.88	0.06	0.05	0.54	0.13
Bihpuria	0.05	0.66	0.19	0.02	0.55	0.06
Nowboicha	0.09	0.43	0.06	0.04	0.18	0.06
Boginadi	0.06	0.53	0.15	0.01	0.33	0.07
Lakhimpur	0.12	0.38	0.19	0.02	0.52	0.12
Telahi	0.02	0.27	0.08	0.02	0.24	0.09
Dhakuakhana	0.05	0.42	0.11	0.01	0.35	0.08
Ghilamora	0.05	0.21	0.01	0.01	0.10	0.16

Source: Census 2011

Fig 3.6: Transport facility



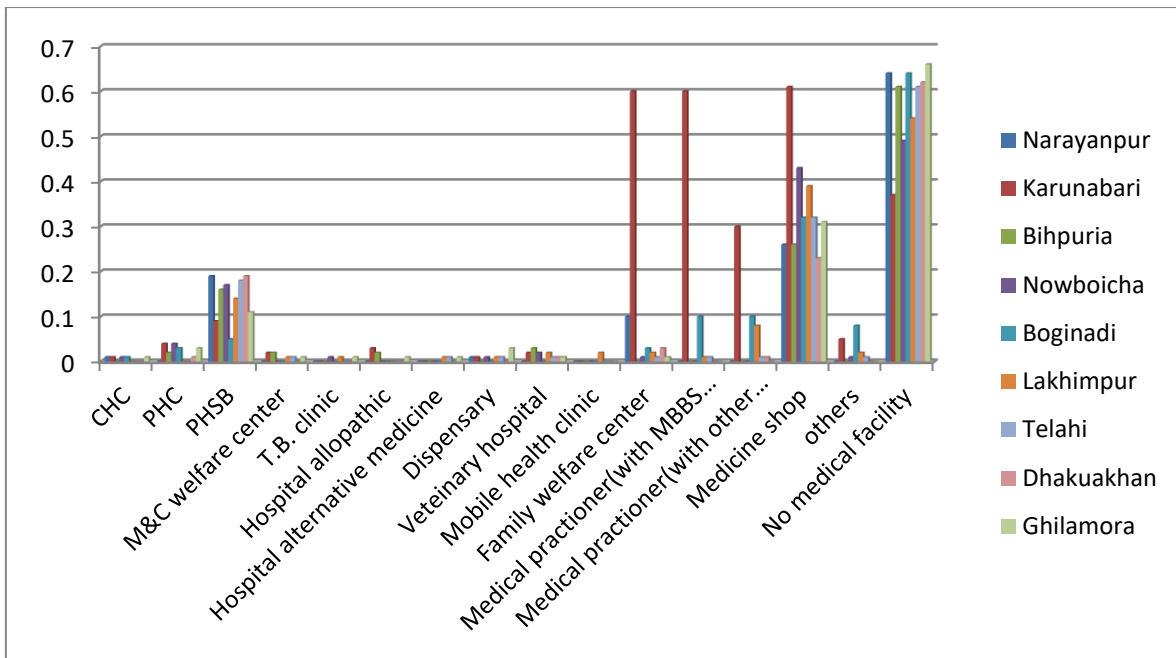
Refer to table 3.7, shows the per block transport facility in Lakhimpur district. Lakhimpur district has been experienced transport bottleneck in the past. Among the districts of Assam, Lakhimpur district is quite lagging behind in respect of transport and communication. From the table we can see that out of 9 blocks, the Karunabari block is rich in case of village pucca road. Pucca road means permanent road, so we can say that Karunabari block has more permanent road facility than as compare to other blocks and the Telahi block has lowest facility in case of permanent road. Karunabari block also record highest in case of private and public bus service. Ghilamara block has record the lowest, it is also true for the navigable water ways. In case of water ways Lakhimpur and Bihpuria block has record highest. Again in case of railway station, there is more railway station in Karunabari block as compared to other blocks; it is also true for van/taxi service. Also there are more tractors in Narayanpur block and less in Bihpuria and Nowboicha. Fig 3.6 shows the transport facility in the CD blocks. From the fig 3.6 we can easily connect with above explanation. Where the fig shows that bus services in the CD blocks is comparatively in good position among other indicators.

Table 3.8: Per village health facility

Health facilities	Narayanpur	Karunabari	Bihpuria	Nowboicha	Boginadi	Lakhimpur	Telahi	Dhakuakhana	Ghilamora
Community health center	0.01	0.01	0	0.01	0.01	0	0	0	0.01
Primary health center	0	0.04	0.02	0.04	0.03	0	0	0.01	0.03
Primary health sub center	0.19	0.09	0.16	0.17	0.05	0.14	0.18	0.19	0.11
Maternity & child welfare center	0	0.02	0.02	0	0	0.01	0.01	0	0.01
T.B. clinic	0	0	0	0.01	0	0.01	0	0	0.01
Hospital allopathic	0	0.03	0.02	0	0	0	0	0	0.01
Hospital alternative medicine	0	0	0	0	0	0.01	0.01	0	0.01
Dispensary	0.01	0.01	0	0.01	0	0.01	0.01	0	0.03
Veteinary hospital	0	0.02	0.03	0.02	0	0.02	0.01	0.01	0.01
Mobile health clinic	0	0	0	0	0	0.02	0	0	0
Family welfare center	0.1	0.6	0	0.01	0.03	0.02	0.01	0.03	0.01
Medical practioner(with MBBS degree)	0	0.6	0	0	0.1	0.01	0.01	0	0
Medical practioner(with other degree)	0	0.3	0	0	0.1	0.08	0.01	0.01	0
Medicine shop	0.26	0.61	0.26	0.43	0.32	0.39	0.32	0.23	0.31
others	0	0.05	0	0.01	0.08	0.02	0.01	0	0
No medical facility	0.64	0.37	0.61	0.49	0.64	0.54	0.61	0.62	0.66

Source: Census 2011

Fig 3.7: Health facility



Refer to table 3.8, this table shows the per village health facility in Lakhimpur district. From the table we can see that in three blocks namely- Lakhimpur block, Telahi block, and Dhakuakhana block has shown no CHC facility, again it is same for Narayanpur and Telahi block which has shown no PHC service. Karunabari block and Nowboisa block has relatively more facility on primary health center as compared to other blocks. But one thing is significant from the above table that in case of per village health institution facility there's not much difference between all other blocks. In case of PHSC, Boginadi block has shown lower facility among all the blocks and the blocks who have relatively more facility are Narayanpur and Dhakuakhana. There are no service in case of maternity & child welfare center in Nowboisa and Baginadi block. In case of Veteinary hospital, Narayanpur and Boginadi block has no any service. Among 9 CD blocks, only Lakhimpur CD block has the mobile health clinic service which is clear from the above table. Again in case of medical shop facility Karunabari block has shown relatively more medical shop with per village 0.61 and Dhakuakhana block has shown moderately less medical shop with per village 0.2. Also, Fig 3.7 strongly represents the above explanation.

Table 3.9: Pairwise Correlation

	Per village population	Education Facility	Post office facility	Transport facility	Health Facility
Per village population	1.0000				

Education Facility	0.1706	1,0000			
post office facility	0.6682	0.0393	1.0000		
Transport facility	0.5761	-0.0032	0.1170	1.0000	
Health Facility	0.9374*	0.2038	0.4562	0.6052	1.0000

Source- author's estimation

Refer to table 3.9, shows that there is high correlation between population size and the number of post office and transport facilities but not statistically significant. However, health facilities are significantly correlated to the population. It means government provides comparatively adequate health infrastructure in the more populated blocks. Similarly there is positive association between health and transport facilities. Thus the government should provide all facilities simultaneously as they are complement to each other.

4.1 Findings:

- As per 2011 census, 91.24% population of Lakhimpur districts lives in rural areas of villages.
- Sex ratio among SC & ST in CD blocks, highest in Bihpuria block and lowest in Lakhimpur block.
- For development connectivity is most important which has showed inadequate in every CD blocks, there is an urgent need for improved in transport facility in Lakhimpur district.
- There is inefficiency in both sector i.e. health and education sector in every CD blocks.
- There is huge gap between gender literacy.

4.2 Suggestive measure:

Considering the high magnitude of socio-economic backwardness of rural people some measures could be suggested which are as follows-

- According to 2011 census, the growth rate of population in Lakhimpur is 17.22 % this growth rate of population must be reduced in order to remove poverty.
- Infrastructural facilities must be adequate in rural areas.
- Proper educational facilities should be provided to literate the rural people.

- d) Women education should be encouraged and parallel women should be empowered.
- e) There should be rapid infrastructural development and higher allocation of budget is needed in rural areas.
- f) There is a need to improve the quality of human resource in rural areas and it can be done by improving the literacy rate, skill development, industrial training etc.

4.3 Conclusion:

We have already done the comparative part among the nine CD blocks in Lakhimpur district, where we get there is no block which is completely developed, or we can say that the CD blocks are in a transition phase. As I mentioned above in order to develop the district we have to develop all the section in the district. Since majority of the total population lives in rural side so we have to focus about the proper facility of rural peoples; only after that we can develop the district. From the present study, we have come across that health sector is mostly lagging behind in some CD blocks as compared to other indicators. There are few blocks, where there is no minimum CHC, PHC facility. There is a common phrase called “Health is wealth”, but we have seen exact opposite in case of my study. So there is urgent need for development in health sector in Lakhimpur district. There are various reasons responsible for the problem in case of health facilities; the assumed reasons are – low allocation of government funds, mismanagement of funds, infrastructural complications, insufficiency in health workers etc. Again if we see in case of education and transport and post office, the existing facility is not sufficient as per the population. Rural people have suffered the most with the outbreak of covid19 pandemic because of the poor health infrastructure. So it is high time for government to introduce new pattern of development structure.

From the above discussions there are various socio-economic dimensions that pose hindrance in development and they need to be identified by the rural development officials. In order to achieve sustainable rural development, the rural development officials should aim at becoming facilitators in the whole process, helping rural economy to evolve them. The development scenario needs a push and that is where the people engaged in rural development step in to provide an opportunity for alternative means of livelihood, inculcating the sense of ownership and responsibility among the common folk and provide information and support for forward and backward linkages. The whole process of rural development

needs to have participative approach for its success. Rural development is a collective process; its benefits are not just confined to one section of the society. There are inter linkages in social and economic domains, and these help the society to evolve further. Finally it must be accepted that the duty and responsibility lie on each and every person of our society to think about the development of rural society.

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