

## An Analysis of the Pattern and State of Livelihood of the People of Goriaghuli Village, Kamrup (Metro), Assam from a Geographical Perspective

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**ABSTRACT** There is a fundamental structural difference between urban and rural segment in terms of pattern of livelihood and the consequent standard of living due to distinct characteristics of rural and urban economics. Around eighty-six percent of Assam's population lives in rural areas. Some rural areas are in continuous state of change with the diversification of economic activities while others are struggling to earn their basic livelihood who are scattered on the certain pockets of Assam. Taking these into account an attempt has been made here to study the pattern of livelihood of the Goriaghuli village of Sonapur area of Kamrup District (Metro) Assam. The main aim is to study the demographics, natural resource endowments and their linkages, varying livelihood strategies and the resultant wellbeing. Concern is directed towards the deep rooting of poverty amongst the people standing as the major constraints in the development of the village. It was found that the villagers have adopted numerous primary activities like crop cultivation, domestication of animals, handicraft work, etc. to earn their livelihood. Agriculture in the village is subsistence. 45 households have been taken for collection of primary data using a schedule following simple random sampling method. To understand the changing situation, secondary data collected from government and other sources was also incorporated to draw the conclusion of the study.

### INTRODUCTION

Livelihood is a means of securing the necessities of life, that is, food, water and shelter for making a living that encompasses people's capabilities, assets and income (Chambers 1992). There has always been an intrinsic and interactive relationship between man and his biotic and abiotic elements of the environment to earn necessities for living. They have moulded their habits and lifestyle according to their physical surroundings and natural endowments (Chambers 1992). Living in close proximity with the biodiversity rich landscape, the tribal communities have evolved their own specific livelihood strategies on the basis of their indigenous knowledge and subsequently this knowledge is passed on through generations guiding their livelihood strategies. Each of the indigenous communities is unique in their culture and tradition with a particular type of economy and the associated work. Land and forest are their assets. They have

always maintained a close relationship with the land and forest. Their economy is highly subsistence and agro-based. Most importantly with the march of time, the tribal community being exposed to modernisation and the subsequent human development have enabled them to explore the numerous means of livelihood. But at the same time it is equally important to note that the excessive use of the natural resources has reduced its availability creating more hardship in their livelihood.

The state of Assam is highly characterised by inhabitants of tribal communities in different areas and thereby creating a number of villages with different socio-cultural settings (Medhi 2014). They basically inhabit the rural areas. One such indigenous tribal community is the Karbi tribe. With a population of around 406,000 as per the 2001 Census, the Karbis constitute the third largest tribal community in Assam after the Bodos and the Mishings. The traditional institutions and the way of life have been damaged due to the integration of the traditional lifestyle with the market economy, which brought suffer-

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ings to the people. Taking this into concern an attempt has been to study the livelihood pattern of the plain Karbi tribe residing in Goriaghuli village, Kamrup district (Assam). In order to survive, the rural households of the plain Karbi tribe in Goriaghuli village pursue a 'livelihood strategy' that may comprise a number of different activities such as farming, fishing, off-farm employment and the exploitation of natural resources through hunting and gathering.

Rai and Nath (2006) conducted a study on the "Socio-economic and Livelihood Pattern of the Ethnic Group Baiga in Achanakmar Sal Reserve Forest in Bilashpur Chhattisgarh". They found that the people of the study area are almost entirely dependent on the Reserve Forest for their livelihood. The villagers generate income by collecting non-timber forest products (NTFPs) from the forest and sell these in the markets. The products extracted from the forest are roots, tuber, fruits, oil extracted from Sal seeds, broom, baskets and cups, which are made from leaves, roofing materials, dyeing clothes from vegetables, furniture from bamboos and canes, etc. They also prefer hunting and fishing as a part of their livelihood.

Ayanwale and Amusan (2014) conducted a study on the "Livelihood Strategies of Female Indigenous Vegetable Farmers in Osun State, Nigeria". They found that though vegetable production was the dominant source of income, it generated returns about half of the total income, which is not sufficient for sustaining their livelihood. For that reason they adopted livelihood diversification as a strategy for sustaining their livelihood and recommended the farmers to intensify livestock production in the livelihood portfolio. They also suggested that combination of multiple portfolios would also enhance their income.

Bhattacharjee et al. (2016) studied the topic "Temporally Changing Livelihood Patterns of Rural People: A Case Study on Tribes of Tripura". They analysed and found that the population adopted livelihood diversification as a compulsive means to stabilise their source of income rather than as a strategy, as the villagers had no other options to tackle their income instability problem. They also found that the younger generation was more active and adaptive in terms of coping with initiatives for income stability than the older generation.

Marchang (2019) studied "Economic, Occupational and Livelihood Changes of Scheduled Tribes of North East India". After detailed analysis he found out that the ST population of the northeast had an employment shift from agricultural sector to non-agricultural sectors. In addition to that, agricultural households and agricultural income declined considerably whereas non-agricultural income increased to a certain extent. This shift is mainly due to increase in education and economic mobility of the people. In spite of that shifting cultivation is still a prominent means of livelihood for some of the ST people.

Rajeevan et al.'s (2020) study on the topic "Community Development through Sustainable Technology—a Proposed Study with Irula Tribe of Masinagudi and Ebbanad Villages of Nilgiri District" found that a well-balanced application of technology and traditional methods in the agricultural system will enhance their yield, market, self-reliance and sustainability. They will have a holistic development in all the sectors like economy, education, health, etc.

### The Study Area

The South Kamrup Tribal Belt is situated on the southern bank of the river Brahmaputra in the Kamrup district. The South Kamrup Tribal Belt is inhabited both by tribal as well as and non-tribal people. Concentration of tribes is seen more under the Sonapur revenue circle of the belt. The prominent tribes residing in the study area are Bodo, Karbi, Rabha, Garo and Tiwa. According to Dubey, "the tribe generally refers to territorial communities living in the relative isolation of hills and forests. Their comparative isolation in some ways, has kept them apart from the mainstream of society in the country. They framed a livelihood pattern to sustain their life. Taking this into concern a study was carried out in a Karbi dominated area called the Goriaghuli located in Kamrup (Metro) via Sonapur, Assam. It is located under the Dimoria block development of Kamrup Metro district. It belongs to the Kamarkuchi panchayat and is a part of Kamakuchi village. Goriaghuli is situated on the eastern side of National Highway 37 at a distance of 38 kilometres to the north of Guwahati city and 7 kilometres from Sonapur. The village is 12 kilo-

metres away from Khanapara, the extreme south of Guwahati City. As it is shown in Figure 1 the study area lies within  $26^{\circ}06'54''\text{N}$  to  $28^{\circ}\text{N}$  latitude and  $96^{\circ}\text{E}$  longitude.

### Objectives

- ◆ To explore the different livelihood support systems associated to the villagers under study.
- ◆ To find out the problems and various inconveniences faced by the villagers in sustaining their livelihood.
- ◆ To analyse the factors that stand as major hindrances in the overall development of the village.

### METHODOLOGY

The unit of analysis for the present study are selected individuals, head of the families and

the elderly people. The research work is mainly based on primary data, which has been collected with the help of a schedule prepared for the purpose. As many as 45 households were selected randomly from the village. Interviews were carried out with the villagers and also with the *Gaon Burha* (village headman) of the village. Simple random sampling method has been followed. For secondary data, relevant books, journal publications, newspapers, etc. were used. The primary data was analysed and interpreted to find out the cause and effect of the problems addressed.

### RESULTS

#### Socio-economic Condition of the Surveyed Households

The Goriaghuli village is completely dominated by the Karbi tribe. Except for 11 house-

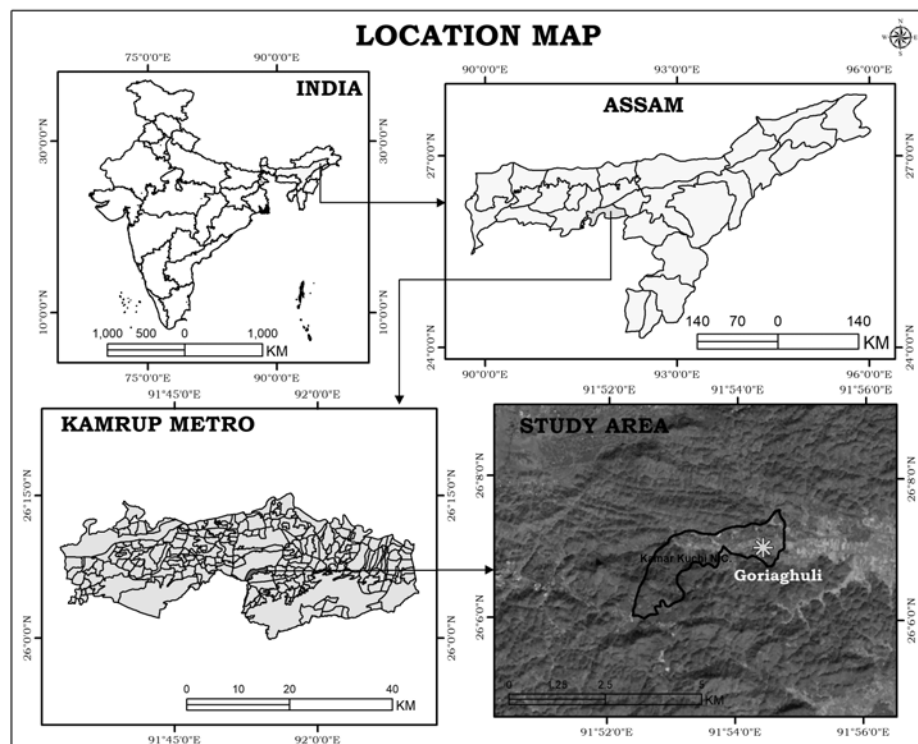


Fig. 1. Study area

holds, the rest of the Karbi villagers of Goriaghuli are Hindu. The Karbis are animistic in belief. They believe in a number of Gods collectively known as *Arnum Atum*, who is considered to be the creator of this universe (Das 2003). The Karbis have no idol shrines or temples but they believe in a form of fetish locally known as *bor* (Das 2003). A section of the Karbis follows Christianity. Among the festivals observed, their main festival is *Rongkher*, which is performed at the beginning of New Year seeking blessings for abundant crop production, that is free from diseases and natural calamities all throughout the year. The village has less than 54 households with the percentage of males and females being 52.43 and 47.57, respectively. Linear settlement pattern prevails in Goriaghuli village. The Karbis of the village have replaced the traditional housing pattern with houses made of bricks or *kutchha* house constructed on the ground rather than *chang ghor* (raised platform) made of bamboo platform resting on timber posts. Slowly the traditional housing pattern has more or less been abandoned by the Karbis due to factors like the influence of Christianity, higher exposure to modernisation, gradual change of culture following the people nearby, lack of building materials like timber and effect of education and social relation with other communities. Revolutionary changes could be observed in the village sweeping across the Karbi society. In the village, only one household has the typical Karbi *chang ghor*. Residents of the upper reaches of the hills have settled down by clearing the forest and cutting down the hill slopes.

The education level of the people of Goriaghuli is quite low. As shown in Table 1, twenty-three percent of the population is illiterate and have never attended school, and thirty-four percent have completed primary education, which is the highest of all levels of education in the village. There is one lower primary school, which was set up in 1987 and it consists of 3 teachers and total of 70 students. The school is in a very bad condition. Cracks have appeared on the walls with numerous holes in the roof made of CGI sheets. During rainy season when rainwater percolates through the holes it becomes impossible to continue classes. After the setting up of the school and until now, the building has not been repaired even once. It is on the verge

of breaking down. Secondly, the school consists of one single big room without any partition. All the classes are held in single room at the same time, which makes it difficult both for the teacher to teach and for the students to learn. Obviously, to deliver proper education is not possible in the school premise under such condition. After the completion of primary level in the said school, to pursue higher education the students have to travel either to Sonapur or to Kamarkuchi, both of which are far from the locality. School dropout is quite prominent in the village. Dropouts are less in number in case of primary level. It has been reported that many children have to leave their education even at lower levels due to financial crisis. Maximum dropouts are seen after the completion of primary education. Therefore, the percentage of higher education is a declining trend after primary level.

**Table 1: Educational status of the population (in %)**

<i>Education level</i>	<i>Percentage of population</i>
Illiterate	23
Primary school	34
Secondary school	24
HSLC	9
HS	7
Graduate	3
Total	100

*Source:* Based on primary survey, 2019-2020

The most common reason for their dropout is their lack of interest in formal education. Youngsters are unaware about the importance of education. Most of the families are incapable in supporting their children to pursue higher education. Lack of awareness among the parents is also responsible to keep the children at lower levels with continuing general education.

The low literacy levels and lack of opportunities are the main reasons due to which the working population of the village is involved in daily wage earnings as casual labour (42%), vegetable sellers (27%), etc. Occupational structure in Goriaghuli can be classified into two categories, namely, main occupation and subsidiary occupation. Table 2 shows that as many as fifty-three percent of the households have undertaken agriculture as their main occupation while thirty-one percent and sixteen percent are involved in cash crop cultivation (rubber planta-

tion) and government services, respectively. This clearly proves that the economy is basically agrarian in nature.

**Table 2: Main occupation of the households surveyed (in %)**

Main occupation	Composition (in %)
Agriculture	53
Cash crop (rubber plantation)	31
Government service	16
Total	100

Source: Based on primary survey, 2019-2020

The households have also undertaken some subsidiary occupations (Table 3), because the income from a single source is not enough to meet the day-to-day expenditure of the families. The women grow various vegetables like potato, cauliflower, radish, leafy vegetables, etc. These women together form a group travel to various parts of Guwahati city like Ulubari, Fancybazar, Ganeshguri, etc. to sell their products and by the evening they travel back to the village. While travelling, the women need to pay the fare of INR 30 per individual plus the fare of their products, which depend on the quantity they carry. Ultimately they are left with low return of income. In some cases, both men and women used to sell their products sitting on both sides of the highway where usually passengers pass by. Around forty-two percent (Table 3) of the total workers are involved in daily wage earning, which is the highest participation in subsidiary occupation sector. Women of the village as daily wage earner are involved in activities like harvesting of rice, as maids, etc. The males are involved in activities like carrying of harvested rice, bamboo-fencing work, construction of

**Table 3: Subsidiary occupation of the households surveyed (in %)**

Subsidiary occupation	Composition (in %)
Poultry	20
Daily wage earner	42
Pig farm	9
Shopkeeper	2
Vegetable seller	27
Total	100

Source: Based on primary survey, 2019-2020

*kutch* houses, cutting of firewood from forest, etc. There is the difference in wage patterns for the daily wage earners. Males are paid INR 300 while the females are paid only INR 200 per day. In the recent context, a few of the youngsters are involved in private companies.

The impact of low level of education and involvement in low-paying works reflects the income level of the households. As shown in Table 4, highest monthly income level is seen in the range of Rs. 6000-9000 (31%), followed by Rs. 3000-6000 (27%) and below Rs. 3000 (18%). This shows the decreasing trend of income level and most of the households fall within the low income ranges.

**Table 4: Monthly income of the households (in %)**

Monthly income (in INR)	Composition (in %)
<3000	18
3000-6000	27
6000-9000	31
9000-12000	12
12000-15000	3
>15000	9

Source: Based on primary survey, 2019-2020

Most of the people are indebted to the landlords, family members or friends. Usually they borrowed money for various purposes like marriage, medical treatment, etc. The practice of making a small vegetables garden of their own and the habit of collecting fruits, vegetables from the forest, the families get some relief of acute shortage of household need caused mainly due to their low income. Around thirty-four percent of the households have their own fisheries for self-consumption. Women weave some pieces of their required clothes at home while the rest are purchased from Guwahati city markets. These activities help them to reduce the family expenditure to some extent.

The economy of the village is primarily agrarian. The villagers still practise the traditional method of cultivation. Bullock, spade and sickle are some of the traditional agricultural equipment they use. They do not use any chemical manure or any kind of high yielding variety (HYV) seeds in their farmlands. The farmers entirely depend on monsoon rain for water for agriculture. Thus, often heavy or shortfall of rain-

fall affects their cultivation, which destroy their crops in field. Delay in monsoon also affects their crop production. However, they get some water from naturally flowing *nizra* (stream flowing down the hill) to irrigate the cropped area using traditional methods. Drains are made on the hills to divert water flow of the *nizras* to croplands. The drain is connected to a big pit dug near the agricultural field where the water accumulates and finally used for irrigation purpose. This reflects the primordial form of economy in terms of resource utilisation, cropping pattern and mode of traditional equipment adoption, etc. (Padhi et al. 2005). Agriculture in this region is predominantly subsistence and crop production is highly vulnerable to erratic weather conditions and wildlife attacks. Ultimately such a situation often affects the agro-economic base of the farmers. Despite having large land holdings, the agricultural productivity is low in the village. Crop failure is common and when it takes place the villagers face great hardship. Mainly, *Sali* rice (*kharif* crop) is cultivated. Apart from *Sali* rice, the rice varieties like *basmati*, *ranjit*, *baa*, etc. are grown in small quantities. *Rabi* crops like potatoes, beans, cauliflower, etc. are grown mainly for self-consumption and partly to sell it in the markets.

### Role of Moroktolla Reserve Forest on Livelihood

The Karbi tribe always had their relation with forests, which is of utmost importance in their daily life. Goriaghuli village depends on Moroktolla reserve forest to a great extent, which is located very close to it. The villagers collect the edible fruits, flowers, tubers, roots and leaves for food and medicines, firewood for cooking (some also sell in the market), materials for agricultural implements, house construction and fencing, fodder for livestock, and collection of a range of marketable non-timber forest products. The non-timber forest products (NTFPs) too act as an important livelihood security for the rural population and NTFPs based value-added industries can be promoted in the future (Shackleton 2004; Kumar and Saikia 2020). Among the Karbi population wild vegetables play an important role as a livelihood support. It provide nutrition, and most importantly, food security to

the local people (Borthakur 2007). Some of the vegetables collected from the forest are given in Table 5. The Karbis not just collect these forest products for their own consumption but also for commercial purposes, which fetches them some income. Usually in the forenoon and noon time collecting forest products by children and women is almost a regular activity of the villagers.

**Table 5: Vegetables obtained from the forest**

<i>Local term</i>	<i>English term</i>	<i>Parts used</i>
Jilmil xaach	White goosefoot	Leaves
Tengamora	Roselle	Leaves
Kosu	Taro	Shoots
Koldil	Banana flower	Flower
Posola	Banana shoot	Shoot
Bhekuri	Indian nightshade	Fruit
Outenga	Elephant apple	Fruit
Dhekia	Fiddlehead fern	Leaves

*Source:* Based on primary survey, 2019-2020

As the population of the village depends largely on the forest for their livelihood, the strategies for controlling forest degradation need to be focused. Dependency on forests should be reduced by creating alternative livelihood opportunities for the forest dependent people of the village and the neighbourhood, so that the forest resources are sustained for future uses.

### Basic Services

#### *Provision of Water Supply*

One of the basic challenge to the community is the hilly topography, where provision of community water supply to the hill dwellers still stands as a big problem. Due to segregated settlement pattern, low population density and rough topography, the government has not yet taken into account the necessity of regular water supply to the village seriously. Only one single hand pump has been provided in the primary school by the government. In the absence of a regular and safe water supply to the village the dwellers face the shortage of water especially in the dry winter months.

Out of 45 households, 23 households have individual dug-wells and 12 households have hand pumps of their own. Therefore, the remain-

ing 10 households (22%) are depended on these 35 households for water or the naturally flowing *nizras* (Table 6). The water quality of the well and hand pumps reported to be very poor.

**Table 6: Source of water in Goriaghuli village**

Source of water	Percentage of household
Well	51
Hand Pump	27
Stream ( <i>Nizra</i> )	22
Total	100

Source: Based on primary survey, 2019-2020

In the dry months, *nizras* and dug-wells dry up especially in the period between January and April. The water level in the well goes down and the water becomes muddy. People have to go to the natural ponds situated far away from the village for bathing and washing clothes, utensils, etc. This causes long queues for drinking water at the site of the hand pump in the primary school. Women have to bear the brunt of the effects of this shortage, as they must wake up early in the morning to collect water so that they do not have to stand in long queues. The constant pressure to collect sufficient water after completing other household chores and going for work leaves them with little time for other more useful pursuits. The digging of wells in such terrain involves higher cost, which is unaffordable by the villagers without government support. Most families in this area do not have their personal wells with adequate depth and concrete rings. The topography makes it difficult to access underground aquifers in the higher areas of the settlement. People responded to the situation by using less water than needed for washing clothes, vegetables, dishes, etc. It has been reported that they often fall sick with diseases like jaundice, which adds additional

economic burden on them. Many of the families have to abandon the wells for their dilapidated condition because of poor maintenance. It is a matter of great concern that eighty-seven percent of the villagers use to drink the water without using modern filtration mechanism while only thirteen percent drink filtered water as shown in Table 7.

The above facts reveal that people were not very concerned about the health risks of consuming unfiltered water. On one hand, the villagers are not economically sound to use the modern electronics and on the other, they have little or no knowledge regarding the availability of various water purifying techniques.

### Sanitation and Public Health

Hygiene and proper sanitation have utmost importance to enjoy a healthy life. Lack of proper sanitation makes the environment unhygienic and in consequence it leads to various communicable and non-communicable diseases.

**Table 8: Type of toilets used by the villagers in Goriaghuli (in %)**

Type of toilet	Percentage of households
<i>Pucca</i>	58
<i>Kutchra</i>	35
Open space	7
Total	100

Source: Based on primary survey, 2019-2020

Table 8 depicts the real picture of sanitation facilities, which is that fifty-eight percent have *pucca* toilets, thirty-five percent have *kutchra* toilets and seven percent follow open defecation. It is very unfortunate to mention that seven percent of the villagers use the open space for defecation, which is very unhealthy and

**Table 7: Method of treatment of water by the villagers in Goraghuli (in %)**

Method	No. of households	Percentage of households (%)	Method of treatment	No. of households	Percentage of households (%)
Drink directly	39	87	Traditional	2	33
Filtered	6	13	Candle	3	50
			Both	1	17

Source: Based on primary survey, 2019-2020

brings risk to the entire community. In the absence of toilets in their households, many of the residents resorted to open defecation in the nearby forests. A substantial number of villagers under consideration do not use any hygiene practice to be followed in toilet use. Around fifty-eight percent of the villagers who are economically little better off use the *pucca* latrines and bathrooms. However, lack of maintenance make these unfit for use at present. Cleaning of the toilets is done rarely. The water shortage may also be a factor discouraging them from building and maintaining *pucca* toilets. More than thirty-five percent of families have *kutch* toilets. *Kutch* pit toilets result in foul smell in the entire locality leading to unhygienic conditions, which induces health-related problems in entire locality. The superstructures of the *kutch* toilet are mostly of local materials, that is, bamboo wall and thatched roof. Some are made of tin roof and covered with polythene sheets. During the monsoon season, these *kutch* toilets are in pathetic condition. They are prone to various sanitation related problems and spread vector borne and water borne diseases like dysentery, malaria, dengue, etc.

#### Poor Accessibility

During the monsoon, the *kutch* roads turn slippery, making it difficult to walk and become a challenging task to reach the village, especially for those living in the higher reaches of the hills. Initially local councillors were petitioned several times on the issue of constructing a *pucca* road to the village. As reported by the villagers and the village head, their response was not positive at all for a long time. After continuous persuasions of villagers, the *pucca* road was constructed at the lower reaches of the village connecting to the National Highway 37. The road of the upper reach of the settlement is still in dilapidated condition. Torrential rains in the monsoon damage the roads every year. Hill slopes have been cut haphazardly, which induce erosion to a great extent. Landslide occurs in the hills leading to many inconveniences to the villagers. Obviously such a condition is adversely affecting the livelihood of the villagers. The poor condition of the road has also adverse implications on people's access to healthcare. The

residents of hills suffer from poor access to medical facilities. Overall, the lack of accessibility had negative impacts on people, their livelihood, education and healthcare, and especially for those living in the upper reaches of the hill.

#### Health Facilities

Medical facilities are not available in the village. A primary healthcare centre is situated at Sonapur at a distance of 7 kilometres from Goriaghuli. The primary healthcare centre of Sonapur has 3 doctors, 2 lady health visitors, 6 auxiliary midwives and 2 pharmacists. A sub-primary health centre is situated at a distance of 2 kilometres from the village. A malaria research centre is situated at Sonapur. The most common ailments that the villagers mainly suffer from are malaria, diarrhoea, dysentery, stomach-ache, fever, jaundice and kidney problem, etc. The main reason behind all these diseases is the unhygienic practices, unhygienic environment, and use of unfiltered water. Majority of the villagers do not prefer to go to hospital and would rather rely on traditional method of curing. It is mainly due to the lack of awareness of the people.

Among the Karbis, the diseases are termed as *bemar* and *kisokila* (Das 2003). The elderlies of the village believe that the illness is caused either by physical environment or by supernatural forces like the influence of evil-spirit, black magic, evil eye, breach of taboo, etc. They believe that the diseases like cough, fever, malaria, diarrhoea, skin diseases, vomiting, etc. are caused by natural forces while mental illness is believed to be caused by the wrath of a particular spirit. These people prefer folk medicines or the traditional herbs for curing all types of ailments instead of using allopathic medicine and

**Table 9: Folk medicine specialist in Goriaghuli**

Category (local karbi term)	Specialisation
<i>Kobiraj</i>	Herbal specialist dealing with all kinds of diseases
<i>Bez Uche</i>	Priest, healer, herbal specialist Treat chicken pox by offering some rituals
Ethno gynaecologist	Treat gynaecological problems

Source: Primary survey, 2019-2020



taking treatment in hospitals, thereby reflecting the medical phenomena and socio-cultural setting of the village (Das 2003). The village has the following ethno medical specialists for the treatment of diseases.

In fact, traditional herbal medicines are available at Goriaghuli village, as it is close to the forest. They take recourse to herbal medicines prescribed by the *bez*, *uche* for ailments like skin boils, dysentery, dental cavities, acne, etc. One most important thing is that majority of the women lack the understanding as to what causes a gynaecological problem. They perceive the problem as a normal aspect of womanhood. Most of the Karbi women do not visit the primary health centre because of their shyness of undergoing a medical examination. They rarely visit the centre. Folk remedy is the first option for them or they visit the ethno gynaecologists and follow their advice and herbal medicine prescribed. However, the health workers are trying hard to overcome the shyness of the women and provide the necessary education pertaining to cleanliness, proper diet and maintenance of hygiene by organising camps in their village. Financial status is also one of the most important driving factors for the dependence of villagers on folk remedies. Inability of the villagers to meet the expenditure of the hospital ultimately drives the villagers to the traditional method of curing of diseases. However, now with the spread of education, organisation of health camps in their village, little change has been observed. Now a few of the patients use to go to the health centre. With influence of Christianity and exposure to the Assamese culture, the settlers have reduced their dependence on traditional beliefs and practices of curing diseases.

## DISCUSSION

From the above observations it is clear that the population of the study area is still lagging behind in terms of physical assets, that is, infrastructure, economic assets like low income level, and human assets like low education level, which act as hindrances in supporting their livelihood. As mentioned in the Kumar R and Saikia (2020) that forest plays an important role in the livelihood of the tribal people in Jharkhand including social, cultural and economic develop-

ment. Similarly, in our current study area too forest plays a key role in the lives of the tribal population. Natural assets and social aspects are the two, supporting the villagers in securing their livelihood, especially the Moroktolla reserve forest fringe dwellers, as they are highly dependent on it for food and medicinal products. Socially too, the villagers support each other in times of need by providing money, food, physical labour, etc. Surayya et al. (2008) have reported that agriculture is vital for the tribal population of India as it is the main income source among them and contributes to the national economy as well as overall development of these communities along with the country. This point is a replication in our present study area too as maximum studied population is dependent on agriculture. As mentioned previously in Table 2, about fifty-three percent of the population is dependent on agriculture (paddy cultivation), so their income from it is highly seasonal. After the harvest of rice they perform different other subsidiary activities like daily wage earning (42%), vegetable selling (27%), poultry (20%), pig farm (9%) and shop keeping (2%) as livelihood support system. These subsidiary income sources are highly variable. Among these, daily wage earning (42%) has the highest dominance over others but still it is not a means of stable income and thus they follow diversification of livelihood to support their family. Livelihood diversification is found as one of the prominent strategy adopted by the rural population around the world for survival in several publications (Ellis 1998; Barrett et al. 2001; Jansen et al. 2006; Mary et al. 2009; Tittonell et al. 2010; Sati et al. 2015). Similar is the case in our current study area as it is also seen as a strategy in meeting the day-to-day needs of the studied population. It can also be seen as a forced means to sustain livelihood, as they do not have any other options left. They are still continuing their traditional activities as well as stepping towards the modernised activities to generate income especially the younger generations. The new generation is slowly moving towards non-agricultural activities like services in private sectors. They are also engaged in more agro-business like production of rubber from rubber trees, which are found to be economically more profitable.

### CONCLUSION

The socio-economic condition of the Karbis residing in Goriaghuli reveals that they have undergone certain changes in their culture with the exposure to modern society but still the villagers are in backward state. Majority of the villagers are not able to improve their economic status. Educational level of the population in Goriaghuli is quite low. The Karbis of Goriaghuli are still practising the traditional methods of cultivation. The low literacy levels and lack of opportunities are the main reasons behind the working population not being involved in government or private sector jobs. They have adopted different livelihood strategies like agricultural labour, daily wage earner, poultry farming, etc. The hill dwellers are living in very poor conditions. They face acute water shortage problem during winter. They face difficulties in the monsoon season, as it restricts their movement due to bad road conditions, which affect their day-to-day works as well as earnings. They cannot provide a better education facility to their children for their economic condition and lack of awareness. As the medical facilities are not adequate and people are not aware enough the general health of the people are poor and more prone to common diseases. Therefore, with the improvement of basic infrastructures, focus has to be on health and hygiene and to provide livelihood support by giving maximum possible employment in government and private sector jobs.

### RECOMMENDATIONS

The analysis points out that to reduce the above mentioned problems associated with the living conditions of the villagers and for overall development of the village, the government should focus on the creation of basic infrastructure facilities like proper road facility, sanitation, water supply, etc. Improvement in education and general awareness among the villagers should be on the priority list. They should be educated, and employed wherever possible. They should be kept healthy to carry out their household activities and profit oriented economic activities with full enthusiasm. The study identifies that the community is unable to respond to the efforts of the governmental agencies. The villagers

are handicapped due to inaccessibility, their low level of awareness, illiteracy and poor health conditions. Hence, the developmental agencies have to focus on providing both formal and informal education as well as improved health facilities in the entire locality. It is of umpteen needs to take cognisance of the traditional values and practices of Karbis. Intervention for any development activities will fail if the traditional values and practices are ignored.

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